



Amazon RDS for Oracle Release Notes

Amazon Relational Database Service



Amazon Relational Database Service: Amazon RDS for Oracle Release Notes

Copyright © 2024 Amazon Web Services, Inc. and/or its affiliates. All rights reserved.

Amazon's trademarks and trade dress may not be used in connection with any product or service that is not Amazon's, in any manner that is likely to cause confusion among customers, or in any manner that disparages or discredits Amazon. All other trademarks not owned by Amazon are the property of their respective owners, who may or may not be affiliated with, connected to, or sponsored by Amazon.

Table of Contents

RDS for Oracle release notes	1
RDS for Oracle Database 21c	2
21.0.0.0.ru-2024-04.rur-2024-04.r1	3
Combined Patches for Version 21.0.0.0.ru-2024-04.rur-2024-04.r1, Released April 2024	3
21.0.0.0.ru-2024-01.rur-2024-01.r1	8
Combined Patches for Version 21.0.0.0.ru-2024-01.rur-2024-01.r1, Released January 2024	9
21.0.0.0.ru-2023-10.rur-2023-10.r1	14
Combined Patches for Version 21.0.0.0.ru-2023-10.rur-2023-10.r1, released October 2023	14
21.0.0.0.ru-2023-07.rur-2023-07.r1	19
Combined patches for version 21.0.0.0.ru-2023-07.rur-2023-07.r1, released July 2023	20
21.0.0.0.ru-2023-04.rur-2023-04.r1	25
Combined patches for version 21.0.0.0.ru-2023-04.rur-2023-04.r1, released April 2023	25
21.0.0.0.ru-2023-01.rur-2023-01.r2	30
Combined patches for version 21.0.0.0.ru-2023-01.rur-2023-01.r2, released January 2023	30
21.0.0.0.ru-2023-01.rur-2023-01.r1	35
Combined patches for version 21.0.0.0.ru-2023-01.rur-2023-01.r1, released January, 2023	35
21.0.0.0.ru-2022-10.rur-2022-10.r1	40
Combined patches for version 21.0.0.0.ru-2022-10.rur-2022-10.r1, released October 2022	40
21.0.0.0.ru-2022-07.rur-2022-07.r1	44
Combined patches for version 21.0.0.0.ru-2022-07.rur-2022-07.r1, released July 2022	44
21.0.0.0.ru-2022-04.rur-2022-04.r1	48
Combined patches for version 21.0.0.0.ru-2022-04.rur-2022-04.r1, released April 2022	49
21.0.0.0.ru-2022-01.rur-2022-01.r1	52
Combined patches for version 21.0.0.0.ru-2022-01.rur-2022-01.r1, released January 2022	52
RDS for Oracle Database 19c	55
19.0.0.0.ru-2024-04.rur-2024-04.r1	56

Combined Patches for Version 19.0.0.0.ru-2024-04.rur-2024-04.r1, Released April 2024	57
19.0.0.0.ru-2024-01.rur-2024-01.r1	95
Combined Patches for Version 19.0.0.0.ru-2024-01.rur-2024-01.r1, Released January 2024	95
19.0.0.0.ru-2023-10.rur-2023-10.r1	132
Combined Patches for Version 19.0.0.0.ru-2023-10.rur-2023-10.r1, released October 2023	133
19.0.0.0.ru-2023-07.rur-2023-07.r1	169
Combined patches for version 19.0.0.0.ru-2023-07.rur-2023-07.r1, released July 2023 ...	169
19.0.0.0.ru-2023-04.rur-2023-04.r1	204
Combined patches for version 19.0.0.0.ru-2023-04.rur-2023-04.r1, released April 2023 .	204
19.0.0.0.ru-2023-01.rur-2023-01.r2	238
Combined patches for version 19.0.0.0.ru-2023-01.rur-2023-01.r2, released January 2023	238
19.0.0.0.ru-2023-01.rur-2023-01.r1	270
Combined patches for version 19.0.0.0.ru-2023-01.rur-2023-01.r1, released January 2023	271
19.0.0.0.ru-2022-10.rur-2022-10.r1	302
Combined patches for version 19.0.0.0.ru-2022-10.rur-2022-10.r1, released October 2022	303
19.0.0.0.ru-2022-07.rur-2022-07.r1	332
Combined patches for version 19.0.0.0.ru-2022-07.rur-2022-07.r1, released July 2022 ...	333
19.0.0.0.ru-2022-04.rur-2022-04.r1	360
Combined patches for version 19.0.0.0.ru-2022-04.rur-2022-04.r1, released April 2022 .	361
19.0.0.0.ru-2022-01.rur-2022-01.r1	386
Combined patches for version 19.0.0.0.ru-2022-01.rur-2022-01.r1, released January 2022	386
19.0.0.0.ru-2021-10.rur-2021-10.r1	410
Combined patches for version 19.0.0.0.ru-2021-10.rur-2021-10.r1, released October 2021	410
19.0.0.0.ru-2021-07.rur-2021-07.r1	432
Combined patches for version 19.0.0.0.ru-2021-07.rur-2021-07.r1, released July 2021 ...	433
19.0.0.0.ru-2021-04.rur-2021-04.r1	452
Combined patches for version 19.0.0.0.ru-2021-04.rur-2021-04.r1, released April 2021 .	453
19.0.0.0.ru-2021-01.rur-2021-01.r2	470

Combined patches for version 19.0.0.0.ru-2021-01.rur-2021-01.r2, released January 2021	470
19.0.0.0.ru-2021-01.rur-2021-01.r1	484
Combined patches for version 19.0.0.0.ru-2021-01.rur-2021-01.r1, released January 2021	484
19.0.0.0.ru-2020-10.rur-2020-10.r1	498
Combined patches for version 19.0.0.0.ru-2020-10.rur-2020-10.r1, released October 2020	498
19.0.0.0.ru-2020-07.rur-2020-07.r1	508
Combined patches for version 19.0.0.0.ru-2020-07.rur-2020-07.r1, released July 2020 ...	509
19.0.0.0.ru-2020-04.rur-2020-04.r1	517
Combined patches for version 19.0.0.0.ru-2020-04.rur-2020-04.r1, released April 2020 ...	518
19.0.0.0.ru-2020-01.rur-2020-01.r1	525
Oracle release update 19.6.0.0.200114, released January 2020	526
19.0.0.0.ru-2019-10.rur-2019-10.r1	530
Oracle release update 19.5.0.0.0, released October 2019	531
19.0.0.0.ru-2019-07.rur-2019-07.r1	536
Oracle release update 19.4.0.0.190716, released July 2019	536
RDS for Oracle Database 18c	540
18.0.0.0.ru-2021-04.rur-2021-04.r1	541
Combined patches for version 18.0.0.0.ru-2021-04.rur-2021-04.r1, released April 2021 .	541
18.0.0.0.ru-2021-01.rur-2021-01.r1	548
Combined patches for version 18.0.0.0.ru-2021-01.rur-2021-01.r1, released January 2021	549
18.0.0.0.ru-2020-10.rur-2020-10.r1	555
Combined patches for version 18.0.0.0.ru-2020-10.rur-2020-10.r1, released October 2020	556
18.0.0.0.ru-2020-07.rur-2020-07.r1	563
Combined patches for version 18.0.0.0.ru-2020-07.rur-2020-07.r1, released July 2020 ...	563
18.0.0.0.ru-2020-04.rur-2020-04.r1	569
Combined patches for version 18.0.0.0.ru-2020-04.rur-2020-04.r1, released April 2020 ...	570
18.0.0.0.ru-2020-01.rur-2020-01.r1	575
Oracle release update 18.9.0.0.200114, released January 2020	576
18.0.0.0.ru-2019-10.rur-2019-10.r1	580
Oracle release update 18.8.0.0.0, released October 2019	581
18.0.0.0.ru-2019-07.rur-2019-07.r1	585

Oracle release update 18.7.0.0.190716, released July 2019	585
RDS for Oracle Database 12c Release 2	589
12.2.0.1.ru-2022-01.rur-2022-01.r1	590
Combined patches for version 12.2.0.1.ru-2022-01.rur-2022-01.r1, released January 2022	591
12.2.0.1.ru-2021-10.rur-2021-10.r1	598
Combined patches for version 12.2.0.1.ru-2021-10.rur-2021-10.r1, released October 2021	599
12.2.0.1.ru-2021-07.rur-2021-07.r1	606
Combined patches for version 12.2.0.1.ru-2021-07.rur-2021-07.r1, released July 2021 ...	606
12.2.0.1.ru-2021-04.rur-2021-04.r1	614
Combined patches for version 12.2.0.1.ru-2021-04.rur-2021-04.r1, released April 2021 .	614
12.2.0.1.ru-2021-01.rur-2021-01.r1	621
Combined patches for version 12.2.0.1.ru-2021-01.rur-2021-01.r1, released January 2021	622
12.2.0.1.ru-2020-10.rur-2020-10.r1	629
Combined patches for version 12.2.0.1.ru-2020-10.rur-2020-10.r1, released October 2020	629
12.2.0.1.ru-2020-07.rur-2020-07.r1	636
Combined patches for version 12.2.0.1.ru-2020-07.rur-2020-07.r1, released July 2020 ...	637
12.2.0.1.ru-2020-04.rur-2020-04.r1	643
Combined patches for version 12.2.0.1.ru-2020-04.rur-2020-04.r1, released April 2020 ...	644
12.2.0.1.ru-2020-01.rur-2020-01.r1	650
Oracle release update 12.2.0.1.200114, released January 2020	650
12.2.0.1.ru-2019-10.rur-2019-10.r1	656
Oracle release update 12.2.0.1.191015, released October 2019	650
12.2.0.1.ru-2019-07.rur-2019-07.r1	661
Oracle release update 12.2.0.1.190716, released July 2019	662
12.2.0.1.ru-2019-04.rur-2019-04.r1	666
Oracle release update 12.2.0.1.190416, released April 2019	667
12.2.0.1.ru-2019-01.rur-2019-01.r1	671
Oracle release update 12.2.0.1.190115, released January 2019	667
12.2.0.1.ru-2018-10.rur-2018-10.r1	675
Oracle release update 12.2.0.1.181016, released October 2018	675
RDS for Oracle Database 12c Release 1	679
12.1.0.2.v29	681

Combined patches for version 12.1.0.2.v29, released October 05, 2022	681
12.1.0.2.v28	687
Combined patches for version 12.1.0.2.v28, released July 28, 2022	688
12.1.0.2.v27	694
Combined patches for version 12.1.0.2.v27, released January 2022	695
12.1.0.2.v26	701
Combined patches for version 12.1.0.2.v26, released October 2021	701
12.1.0.2.v25	707
Combined patches for version 12.1.0.2.v25, released July 2021	708
12.1.0.2.v24	713
Combined patches for version 12.1.0.2.v24, released April 2021	714
12.1.0.2.v23	719
Combined patches for version 12.1.0.2.v23, released February 2021	720
12.1.0.2.v22	726
Combined patches for version 12.1.0.2.v22, released October 2020	727
12.1.0.2.v21	732
Combined patches for version 12.1.0.2.v21, released July 2020	733
12.1.0.2.v20	738
Combined patches for version 12.1.0.2, released April 2020	738
12.1.0.2.v19	743
Oracle patch 29918340, released January 2020	744
12.1.0.2.v18	748
Oracle patch 29918340, released October 2019	749
12.1.0.2.v17	753
Oracle patch 29494060, released July 2019	753
12.1.0.2.v16	757
Oracle patch 22785785, released April 2019	757
12.1.0.2.v15	761
Oracle patch 28729169, released January 2019	761
12.1.0.2.v14	764
Oracle patch 28259833, released October 2018	765
12.1.0.2.v13	768
Oracle patch 27547329, released July 2018	768
12.1.0.2.v12	771
Oracle patch 27338041, released April 2018	771
12.1.0.2.v11	774

Oracle patch 26925311, released January 2018	774
12.1.0.2.v10	777
Oracle patch 26713565, released October 2017	777
12.1.0.2.v9	780
Oracle patch 26609783, released July 2017	780
12.1.0.2.v8	782
Oracle patch 25171037, released April 2017	783
12.1.0.2.v7	785
Oracle patch 24917069, released January 2017	785
12.1.0.2.v6	787
Baseline: Oracle database patch set update 12.1.0.2.161018 (patch 24006101, released October 2016)	787
12.1.0.2.v5	789
Baseline: Oracle database patch set update 12.1.0.2.160719 (patch 23054246, released July 2016)	789
12.1.0.2.v4	791
Baseline: Oracle database patch set update 12.1.0.2.160419 (patch 22291127, released April 2016)	791
12.1.0.2.v3	792
Baseline: Oracle database patch set update 12.1.0.2.160119 (patch 21948354, released January 2016)	793
12.1.0.2.v2	794
Baseline: Oracle database patch set update 12.1.0.2.5 (patch 21359755, released October 2015)	794
12.1.0.2.v1	795
Baseline: Oracle database patch set update 12.1.0.2.3 (patch 20299023, released April 2015)	795
RDS for Oracle Database 11g Release 2	797
11.2.0.4.v26	799
Combined patches for version 11.2.0.4.v26, released November 2020	800
11.2.0.4.v25	803
Combined patches for version 11.2.0.4.v25, released July 2020	804
11.2.0.4.v24	807
Combined patches for version 11.2.0.4, released April 2020	808
11.2.0.4.v23	811
Oracle patch 30298532, released January 2020	812

11.2.0.4.v22	815
Oracle patch 29913194, released October 2019	816
11.2.0.4.v21	818
Oracle patch 29497421, released July 2019	819
11.2.0.4.v20	821
Oracle patch 22768427, released April 2019	822
11.2.0.4.v19	824
Oracle patch 28729262, released January 2019	824
11.2.0.4.v18	827
Oracle patch 28204707, released October 2018	827
11.2.0.4.v17	829
Oracle patch 27734982, released July 2018	830
11.2.0.4.v16	832
Oracle patch 27338049, released April 2018	832
11.2.0.4.v15	834
Oracle patch 26925576, released January 2018	835
11.2.0.4.v14	837
Oracle patch 26392168, released October 2017	837
11.2.0.4.v13	839
Oracle patch 26609445, released July 2017	839
11.2.0.4.v12	841
Oracle patch 24732075, released April 2017	842
11.2.0.4.v11	843
Oracle patch 24918033, released January 2017	844
11.2.0.4.v10	845
Baseline: Oracle database patch set update 11.2.0.4.161018 (patch 24006111, released October 2016)	846
11.2.0.4.v9	847
Baseline: Oracle database patch set update 11.2.0.4.160719 (patch 23054359, released July 2016)	848
11.2.0.4.v8	850
Baseline: Oracle database patch set update 11.2.0.4.160419 (patch 22502456, released April 2016)	850
11.2.0.4.v7	852
Baseline: Oracle database patch set update 11.2.0.4.160119 (patch 21948347, released January 2016)	852

11.2.0.4.v6	854
11.2.0.4.v5	854
Baseline: Oracle database patch set update 11.2.0.4.8 (patch 21352635, released October 2015)	854
11.2.0.4.v4	855
Baseline: Oracle database patch set update 11.2.0.4.6 (patch 20299013, released April 2015)	856
11.2.0.4.v3	857
Baseline: Oracle database patch set update 11.2.0.4.4 (patch 19121551, released October 2014)	857
11.2.0.4.v2	858
Baseline: Oracle database patch set update 11.2.0.4.3 (patch 18522509, released July 2014)	859
11.2.0.4.v1	859
Baseline: Oracle database patch set update 11.2.0.4.1 (released January 2014)	860
Document history	861
Earlier updates	864

Release notes for Amazon Relational Database Service (Amazon RDS) for Oracle

The Amazon RDS for Oracle release notes provide details about the Oracle Database versions that are supported by Amazon RDS.

Updates to your Amazon RDS for Oracle DB instances keep them current. If you apply updates, you can be confident that your DB instance is running a version of the database software that has been tested by both Oracle and Amazon. We don't support applying one-off patches to individual DB instances.

You can specify any currently supported Oracle Database version when creating a new DB instance. You can specify the major version, such as Oracle Database 21c Release 1 (21.0.0.0), and any supported minor version for the specified major version. If no version is specified, Amazon RDS defaults to a supported version, typically the most recent version. If a major version is specified but a minor version isn't, Amazon RDS defaults to a recent release of the major version that you specified. To see a list of supported versions and defaults for newly created DB instances, use the [describe-db-engine-versions](#) AWS CLI command.

These release notes apply to RDS for Oracle. If you are looking for details about RDS Custom for Oracle, please see [RDS Custom](#).

Topics

- [Amazon RDS for Oracle Database 21c \(21.0.0.0\)](#)
- [Amazon RDS for Oracle Database 19c \(19.0.0.0\)](#)
- [Amazon RDS for Oracle Database 18c \(18.0.0.0\)](#)
- [Amazon RDS for Oracle Database 12c Release 2 \(12.2.0.1\)](#)
- [Amazon RDS for Oracle Database 12c Release 1 \(12.1.0.2\)](#)
- [Amazon RDS for Oracle Database 11g Release 2 \(11.2.0.4\)](#)

Amazon RDS for Oracle Database 21c (21.0.0.0)

Amazon RDS for Oracle Database 21c (21.0.0.0) incorporates bug fixes from Oracle by using Release Updates (RUs). The naming format for an RU is as follows:

release.*ru-date*.*ru-date*.*rnumber*. For example, the Oracle Database 21c update released by Oracle Corporation in April 2023 is named 21.0.0.0.ru-2023-04.ru-2023-04.r1. The naming format has the following components:

- The *release* is the five-digit number of the release, for example, 21.0.0.0.
- The *date* is the 4-digit year and 2-digit month when the update was made available by Oracle, for example, 2024-04.
- The *rnumber* is the revision, for example, r1.

An upgrade to an RU is called a minor version upgrade. Even though the string *ru* appears in the name of the patch, it is an RU rather than a Release Update Revision (RUR). Amazon RDS upgrades from one RU to another RU. RDS doesn't support RURs as part of its minor version upgrade mechanism. We don't support applying one-off patches to individual DB instances.

To find out which RUs are applied to Amazon RDS for Oracle Database 21c (21.0.0), see the following table.

Date	RU
2024 April	Version 21.0.0.0.ru-2024-04.ru-2024-04.r1
2024 January	Version 21.0.0.0.ru-2024-01.ru-2024-01.r1
2023 October	Version 21.0.0.0.ru-2023-10.ru-2023-10.r1
2023 July	Version 21.0.0.0.ru-2023-07.ru-2023-07.r1
2023 April	Version 21.0.0.0.ru-2023-04.ru-2023-04.r1
2023 January	Version 21.0.0.0.ru-2023-01.ru-2023-01.r2 and Version 21.0.0.0.ru-2023-01.ru-2023-01.r1
2022 October	Version 21.0.0.0.ru-2022-10.ru-2022-10.r1

Date	RU
2022 July	Version 21.0.0.0.ru-2022-07.rur-2022-07.r1
2022 April	Version 21.0.0.0.ru-2022-04.rur-2022-04.r1
2022 January	Version 21.0.0.0.ru-2022-01.rur-2022-01.r1

Version 21.0.0.0.ru-2024-04.rur-2024-04.r1

Version 21.0.0.0.ru-2024-04.rur-2024-04.r1 includes the following:

- Patch [36260537](#): DSTV43 UPDATE - TZDATA2024A - NEED OJVM FIX
- Patch [36260493](#): RDBMS - DSTV43 UPDATE - TZDATA2024A
- Patch [35220732](#): RDBMS - DSTV42 UPDATE - TZDATA2023C
- Patch [35099667](#): RDBMS - DSTV41 UPDATE - TZDATA2022G
- Patch [34698179](#): RDBMS - DSTV40 UPDATE - TZDATA2022E
- Patch [34533061](#): RDBMS - DSTV39 UPDATE - TZDATA2022C
- Patch [34006614](#): RDBMS - DSTV38 UPDATE - TZDATA2022A
- Patch [33613829](#): RDBMS - DSTV37 UPDATE - TZDATA2021E
- Patch [32327201](#): RDBMS - DSTV36 UPDATE - TZDATA2020E
- Patch [36352352](#): Database Release Update: 21.14.0.0.240416 (36352352)

Combined Patches for Version 21.0.0.0.ru-2024-04.rur-2024-04.r1, Released April 2024

Bugs fixed:

12565410, 12949919, 14112098, 15897884, 16799766, 17443054, 18759260
 19397646, 19884953, 19958239, 20875943, 22037067, 22873666, 23614160
 24559425, 24597536, 24701882, 24916492, 25173172, 25562258, 25655012
 25881271, 26139817, 26352569, 26950182, 27015468, 27162036, 27751518
 27897090, 27979632, 28044739, 28089112, 28127287, 28294439, 28337860
 28513129, 28632799, 28852334, 28882751, 28994721, 29027914, 29413205
 29524043, 29587488, 29591661, 29617414, 29811720, 29900186, 29927360
 29948154, 29997959, 30082402, 30343750, 30481004, 30610097, 30706073

30710917, 30722105, 30747820, 30771009, 30808364, 30840150, 30846263
30876666, 30933117, 30961824, 31006259, 31006953, 31026870, 31044504
31073424, 31079198, 31110887, 31113682, 31138371, 31192261, 31243859
31251325, 31287296, 31335142, 31356954, 31385668, 31387123, 31414524
31429692, 31487775, 31488085, 31504723, 31526250, 31531079, 31535516
31562484, 31588631, 31596817, 31615736, 31628975, 31649223, 31652763
31656601, 31676324, 31720377, 31725154, 31731407, 31768866, 31773909
31780567, 31781944, 31800059, 31800139, 31824792, 31827584, 31834214
31834611, 31834677, 31841210, 31843716, 31843845, 31844137, 31844357
31844557, 31872320, 31897178, 31912834, 31918462, 31923463, 31927078
31932042, 31933842, 31933846, 31933914, 31938116, 31939767, 31951628
31954223, 31959140, 31960603, 31969646, 31974187, 31982879, 31986827
31987278, 31987922, 31988833, 31992242, 31992615, 31992953, 31993051
31994298, 31996331, 31997660, 32003908, 32008408, 32008716, 32009197
32012400, 32013253, 32015642, 32017570, 32017635, 32020701, 32041003
32055692, 32056529, 32057565, 32069508, 32071457, 32075130, 32078078
32081381, 32092797, 32097767, 32102542, 32102722, 32104578, 32114541
32114746, 32115403, 32118543, 32119144, 32122804, 32132504, 32133898
32159343, 32161381, 32166950, 32178966, 32183102, 32183756, 32184235
32184577, 32184844, 32185296, 32190419, 32196943, 32198292, 32198368
32198396, 32199681, 32205514, 32212062, 32219835, 32224140, 32225117
32225742, 32233406, 32234148, 32240272, 32249371, 32254686, 32255529
32255753, 32255762, 32258388, 32258423, 32277793, 32284608, 32285563
32287989, 32292805, 32294031, 32297469, 32297849, 32298173, 32298782
32300822, 32302470, 32312412, 32327201, 32327208, 32335257, 32338919
32342345, 32343092, 32345050, 32346254, 32346649, 32357412, 32361175
32361677, 32362072, 32365085, 32366303, 32368480, 32371828, 32372554
32372725, 32373696, 32374616, 32377901, 32379001, 32380591, 32382021
32386720, 32390629, 32393137, 32394623, 32396326, 32408640, 32417301
32423678, 32423985, 32424465, 32425778, 32425862, 32426213, 32427158
32427583, 32427953, 32428097, 32431049, 32431251, 32432078, 32432245
32436460, 32436721, 32439726, 32441128, 32441671, 32442229, 32449909
32459632, 32460145, 32462153, 32465193, 32465209, 32465495, 32468643
32471100, 32471251, 32472485, 32478452, 32481807, 32486955, 32492382
32498569, 32498752, 32503790, 32506166, 32506473, 32506809, 32507542
32509814, 32514516, 32515850, 32523613, 32524841, 32526703, 32529396
32530202, 32531647, 32533461, 32535156, 32538824, 32540706, 32540772
32544740, 32546937, 32549277, 32550894, 32551246, 32555592, 32556165
32556311, 32561841, 32573197, 32579075, 32580852, 32583315, 32583355
32583692, 32584375, 32584505, 32585832, 32587305, 32587793, 32587994
32588656, 32593877, 32594965, 32597099, 32597637, 32602194, 32602990
32603092, 32606093, 32607991, 32608583, 32609512, 32610185, 32610271
32618819, 32619195, 32620859, 32621140, 32621309, 32625160, 32625356
32626756, 32626830, 32628168, 32629028, 32630060, 32634049, 32635881

32635931, 32639432, 32639860, 32642587, 32645139, 32649737, 32649749
32651063, 32651773, 32652605, 32653470, 32662165, 32665836, 32669149
32672057, 32674819, 32675095, 32677000, 32682586, 32685286, 32685989
32690400, 32692372, 32697157, 32697859, 32698508, 32700455, 32701048
32703155, 32704013, 32705734, 32709170, 32710534, 32712791, 32712916
32719288, 32719445, 32719456, 32720344, 32724505, 32726772, 32728984
32730701, 32732179, 32733845, 32734021, 32734171, 32734800, 32735915
32736370, 32737827, 32737969, 32740515, 32743290, 32747680, 32747738
32748806, 32750940, 32753472, 32754044, 32754574, 32755517, 32760868
32761294, 32761932, 32763050, 32763283, 32763544, 32764690, 32766397
32766407, 32766916, 32768752, 32769880, 32770651, 32771735, 32775512
32775526, 32776891, 32781826, 32782851, 32786308, 32789228, 32790012
32794261, 32797486, 32800137, 32800539, 32801192, 32801303, 32801337
32802926, 32803807, 32804609, 32806069, 32806915, 32809152, 32810125
32818545, 32822436, 32822847, 32823545, 32823692, 32827206, 32829563
32831451, 32831901, 32834394, 32834426, 32838028, 32838533, 32842415
32843672, 32846876, 32848060, 32848816, 32850174, 32851615, 32852484
32852504, 32856375, 32856640, 32857881, 32863795, 32864736, 32866089
32868344, 32868369, 32869560, 32874225, 32874773, 32875003, 32875118
32879447, 32880390, 32881057, 32881462, 32883252, 32883853, 32887649
32888458, 32889096, 32891500, 32893951, 32897184, 32897679, 32898672
32898678, 32898971, 32901237, 32903472, 32903625, 32904867, 32907741
32908249, 32908946, 32909255, 32910846, 32912828, 32913527, 32913610
32914711, 32915747, 32915760, 32915847, 32916025, 32918041, 32918585
32920489, 32922090, 32924796, 32925703, 32926513, 32926653, 32930360
32930665, 32931078, 32931941, 32935045, 32935932, 32936005, 32936402
32936424, 32936537, 32937167, 32937338, 32940440, 32940955, 32941096
32941792, 32943694, 32945404, 32946347, 32947264, 32947268, 32952285
32955962, 32956896, 32958616, 32961142, 32962378, 32965460, 32966389
32967871, 32968221, 32968634, 32969863, 32970478, 32972633, 32973406
32974802, 32976022, 32977489, 32978151, 32980826, 32982562, 32983419
32983750, 32983871, 32984625, 32984679, 32985908, 32987004, 32987308
32988028, 32989794, 32991289, 32991527, 32993522, 32994080, 32995206
32995242, 32995863, 32996974, 32998659, 32999086, 33000440, 33000980
33001615, 33004888, 33005241, 33005831, 33009224, 33009351, 33010444
33011078, 33011198, 33013379, 33015716, 33016007, 33018951, 33020088
33020510, 33021036, 33021642, 33022043, 33022140, 33022926, 33023671
33025005, 33026313, 33026533, 33026796, 33027377, 33027525, 33027553
33028013, 33028286, 33028462, 33028480, 33032299, 33032579, 33034642
33034846, 33035201, 33035710, 33037531, 33037895, 33038120, 33038479
33038537, 33039277, 33040335, 33042780, 33043590, 33043881, 33044062
33045137, 33047645, 33047827, 33048074, 33049012, 33050587, 33050622
33050626, 33051299, 33053538, 33056383, 33056579, 33059891, 33060161
33061152, 33061339, 33061595, 33063919, 33064324, 33064565, 33065343

33065437, 33065526, 33065979, 33068672, 33069366, 33069889, 33072392
33075093, 33075133, 33075246, 33075452, 33076129, 33080651, 33085296
33085361, 33088863, 33089096, 33089556, 33090110, 33090127, 33090781
33090848, 33092087, 33096609, 33097433, 33098505, 33100270, 33100352
33101055, 33101058, 33102477, 33105276, 33105656, 33106822, 33106897
33107872, 33109335, 33110192, 33110580, 33110642, 33110992, 33111729
33113848, 33114640, 33115438, 33116481, 33120828, 33120920, 33121866
33121880, 33121934, 33123402, 33123404, 33123985, 33126216, 33127141
33127312, 33131526, 33131742, 33132050, 33134819, 33135083, 33135374
33136252, 33136601, 33137328, 33139230, 33140218, 33141420, 33142123
33142479, 33142533, 33142739, 33145153, 33146001, 33147065, 33150236
33152388, 33153797, 33156632, 33157547, 33161424, 33161535, 33161726
33163159, 33163187, 33165183, 33165391, 33166116, 33166125, 33166242
33166560, 33168480, 33169254, 33172549, 33172631, 33172679, 33176672
33177660, 33178223, 33178248, 33179718, 33181349, 33181498, 33182152
33182656, 33184467, 33185231, 33185773, 33186650, 33188597, 33189199
33189838, 33190454, 33190694, 33190761, 33191073, 33191584, 33193293
33195897, 33196009, 33196035, 33196475, 33197565, 33199431, 33199858
33201415, 33203951, 33205229, 33205781, 33207143, 33208644, 33210231
33211160, 33212112, 33216590, 33216667, 33218194, 33219840, 33220282
33223248, 33225584, 33225678, 33227044, 33230882, 33232128, 33233560
33234302, 33235620, 33239083, 33241118, 33241692, 33242408, 33243077
33244297, 33245879, 33245940, 33247372, 33251004, 33251111, 33252648
33253466, 33253504, 33254019, 33261707, 33261786, 33266449, 33268162
33271125, 33271941, 33273598, 33273638, 33278133, 33278440, 33278509
33279489, 33281287, 33282502, 33282504, 33282605, 33282971, 33287418
33288427, 33289442, 33289734, 33292174, 33292175, 33292429, 33292896
33294123, 33295267, 33297275, 33298903, 33300422, 33304435, 33304775
33304830, 33305175, 33305254, 33306852, 33307945, 33308107, 33308736
33309324, 33312816, 33312823, 33312932, 33313554, 33314122, 33314523
33315230, 33316711, 33316815, 33317279, 33317740, 33317752, 33317996
33318949, 33319065, 33320455, 33322041, 33322672, 33323634, 33323903
33324226, 33325981, 33326105, 33327118, 33329192, 33330508, 33331329
33332612, 33332891, 33334340, 33334404, 33334957, 33335201, 33335941
33337385, 33338247, 33338891, 33339444, 33339868, 33344767, 33345269
33347947, 33349744, 33351136, 33351978, 33352740, 33353474, 33354011
33355007, 33357283, 33360246, 33364012, 33367076, 33367184, 33367909
33370332, 33372080, 33373644, 33373693, 33375194, 33376694, 33380058
33380871, 33381652, 33381839, 33382108, 33382224, 33382529, 33382620
33384092, 33384505, 33387767, 33388473, 33389651, 33390717, 33390917
33390925, 33392448, 33392926, 33393503, 33397495, 33397605, 33398383
33401519, 33402361, 33402406, 33402456, 33407135, 33408858, 33409163
33409759, 33409841, 33410321, 33416405, 33417145, 33417828, 33417987
33418112, 33418443, 33420096, 33420490, 33421108, 33421305, 33421440

33422596, 33422877, 33424192, 33425127, 33426135, 33427823, 33427991
33428316, 33428795, 33435313, 33440442, 33440899, 33441073, 33444647
33446226, 33447015, 33447957, 33448908, 33451134, 33454288, 33454299
33455225, 33456703, 33456848, 33457235, 33457584, 33457842, 33458732
33460521, 33460870, 33462620, 33463044, 33464061, 33466822, 33467715
33470092, 33470254, 33471858, 33473795, 33474916, 33479703, 33480765
33480963, 33482590, 33485134, 33486067, 33489699, 33491676, 33492066
33492136, 33497132, 33498037, 33499125, 33499867, 33500486, 33503732
33504158, 33504432, 33504626, 33504902, 33505158, 33507610, 33507953
33510171, 33513526, 33513906, 33514179, 33514440, 33516571, 33517445
33517703, 33520658, 33522799, 33523982, 33525448, 33527630, 33527663
33531067, 33531364, 33532517, 33532755, 33533269, 33534589, 33536809
33537229, 33538063, 33540746, 33545633, 33545698, 33548709, 33548869
33550827, 33553452, 33553902, 33555482, 33558058, 33558087, 33558391
33559316, 33561671, 33561845, 33562255, 33563137, 33563167, 33566611
33568355, 33571225, 33575100, 33580595, 33581395, 33584404, 33584585
33584637, 33586107, 33589615, 33596056, 33596361, 33596364, 33598703
33599734, 33601195, 33601673, 33601849, 33607613, 33613512, 33613829
33613833, 33617587, 33617685, 33618962, 33621794, 33622325, 33624052
33624356, 33630464, 33631068, 33631562, 33632754, 33633875, 33637219
33641592, 33647716, 33647820, 33651003, 33651993, 33655399, 33656104
33656679, 33657553, 33660093, 33660782, 33661960, 33663444, 33664959
33664976, 33666803, 33674035, 33676296, 33677163, 33679665, 33681814
33681832, 33684377, 33695048, 33704431, 33705050, 33708958, 33710568
33711151, 33714000, 33718848, 33726682, 33727390, 33727406, 33727922
33729569, 33729692, 33734040, 33736618, 33737965, 33738702, 33742827
33743745, 33743884, 33746114, 33749984, 33750344, 33751080, 33753873
33755161, 33757064, 33759379, 33761538, 33763570, 33764761, 33767425
33768421, 33770883, 33770960, 33774856, 33777176, 33780001, 33785175
33786208, 33794088, 33794281, 33796040, 33798328, 33805155, 33809062
33809642, 33809904, 33810177, 33810360, 33813849, 33814415, 33817717
33817746, 33822187, 33833554, 33843512, 33845824, 33848060, 33848294
33850437, 33852823, 33853330, 33860895, 33861312, 33863150, 33863183
33863261, 33865116, 33865495, 33866472, 33867208, 33867451, 33867491
33870373, 33870888, 33871591, 33871761, 33875167, 33876357, 33879054
33886862, 33890694, 33893127, 33896341, 33896412, 33897055, 33901168
33902235, 33909838, 33915925, 33916081, 33921410, 33928944, 33930982
33932721, 33933784, 33937333, 33937705, 33945728, 33947516, 33947548
33954999, 33957025, 33959377, 33959383, 33960647, 33967599, 33970659
33973695, 33978449, 33987170, 33987636, 33987734, 33988974, 33990985
33993386, 33998365, 34001406, 34003643, 34004063, 34006614, 34006650
34010877, 34019087, 34023644, 34024924, 34030468, 34033430, 34034279
34053514, 34054215, 34058951, 34060425, 34066251, 34069959, 34088194
34094291, 34100909, 34103647, 34106567, 34110342, 34110724, 34113643

34116531, 34118219, 34139110, 34139217, 34146833, 34149263, 34154060
34162325, 34164828, 34170459, 34171855, 34177554, 34183461, 34191990
34208572, 34220943, 34229442, 34233694, 34238278, 34238626, 34240339
34244147, 34248786, 34256079, 34256867, 34257221, 34259389, 34261947
34264633, 34266633, 34269255, 34271874, 34276007, 34279907, 34291104
34301719, 34304388, 34309783, 34310198, 34310304, 34314448, 34319499
34324384, 34324942, 34326245, 34330164, 34339332, 34339511, 34351706
34363214, 34363828, 34366627, 34387852, 34398456, 34400514, 34411060
34421053, 34422622, 34454450, 34461697, 34473578, 34491739, 34509863
34533061, 34533150, 34536480, 34538832, 34539284, 34545148, 34545238
34559195, 34559432, 34570620, 34574048, 34574650, 34580665, 34587326
34596863, 34598617, 34599800, 34602706, 34604941, 34629086, 34635086
34651385, 34659006, 34680126, 34681779, 34692403, 34694304, 34698179
34698475, 34699533, 34699616, 34700228, 34713413, 34714760, 34715072
34720762, 34721689, 34738737, 34740434, 34743869, 34763622, 34773547
34777399, 34782365, 34785277, 34786432, 34787623, 34798436, 34810533
34813568, 34816792, 34820652, 34830523, 34839112, 34843376, 34847038
34855429, 34872784, 34873945, 34884137, 34891346, 34903282, 34913418
34922278, 34929834, 34930370, 34957489, 34977125, 34993116, 34996911
34997341, 34998034, 35001950, 35004964, 35021301, 35034357, 35066263
35075219, 35079982, 35097019, 35099667, 35099674, 35102258, 35116995
35121905, 35122349, 35123829, 35154926, 35157812, 35163085, 35167216
35171598, 35175684, 35176667, 35176824, 35177608, 35185281, 35185582
35194313, 35209504, 35220732, 35225526, 35239280, 35251084, 35257415
35278276, 35280309, 35280316, 35285795, 35314366, 35325831, 35331461
35336148, 35336918, 35354098, 35360571, 35360677, 35393406, 35414664
35428646, 35464439, 35572071, 35585502, 35587953, 35598272, 35598910
35598911, 35608957, 35610741, 35618472, 35627067, 35635081, 35637915
35638302, 35642546, 35644675, 35646719, 35649519, 35654499, 35656066
35657726, 35665871, 35671663, 35698030, 35717077, 35737047, 35748468
35754528, 35770294, 35786885, 35806962, 35818242, 35829615, 35843015
35853413, 35901710, 35905938, 35908011, 35914430, 35949081, 35949725
36004586, 36016273, 36037226, 36059486, 36097286, 36102295, 36107739
36138120, 36178988, 36210227, 36223861, 36230174, 36244242, 36260493
36260537, 36387740

Version 21.0.0.0.ru-2024-01.rur-2024-01.r1

Version 21.0.0.0.ru-2024-01.rur-2024-01.r1 includes the following patches:

- Patch [35220732](#): RDBMS - DSTV42 UPDATE - TZDATA2023C
- Patch [35099667](#): RDBMS - DSTV41 UPDATE - TZDATA2022G

- Patch [34698179](#): RDBMS - DSTV40 UPDATE - TZDATA2022E
- Patch [34533061](#): RDBMS - DSTV39 UPDATE - TZDATA2022C
- Patch [34006614](#): RDBMS - DSTV38 UPDATE - TZDATA2022A
- Patch [33613829](#): RDBMS - DSTV37 UPDATE - TZDATA2021E
- Patch [32327201](#): RDBMS - DSTV36 UPDATE - TZDATA2020E
- Patch [36041222](#): Database Release Update : 21.13.0.0.240116 (36041222)

Combined Patches for Version 21.0.0.0.ru-2024-01.rur-2024-01.r1, Released January 2024

Bugs fixed:

12565410, 12949919, 14112098, 15897884, 16799766, 17443054, 18759260
 19397646, 19884953, 19958239, 20875943, 22037067, 22873666, 23614160
 24559425, 24597536, 24701882, 24916492, 25173172, 25562258, 25655012
 25881271, 26139817, 26352569, 26950182, 27015468, 27162036, 27751518
 27897090, 27979632, 28044739, 28089112, 28127287, 28294439, 28337860
 28513129, 28632799, 28852334, 28882751, 28994721, 29027914, 29413205
 29524043, 29587488, 29591661, 29617414, 29811720, 29900186, 29927360
 29948154, 29997959, 30082402, 30343750, 30481004, 30610097, 30706073
 30710917, 30722105, 30747820, 30771009, 30808364, 30840150, 30846263
 30876666, 30933117, 30961824, 31006259, 31006953, 31026870, 31044504
 31073424, 31079198, 31110887, 31113682, 31138371, 31192261, 31243859
 31251325, 31287296, 31335142, 31356954, 31385668, 31387123, 31414524
 31429692, 31487775, 31488085, 31504723, 31526250, 31531079, 31535516
 31562484, 31588631, 31596817, 31615736, 31628975, 31649223, 31652763
 31656601, 31676324, 31720377, 31725154, 31731407, 31768866, 31773909
 31780567, 31781944, 31800059, 31800139, 31824792, 31827584, 31834214
 31834611, 31834677, 31841210, 31843716, 31843845, 31844137, 31844357
 31844557, 31872320, 31897178, 31912834, 31918462, 31923463, 31927078
 31932042, 31933842, 31933846, 31933914, 31938116, 31939767, 31951628
 31954223, 31959140, 31960603, 31969646, 31974187, 31982879, 31986827
 31987278, 31987922, 31988833, 31992242, 31992615, 31992953, 31993051
 31994298, 31996331, 31997660, 32003908, 32008408, 32008716, 32009197
 32012400, 32013253, 32015642, 32017570, 32017635, 32020701, 32041003
 32055692, 32056529, 32057565, 32069508, 32071457, 32075130, 32078078
 32081381, 32092797, 32097767, 32102542, 32102722, 32104578, 32114541
 32114746, 32115403, 32118543, 32119144, 32122804, 32132504, 32133898
 32159343, 32161381, 32166950, 32178966, 32183102, 32183756, 32184235
 32184577, 32184844, 32185296, 32190419, 32196943, 32198292, 32198368

32198396, 32199681, 32205514, 32212062, 32219835, 32224140, 32225117
32225742, 32233406, 32234148, 32240272, 32249371, 32254686, 32255529
32255753, 32255762, 32258388, 32258423, 32277793, 32284608, 32285563
32287989, 32292805, 32294031, 32297469, 32297849, 32298173, 32298782
32300822, 32302470, 32312412, 32327201, 32327208, 32335257, 32338919
32342345, 32343092, 32345050, 32346254, 32346649, 32357412, 32361175
32361677, 32362072, 32365085, 32366303, 32368480, 32371828, 32372554
32372725, 32373696, 32374616, 32377901, 32379001, 32380591, 32382021
32386720, 32390629, 32393137, 32394623, 32396326, 32408640, 32417301
32423678, 32423985, 32424465, 32425778, 32425862, 32426213, 32427158
32427583, 32427953, 32428097, 32431049, 32431251, 32432078, 32432245
32436460, 32436721, 32439726, 32441128, 32441671, 32442229, 32449909
32459632, 32460145, 32462153, 32465193, 32465209, 32465495, 32468643
32471100, 32471251, 32472485, 32478452, 32481807, 32486955, 32492382
32498569, 32498752, 32503790, 32506166, 32506473, 32506809, 32507542
32509814, 32514516, 32515850, 32523613, 32524841, 32526703, 32529396
32530202, 32531647, 32533461, 32535156, 32538824, 32540706, 32540772
32544740, 32546937, 32549277, 32550894, 32551246, 32555592, 32556165
32556311, 32561841, 32573197, 32579075, 32580852, 32583315, 32583355
32583692, 32584375, 32584505, 32585832, 32587305, 32587793, 32587994
32588656, 32593877, 32594965, 32597099, 32597637, 32602194, 32602990
32603092, 32606093, 32607991, 32608583, 32609512, 32610185, 32610271
32618819, 32619195, 32620859, 32621140, 32621309, 32625160, 32625356
32626756, 32626830, 32628168, 32629028, 32630060, 32634049, 32635881
32635931, 32639432, 32639860, 32642587, 32645139, 32649737, 32649749
32651063, 32651773, 32652605, 32653470, 32662165, 32665836, 32669149
32672057, 32674819, 32675095, 32677000, 32682586, 32685286, 32685989
32690400, 32692372, 32697157, 32697859, 32698508, 32700455, 32701048
32703155, 32704013, 32705734, 32709170, 32710534, 32712791, 32712916
32719288, 32719445, 32719456, 32720344, 32724505, 32726772, 32728984
32730701, 32732179, 32733845, 32734021, 32734171, 32734800, 32735915
32736370, 32737827, 32737969, 32740515, 32743290, 32747680, 32747738
32748806, 32750940, 32753472, 32754044, 32754574, 32755517, 32760868
32761294, 32761932, 32763050, 32763283, 32763544, 32764690, 32766397
32766407, 32766916, 32768752, 32769880, 32770651, 32771735, 32775512
32775526, 32776891, 32781826, 32782851, 32786308, 32789228, 32790012
32794261, 32797486, 32800137, 32800539, 32801192, 32801303, 32801337
32802926, 32803807, 32804609, 32806069, 32806915, 32809152, 32810125
32818545, 32822436, 32822847, 32823545, 32823692, 32827206, 32829563
32831451, 32831901, 32834394, 32834426, 32838028, 32838533, 32842415
32843672, 32846876, 32848060, 32848816, 32850174, 32851615, 32852484
32852504, 32856375, 32856640, 32857881, 32863795, 32864736, 32866089
32868344, 32868369, 32869560, 32874225, 32874773, 32875003, 32875118
32879447, 32880390, 32881057, 32881462, 32883252, 32883853, 32887649

32888458, 32889096, 32891500, 32893951, 32897184, 32897679, 32898672
32898678, 32898971, 32901237, 32903472, 32903625, 32904867, 32907741
32908249, 32908946, 32909255, 32910846, 32912828, 32913527, 32913610
32914711, 32915747, 32915760, 32915847, 32916025, 32918041, 32918585
32920489, 32922090, 32924796, 32925703, 32926513, 32926653, 32930360
32930665, 32931078, 32931941, 32935045, 32935932, 32936005, 32936402
32936424, 32936537, 32937167, 32937338, 32940440, 32940955, 32941096
32941792, 32943694, 32945404, 32946347, 32947264, 32947268, 32952285
32955962, 32956896, 32958616, 32961142, 32962378, 32965460, 32966389
32967871, 32968221, 32968634, 32969863, 32970478, 32972633, 32973406
32974802, 32976022, 32977489, 32978151, 32980826, 32982562, 32983419
32983750, 32983871, 32984625, 32984679, 32985908, 32987004, 32987308
32988028, 32989794, 32991289, 32991527, 32993522, 32994080, 32995206
32995242, 32995863, 32996974, 32998659, 32999086, 33000440, 33000980
33001615, 33004888, 33005241, 33005831, 33009224, 33009351, 33010444
33011078, 33011198, 33013379, 33015716, 33016007, 33018951, 33020088
33020510, 33021036, 33021642, 33022043, 33022140, 33022926, 33023671
33025005, 33026313, 33026533, 33026796, 33027377, 33027525, 33027553
33028013, 33028286, 33028462, 33028480, 33032299, 33032579, 33034642
33034846, 33035201, 33035710, 33037531, 33037895, 33038120, 33038479
33038537, 33039277, 33040335, 33042780, 33043590, 33043881, 33044062
33045137, 33047645, 33047827, 33048074, 33049012, 33050587, 33050622
33050626, 33051299, 33053538, 33056383, 33056579, 33059891, 33060161
33061152, 33061339, 33061595, 33063919, 33064324, 33064565, 33065343
33065437, 33065526, 33065979, 33068672, 33069366, 33069889, 33072392
33075093, 33075133, 33075246, 33075452, 33076129, 33080651, 33085296
33085361, 33088863, 33089096, 33089556, 33090110, 33090127, 33090781
33090848, 33092087, 33096609, 33097433, 33098505, 33100270, 33100352
33101055, 33101058, 33102477, 33105276, 33105656, 33106822, 33106897
33107872, 33109335, 33110192, 33110580, 33110642, 33110992, 33111729
33113848, 33114640, 33115438, 33116481, 33120828, 33120920, 33121866
33121880, 33121934, 33123402, 33123404, 33123985, 33126216, 33127141
33127312, 33131526, 33131742, 33132050, 33134819, 33135083, 33135374
33136252, 33136601, 33137328, 33139230, 33140218, 33141420, 33142123
33142479, 33142533, 33142739, 33145153, 33146001, 33147065, 33150236
33152388, 33153797, 33156632, 33157547, 33161424, 33161535, 33161726
33163159, 33163187, 33165183, 33165391, 33166116, 33166125, 33166242
33166560, 33168480, 33169254, 33172549, 33172631, 33172679, 33176672
33177660, 33178223, 33178248, 33179718, 33181349, 33181498, 33182152
33182656, 33184467, 33185231, 33185773, 33186650, 33188597, 33189199
33190454, 33190694, 33190761, 33191073, 33191584, 33193293, 33195897
33196009, 33196035, 33196475, 33197565, 33199431, 33199858, 33201415
33203951, 33205229, 33205781, 33207143, 33208644, 33210231, 33211160
33212112, 33216590, 33216667, 33218194, 33219840, 33220282, 33223248

33225584, 33225678, 33227044, 33230882, 33232128, 33233560, 33234302
33235620, 33239083, 33241118, 33241692, 33242408, 33243077, 33244297
33245879, 33245940, 33247372, 33251004, 33251111, 33252648, 33253466
33253504, 33254019, 33261707, 33261786, 33266449, 33268162, 33271125
33271941, 33273598, 33273638, 33278133, 33278440, 33278509, 33279489
33281287, 33282502, 33282504, 33282605, 33282971, 33287418, 33288427
33289442, 33289734, 33292174, 33292175, 33292429, 33292896, 33294123
33295267, 33297275, 33298903, 33300422, 33304435, 33304775, 33304830
33305175, 33305254, 33306852, 33307945, 33308107, 33308736, 33309324
33312816, 33312823, 33312932, 33313554, 33314122, 33314523, 33315230
33316711, 33316815, 33317279, 33317740, 33317752, 33317996, 33318949
33319065, 33320455, 33322041, 33322672, 33323634, 33323903, 33324226
33325981, 33326105, 33327118, 33329192, 33330508, 33331329, 33332612
33332891, 33334340, 33334404, 33334957, 33335201, 33335941, 33337385
33338247, 33338891, 33339444, 33339868, 33344767, 33345269, 33347947
33349744, 33351136, 33351978, 33352740, 33353474, 33354011, 33355007
33357283, 33360246, 33364012, 33367076, 33367184, 33367909, 33370332
33372080, 33373644, 33373693, 33375194, 33376694, 33380058, 33380871
33381652, 33381839, 33382108, 33382224, 33382529, 33382620, 33384092
33384505, 33387767, 33388473, 33389651, 33390717, 33390917, 33390925
33392448, 33392926, 33393503, 33397495, 33397605, 33398383, 33401519
33402361, 33402406, 33402456, 33407135, 33408858, 33409163, 33409759
33409841, 33410321, 33416405, 33417145, 33417828, 33417987, 33418112
33418443, 33420096, 33420490, 33421108, 33421305, 33421440, 33422596
33422877, 33424192, 33425127, 33426135, 33427823, 33427991, 33428316
33428795, 33435313, 33440442, 33440899, 33441073, 33444647, 33446226
33447015, 33447957, 33448908, 33451134, 33454288, 33454299, 33455225
33456703, 33456848, 33457235, 33457584, 33457842, 33458732, 33460521
33460870, 33462620, 33463044, 33464061, 33466822, 33467715, 33470092
33470254, 33471858, 33473795, 33474916, 33479703, 33480765, 33480963
33482590, 33485134, 33486067, 33489699, 33491676, 33492066, 33492136
33497132, 33498037, 33499125, 33499867, 33500486, 33503732, 33504158
33504432, 33504626, 33504902, 33505158, 33507610, 33507953, 33510171
33513526, 33513906, 33514179, 33514440, 33516571, 33517445, 33517703
33520658, 33522799, 33523982, 33525448, 33527630, 33527663, 33531067
33531364, 33532517, 33532755, 33533269, 33534589, 33536809, 33537229
33538063, 33540746, 33545633, 33545698, 33548709, 33548869, 33550827
33553452, 33553902, 33555482, 33558058, 33558087, 33558391, 33559316
33561671, 33561845, 33562255, 33563137, 33563167, 33566611, 33568355
33571225, 33575100, 33580595, 33581395, 33584404, 33584585, 33584637
33586107, 33589615, 33596056, 33596361, 33596364, 33598703, 33599734
33601195, 33601673, 33601849, 33607613, 33613512, 33613829, 33613833
33617587, 33617685, 33618962, 33621794, 33622325, 33624052, 33624356
33630464, 33631068, 33631562, 33632754, 33633875, 33637219, 33641592

33647716, 33647820, 33651003, 33651993, 33655399, 33656104, 33656679
33657553, 33660093, 33660782, 33661960, 33663444, 33664959, 33664976
33666803, 33674035, 33676296, 33677163, 33679665, 33681814, 33681832
33684377, 33695048, 33704431, 33705050, 33708958, 33710568, 33711151
33714000, 33718848, 33726682, 33727390, 33727406, 33727922, 33729569
33729692, 33734040, 33736618, 33737965, 33738702, 33742827, 33743745
33743884, 33746114, 33749984, 33750344, 33751080, 33753873, 33755161
33757064, 33759379, 33761538, 33763570, 33764761, 33767425, 33768421
33770883, 33770960, 33774856, 33777176, 33780001, 33785175, 33786208
33794088, 33794281, 33796040, 33798328, 33805155, 33809062, 33809642
33809904, 33810177, 33810360, 33813849, 33814415, 33817717, 33817746
33822187, 33833554, 33843512, 33845824, 33848060, 33848294, 33850437
33852823, 33853330, 33860895, 33861312, 33863150, 33863183, 33863261
33865116, 33865495, 33866472, 33867208, 33867451, 33867491, 33870373
33870888, 33871591, 33871761, 33875167, 33876357, 33879054, 33886862
33890694, 33893127, 33896341, 33896412, 33897055, 33901168, 33902235
33909838, 33915925, 33916081, 33921410, 33928944, 33932721, 33933784
33937333, 33937705, 33945728, 33947516, 33947548, 33954999, 33957025
33959377, 33959383, 33960647, 33967599, 33970659, 33973695, 33978449
33987170, 33987636, 33987734, 33988974, 33990985, 33993386, 33998365
34001406, 34003643, 34004063, 34006614, 34006650, 34010877, 34019087
34023644, 34024924, 34030468, 34033430, 34034279, 34053514, 34054215
34058951, 34060425, 34066251, 34069959, 34088194, 34094291, 34100909
34103647, 34106567, 34110342, 34110724, 34113643, 34116531, 34118219
34139110, 34139217, 34146833, 34149263, 34154060, 34162325, 34164828
34170459, 34171855, 34177554, 34183461, 34191990, 34208572, 34220943
34229442, 34233694, 34238278, 34238626, 34240339, 34244147, 34248786
34256079, 34256867, 34257221, 34259389, 34261947, 34264633, 34266633
34269255, 34271874, 34276007, 34279907, 34291104, 34301719, 34304388
34309783, 34310198, 34310304, 34314448, 34319499, 34324384, 34324942
34326245, 34330164, 34339332, 34339511, 34351706, 34363214, 34363828
34366627, 34387852, 34398456, 34400514, 34411060, 34421053, 34422622
34454450, 34461697, 34473578, 34491739, 34509863, 34533061, 34533150
34536480, 34538832, 34539284, 34545148, 34545238, 34559195, 34559432
34570620, 34574048, 34574650, 34580665, 34587326, 34596863, 34598617
34599800, 34602706, 34604941, 34629086, 34635086, 34651385, 34659006
34680126, 34681779, 34692403, 34694304, 34698179, 34698475, 34699616
34700228, 34713413, 34714760, 34715072, 34720762, 34721689, 34738737
34740434, 34743869, 34763622, 34773547, 34777399, 34782365, 34785277
34786432, 34787623, 34798436, 34810533, 34813568, 34816792, 34820652
34830523, 34839112, 34843376, 34847038, 34855429, 34872784, 34873945
34884137, 34891346, 34913418, 34922278, 34929834, 34930370, 34957489
34977125, 34993116, 34996911, 34997341, 34998034, 35001950, 35004964
35021301, 35034357, 35066263, 35075219, 35079982, 35097019, 35099667

35099674, 35116995, 35121905, 35122349, 35123829, 35154926, 35157812
 35163085, 35167216, 35171598, 35175684, 35176667, 35176824, 35177608
 35185281, 35185582, 35194313, 35209504, 35220732, 35225526, 35239280
 35251084, 35257415, 35278276, 35280309, 35285795, 35314366, 35325831
 35331461, 35336148, 35336918, 35354098, 35360571, 35393406, 35414664
 35428646, 35464439, 35572071, 35585502, 35598272, 35598910, 35598911
 35608957, 35610741, 35618472, 35627067, 35635081, 35637915, 35638302
 35642546, 35644675, 35646719, 35649519, 35654499, 35656066, 35665871
 35671663, 35698030, 35717077, 35737047, 35748468, 35754528, 35770294
 35786885, 35806962, 35829615, 35908011, 35914430, 35949725, 36138120

Version 21.0.0.0.ru-2023-10.rur-2023-10.r1

Version 21.0.0.0.ru-2023-10.rur-2023-10.r1 includes the following:

- Patch [35239280](#): DSTV42 UPDATE - TZDATA2023C - NEED OJVM FIX
- Patch [35220732](#): RDBMS - DSTV42 UPDATE - TZDATA2023C
- Patch [35099667](#): RDBMS - DSTV41 UPDATE - TZDATA2022G
- Patch [34698179](#): RDBMS - DSTV40 UPDATE - TZDATA2022E
- Patch [34533061](#): RDBMS - DSTV39 UPDATE - TZDATA2022C
- Patch [34006614](#): RDBMS - DSTV38 UPDATE - TZDATA2022A
- Patch [33613829](#): RDBMS - DSTV37 UPDATE - TZDATA2021E
- Patch [32327201](#): RDBMS - DSTV36 UPDATE - TZDATA2020E
- Patch [35740258](#): Database Release Update : 21.12.0.0.231017 (35740258)

Combined Patches for Version 21.0.0.0.ru-2023-10.rur-2023-10.r1, released October 2023

Bugs fixed:

12565410, 12949919, 14112098, 15897884, 16799766, 17443054, 18759260
 19397646, 19884953, 19958239, 20875943, 22037067, 22873666, 23614160
 24559425, 24597536, 24701882, 24916492, 25173172, 25562258, 25655012
 25881271, 26139817, 26352569, 26950182, 27015468, 27162036, 27751518
 27897090, 27979632, 28044739, 28089112, 28127287, 28294439, 28337860
 28513129, 28632799, 28852334, 28882751, 28994721, 29027914, 29413205
 29524043, 29587488, 29591661, 29617414, 29811720, 29900186, 29927360

29948154, 29997959, 30082402, 30343750, 30481004, 30610097, 30706073
30710917, 30722105, 30747820, 30771009, 30808364, 30840150, 30846263
30876666, 30933117, 30961824, 31006259, 31006953, 31026870, 31044504
31073424, 31079198, 31110887, 31113682, 31138371, 31192261, 31243859
31251325, 31287296, 31335142, 31356954, 31385668, 31387123, 31414524
31429692, 31487775, 31488085, 31504723, 31526250, 31531079, 31535516
31562484, 31588631, 31596817, 31615736, 31628975, 31649223, 31652763
31656601, 31676324, 31720377, 31725154, 31731407, 31768866, 31773909
31780567, 31781944, 31800059, 31800139, 31824792, 31827584, 31834214
31834611, 31834677, 31841210, 31843716, 31843845, 31844137, 31844357
31844557, 31872320, 31897178, 31912834, 31918462, 31923463, 31927078
31932042, 31933842, 31933846, 31933914, 31938116, 31939767, 31951628
31954223, 31959140, 31960603, 31969646, 31974187, 31982879, 31986827
31987278, 31987922, 31988833, 31992242, 31992615, 31992953, 31993051
31994298, 31996331, 31997660, 32003908, 32008408, 32008716, 32009197
32012400, 32013253, 32015642, 32017570, 32017635, 32020701, 32041003
32055692, 32056529, 32057565, 32069508, 32071457, 32075130, 32078078
32081381, 32092797, 32097767, 32102542, 32102722, 32104578, 32114541
32114746, 32115403, 32118543, 32119144, 32122804, 32132504, 32133898
32159343, 32161381, 32166950, 32178966, 32183102, 32183756, 32184235
32184577, 32184844, 32185296, 32190419, 32196943, 32198292, 32198368
32198396, 32199681, 32205514, 32212062, 32219835, 32224140, 32225117
32225742, 32233406, 32234148, 32240272, 32249371, 32254686, 32255529
32255753, 32255762, 32258388, 32258423, 32277793, 32284608, 32285563
32287989, 32292805, 32294031, 32297469, 32297849, 32298173, 32298782
32300822, 32302470, 32312412, 32327201, 32327208, 32335257, 32338919
32342345, 32343092, 32345050, 32346254, 32346649, 32357412, 32361175
32361677, 32362072, 32365085, 32366303, 32368480, 32371828, 32372554
32372725, 32373696, 32374616, 32377901, 32379001, 32380591, 32382021
32386720, 32390629, 32393137, 32394623, 32396326, 32408640, 32417301
32423678, 32423985, 32424465, 32425778, 32425862, 32426213, 32427158
32427583, 32427953, 32428097, 32431049, 32431251, 32432078, 32432245
32436460, 32436721, 32439726, 32441128, 32441671, 32442229, 32449909
32459632, 32460145, 32462153, 32465193, 32465209, 32465495, 32468643
32471100, 32471251, 32472485, 32478452, 32481807, 32486955, 32492382
32498569, 32498752, 32503790, 32506166, 32506473, 32506809, 32507542
32509814, 32514516, 32515850, 32523613, 32524841, 32526703, 32529396
32530202, 32531647, 32533461, 32535156, 32538824, 32540706, 32540772
32544740, 32546937, 32549277, 32550894, 32551246, 32555592, 32556165
32556311, 32561841, 32573197, 32579075, 32580852, 32583315, 32583355
32583692, 32584375, 32584505, 32585832, 32587305, 32587793, 32587994
32588656, 32593877, 32594965, 32597099, 32597637, 32602194, 32602990
32603092, 32606093, 32607991, 32608583, 32609512, 32610185, 32610271
32618819, 32619195, 32620859, 32621140, 32621309, 32625160, 32625356

32626756, 32626830, 32628168, 32629028, 32630060, 32634049, 32635881
32635931, 32639432, 32639860, 32642587, 32645139, 32649737, 32649749
32651063, 32651773, 32652605, 32653470, 32662165, 32665836, 32669149
32672057, 32674819, 32675095, 32677000, 32682586, 32685286, 32685989
32690400, 32692372, 32697157, 32697859, 32698508, 32700455, 32701048
32703155, 32704013, 32705734, 32709170, 32710534, 32712791, 32712916
32719288, 32719445, 32719456, 32720344, 32724505, 32726772, 32728984
32730701, 32732179, 32733845, 32734021, 32734171, 32734800, 32735915
32736370, 32737827, 32737969, 32740515, 32743290, 32747680, 32747738
32748806, 32750940, 32753472, 32754044, 32754574, 32755517, 32760868
32761294, 32761932, 32763050, 32763283, 32763544, 32764690, 32766397
32766407, 32766916, 32768752, 32769880, 32770651, 32771735, 32775512
32775526, 32776891, 32781826, 32782851, 32786308, 32789228, 32790012
32794261, 32797486, 32800137, 32800539, 32801192, 32801303, 32801337
32802926, 32803807, 32804609, 32806069, 32806915, 32809152, 32810125
32818545, 32822436, 32822847, 32823545, 32823692, 32827206, 32829563
32831451, 32831901, 32834394, 32834426, 32838028, 32838533, 32842415
32843672, 32846876, 32848060, 32848816, 32850174, 32851615, 32852484
32852504, 32856375, 32856640, 32857881, 32863795, 32864736, 32866089
32868344, 32868369, 32869560, 32874225, 32874773, 32875003, 32875118
32879447, 32880390, 32881057, 32881462, 32883252, 32883853, 32887649
32888458, 32889096, 32891500, 32893951, 32897184, 32897679, 32898672
32898678, 32898971, 32901237, 32903472, 32903625, 32904867, 32907741
32908249, 32908946, 32909255, 32910846, 32912828, 32913527, 32913610
32914711, 32915747, 32915760, 32915847, 32916025, 32918041, 32918585
32920489, 32922090, 32924796, 32925703, 32926513, 32926653, 32930360
32930665, 32931078, 32931941, 32935045, 32935932, 32936005, 32936402
32936424, 32936537, 32937167, 32937338, 32940440, 32940955, 32941096
32941792, 32943694, 32945404, 32946347, 32947264, 32947268, 32952285
32955962, 32956896, 32958616, 32961142, 32962378, 32965460, 32966389
32967871, 32968221, 32968634, 32969863, 32970478, 32972633, 32973406
32974802, 32976022, 32977489, 32978151, 32980826, 32982562, 32983419
32983750, 32983871, 32984625, 32984679, 32985908, 32987004, 32987308
32988028, 32989794, 32991289, 32991527, 32993522, 32994080, 32995206
32995242, 32995863, 32996974, 32998659, 32999086, 33000440, 33000980
33001615, 33004888, 33005241, 33005831, 33009224, 33009351, 33010444
33011078, 33011198, 33013379, 33015716, 33016007, 33018951, 33020088
33020510, 33021036, 33021642, 33022043, 33022140, 33022926, 33023671
33025005, 33026313, 33026533, 33026796, 33027377, 33027525, 33027553
33028013, 33028286, 33028462, 33028480, 33032299, 33032579, 33034642
33034846, 33035201, 33035710, 33037531, 33037895, 33038120, 33038479
33038537, 33039277, 33040335, 33042780, 33043590, 33043881, 33044062
33045137, 33047645, 33047827, 33048074, 33049012, 33050587, 33050622
33050626, 33051299, 33053538, 33056383, 33056579, 33059891, 33060161

33061152, 33061339, 33061595, 33063919, 33064324, 33064565, 33065343
33065437, 33065526, 33065979, 33068672, 33069366, 33069889, 33072392
33075093, 33075133, 33075246, 33075452, 33076129, 33080651, 33085296
33085361, 33088863, 33089096, 33089556, 33090110, 33090127, 33090781
33090848, 33092087, 33096609, 33097433, 33098505, 33100270, 33100352
33101055, 33101058, 33102477, 33105276, 33105656, 33106822, 33106897
33107872, 33109335, 33110192, 33110580, 33110642, 33110992, 33111729
33113848, 33114640, 33115438, 33116481, 33120828, 33120920, 33121866
33121880, 33121934, 33123402, 33123404, 33123985, 33126216, 33127141
33127312, 33131526, 33131742, 33132050, 33134819, 33135083, 33135374
33136252, 33136601, 33137328, 33139230, 33140218, 33141420, 33142123
33142479, 33142533, 33142739, 33145153, 33146001, 33147065, 33150236
33152388, 33153797, 33156632, 33157547, 33161424, 33161535, 33161726
33163159, 33163187, 33165183, 33165391, 33166116, 33166125, 33166242
33166560, 33168480, 33169254, 33172549, 33172631, 33172679, 33176672
33177660, 33178223, 33178248, 33179718, 33181349, 33181498, 33182152
33182656, 33184467, 33185231, 33185773, 33186650, 33188597, 33189199
33190454, 33190694, 33190761, 33191073, 33191584, 33193293, 33195897
33196009, 33196035, 33196475, 33197565, 33199431, 33199858, 33201415
33203951, 33205229, 33205781, 33207143, 33208644, 33210231, 33211160
33212112, 33216590, 33216667, 33218194, 33219840, 33220282, 33223248
33225584, 33225678, 33227044, 33230882, 33232128, 33233560, 33234302
33235620, 33239083, 33241118, 33241692, 33242408, 33243077, 33244297
33245879, 33245940, 33247372, 33251004, 33251111, 33252648, 33253466
33253504, 33254019, 33261707, 33261786, 33266449, 33268162, 33271125
33271941, 33273598, 33273638, 33278133, 33278440, 33278509, 33279489
33281287, 33282502, 33282504, 33282605, 33282971, 33287418, 33288427
33289442, 33289734, 33292174, 33292175, 33292429, 33292896, 33294123
33295267, 33297275, 33298903, 33300422, 33304435, 33304775, 33304830
33305175, 33305254, 33306852, 33307945, 33308107, 33308736, 33309324
33312816, 33312823, 33312932, 33313554, 33314122, 33314523, 33315230
33316711, 33316815, 33317279, 33317740, 33317752, 33317996, 33318949
33319065, 33320455, 33322041, 33322672, 33323634, 33323903, 33324226
33325981, 33326105, 33327118, 33329192, 33330508, 33331329, 33332612
33332891, 33334340, 33334404, 33334957, 33335201, 33335941, 33337385
33338247, 33338891, 33339444, 33339868, 33344767, 33345269, 33347947
33349744, 33351136, 33351978, 33352740, 33353474, 33354011, 33355007
33357283, 33360246, 33364012, 33367076, 33367184, 33367909, 33370332
33372080, 33373644, 33373693, 33375194, 33376694, 33380058, 33380871
33381652, 33381839, 33382108, 33382224, 33382529, 33382620, 33384092
33384505, 33387767, 33388473, 33389651, 33390717, 33390917, 33390925
33392448, 33392926, 33393503, 33397495, 33397605, 33398383, 33401519
33402361, 33402406, 33402456, 33407135, 33408858, 33409163, 33409759
33409841, 33410321, 33416405, 33417145, 33417828, 33417987, 33418112

33418443, 33420096, 33420490, 33421108, 33421305, 33421440, 33422596
33422877, 33424192, 33425127, 33426135, 33427823, 33427991, 33428316
33428795, 33435313, 33440442, 33440899, 33441073, 33444647, 33446226
33447015, 33447957, 33448908, 33451134, 33454288, 33454299, 33455225
33456703, 33456848, 33457235, 33457584, 33457842, 33458732, 33460521
33460870, 33462620, 33463044, 33464061, 33466822, 33467715, 33470092
33470254, 33471858, 33473795, 33474916, 33479703, 33480765, 33480963
33482590, 33485134, 33486067, 33489699, 33491676, 33492066, 33492136
33497132, 33498037, 33499125, 33499867, 33500486, 33503732, 33504158
33504432, 33504626, 33504902, 33505158, 33507610, 33507953, 33510171
33513526, 33513906, 33514179, 33514440, 33516571, 33517445, 33517703
33520658, 33522799, 33523982, 33525448, 33527630, 33527663, 33531067
33531364, 33532517, 33532755, 33533269, 33534589, 33536809, 33537229
33538063, 33540746, 33545633, 33545698, 33548709, 33548869, 33550827
33553452, 33553902, 33555482, 33558058, 33558087, 33558391, 33559316
33561671, 33561845, 33562255, 33563137, 33563167, 33566611, 33568355
33571225, 33575100, 33580595, 33581395, 33584404, 33584585, 33584637
33586107, 33589615, 33596056, 33596361, 33596364, 33598703, 33599734
33601195, 33601673, 33601849, 33607613, 33613512, 33613829, 33613833
33617587, 33617685, 33618962, 33621794, 33622325, 33624052, 33624356
33630464, 33631068, 33631562, 33632754, 33633875, 33637219, 33641592
33647716, 33647820, 33651003, 33651993, 33655399, 33656104, 33656679
33657553, 33660093, 33660782, 33661960, 33663444, 33664959, 33664976
33666803, 33674035, 33676296, 33677163, 33679665, 33681814, 33681832
33684377, 33695048, 33704431, 33705050, 33708958, 33710568, 33711151
33714000, 33718848, 33726682, 33727390, 33727406, 33727922, 33729569
33729692, 33734040, 33736618, 33737965, 33738702, 33742827, 33743745
33743884, 33746114, 33749984, 33750344, 33751080, 33753873, 33755161
33757064, 33759379, 33761538, 33763570, 33764761, 33767425, 33768421
33770883, 33770960, 33774856, 33777176, 33780001, 33785175, 33786208
33794088, 33796040, 33798328, 33805155, 33809062, 33809642, 33809904
33810177, 33810360, 33813849, 33814415, 33817717, 33817746, 33822187
33833554, 33843512, 33845824, 33848060, 33848294, 33850437, 33853330
33860895, 33861312, 33863150, 33863183, 33863261, 33865116, 33865495
33866472, 33867208, 33867451, 33867491, 33870373, 33871591, 33871761
33875167, 33876357, 33879054, 33886862, 33890694, 33893127, 33896341
33896412, 33897055, 33901168, 33902235, 33909838, 33915925, 33916081
33921410, 33928944, 33932721, 33933784, 33937333, 33937705, 33945728
33947516, 33947548, 33954999, 33957025, 33959377, 33959383, 33960647
33967599, 33970659, 33973695, 33978449, 33987170, 33987636, 33987734
33988974, 33990985, 33993386, 33998365, 34001406, 34003643, 34004063
34006614, 34006650, 34010877, 34019087, 34023644, 34024924, 34030468
34033430, 34034279, 34053514, 34054215, 34058951, 34060425, 34066251
34069959, 34088194, 34094291, 34100909, 34103647, 34106567, 34110342

34110724, 34113643, 34116531, 34118219, 34139110, 34139217, 34146833
34149263, 34154060, 34162325, 34164828, 34170459, 34171855, 34177554
34183461, 34191990, 34208572, 34220943, 34229442, 34233694, 34238278
34238626, 34240339, 34244147, 34248786, 34256079, 34256867, 34257221
34259389, 34261947, 34264633, 34266633, 34269255, 34271874, 34276007
34279907, 34291104, 34301719, 34304388, 34309783, 34310198, 34310304
34314448, 34319499, 34324384, 34324942, 34326245, 34330164, 34339332
34339511, 34351706, 34363214, 34363828, 34366627, 34387852, 34398456
34400514, 34411060, 34421053, 34422622, 34454450, 34461697, 34473578
34491739, 34509863, 34533061, 34533150, 34536480, 34538832, 34539284
34545148, 34545238, 34559195, 34559432, 34570620, 34574048, 34574650
34580665, 34587326, 34596863, 34598617, 34599800, 34602706, 34604941
34629086, 34635086, 34651385, 34659006, 34680126, 34681779, 34692403
34694304, 34698179, 34698475, 34699616, 34700228, 34713413, 34714760
34715072, 34720762, 34738737, 34740434, 34743869, 34763622, 34773547
34777399, 34782365, 34785277, 34786432, 34787623, 34798436, 34810533
34813568, 34816792, 34820652, 34830523, 34839112, 34843376, 34847038
34855429, 34873945, 34884137, 34891346, 34922278, 34929834, 34930370
34957489, 34977125, 34993116, 34996911, 34997341, 34998034, 35001950
35004964, 35021301, 35034357, 35066263, 35075219, 35079982, 35097019
35099667, 35099674, 35116995, 35121905, 35123829, 35154926, 35157812
35163085, 35167216, 35171598, 35175684, 35176667, 35176824, 35177608
35209504, 35220732, 35225526, 35239280, 35251084, 35257415, 35278276
35280309, 35285795, 35314366, 35325831, 35331461, 35336148, 35336918
35354098, 35360571, 35393406, 35414664, 35428646, 35572071, 35585502
35598272, 35598910, 35598911, 35610741, 35618472, 35635081, 35642546
35644675, 35646719, 35654499, 35656066, 35665871, 35671663, 35717077
35737047, 35754528

Version 21.0.0.0.ru-2023-07.rur-2023-07.r1

Version 21.0.0.0.ru-2023-07.rur-2023-07.r1 includes the following:

- Patch [35239280](#): DSTV42 UPDATE - TZDATA2023C - NEED OJVM FIX
- Patch [35220732](#): RDBMS - DSTV42 UPDATE - TZDATA2023C
- Patch [35099667](#): RDBMS - DSTV41 UPDATE - TZDATA2022G
- Patch [34698179](#): RDBMS - DSTV40 UPDATE - TZDATA2022E
- Patch [34533061](#): RDBMS - DSTV39 UPDATE - TZDATA2022C
- Patch [34006614](#): RDBMS - DSTV38 UPDATE - TZDATA2022A
- Patch [33613829](#): RDBMS - DSTV37 UPDATE - TZDATA2021E

- Patch [32327201](#): RDBMS - DSTV36 UPDATE - TZDATA2020E
- Patch [35428978](#): Database Release Update : 21.11.0.0.230718 (35428978)

Combined patches for version 21.0.0.0.ru-2023-07.rur-2023-07.r1, released July 2023

Bugs fixed:

12565410, 12949919, 14112098, 15897884, 16799766, 17443054, 18759260
19397646, 19884953, 19958239, 20875943, 22037067, 22873666, 23614160
24559425, 24597536, 24701882, 24916492, 25173172, 25562258, 25655012
25881271, 26139817, 26352569, 26950182, 27015468, 27162036, 27751518
27897090, 27979632, 28044739, 28089112, 28127287, 28294439, 28337860
28513129, 28632799, 28852334, 28882751, 28994721, 29027914, 29413205
29524043, 29587488, 29591661, 29617414, 29811720, 29900186, 29927360
29948154, 29997959, 30082402, 30343750, 30481004, 30610097, 30706073
30710917, 30722105, 30747820, 30771009, 30808364, 30840150, 30846263
30876666, 30933117, 30961824, 31006259, 31006953, 31026870, 31044504
31073424, 31079198, 31110887, 31113682, 31138371, 31192261, 31243859
31251325, 31287296, 31335142, 31356954, 31385668, 31387123, 31414524
31429692, 31487775, 31488085, 31504723, 31526250, 31531079, 31535516
31562484, 31588631, 31596817, 31615736, 31628975, 31649223, 31652763
31656601, 31676324, 31720377, 31725154, 31731407, 31768866, 31773909
31780567, 31781944, 31800059, 31800139, 31824792, 31827584, 31834214
31834611, 31834677, 31841210, 31843716, 31843845, 31844137, 31844357
31844557, 31872320, 31897178, 31912834, 31918462, 31923463, 31927078
31932042, 31933842, 31933846, 31933914, 31938116, 31939767, 31951628
31954223, 31959140, 31960603, 31969646, 31974187, 31982879, 31986827
31987278, 31987922, 31988833, 31992242, 31992615, 31992953, 31993051
31994298, 31996331, 31997660, 32003908, 32008408, 32008716, 32009197
32012400, 32013253, 32015642, 32017570, 32017635, 32020701, 32041003
32055692, 32056529, 32057565, 32069508, 32071457, 32075130, 32078078
32081381, 32092797, 32097767, 32102542, 32102722, 32104578, 32114541
32114746, 32115403, 32118543, 32119144, 32122804, 32132504, 32133898
32159343, 32161381, 32166950, 32178966, 32183102, 32183756, 32184235
32184577, 32184844, 32185296, 32190419, 32196943, 32198292, 32198368
32198396, 32199681, 32205514, 32212062, 32219835, 32224140, 32225117
32225742, 32233406, 32234148, 32240272, 32249371, 32254686, 32255529
32255753, 32255762, 32258388, 32258423, 32277793, 32284608, 32285563
32287989, 32292805, 32294031, 32297469, 32297849, 32298173, 32298782
32300822, 32302470, 32312412, 32327201, 32327208, 32335257, 32338919

32342345, 32343092, 32345050, 32346254, 32346649, 32357412, 32361175
32361677, 32362072, 32365085, 32366303, 32368480, 32371828, 32372554
32372725, 32373696, 32374616, 32377901, 32379001, 32380591, 32382021
32386720, 32390629, 32393137, 32394623, 32396326, 32408640, 32417301
32423678, 32423985, 32424465, 32425778, 32425862, 32426213, 32427158
32427583, 32427953, 32428097, 32431049, 32431251, 32432078, 32432245
32436460, 32436721, 32439726, 32441128, 32441671, 32442229, 32449909
32459632, 32460145, 32462153, 32465193, 32465209, 32465495, 32468643
32471100, 32471251, 32472485, 32478452, 32481807, 32486955, 32492382
32498569, 32498752, 32503790, 32506166, 32506473, 32506809, 32507542
32509814, 32514516, 32515850, 32523613, 32524841, 32526703, 32529396
32530202, 32531647, 32533461, 32535156, 32538824, 32540706, 32540772
32544740, 32546937, 32549277, 32550894, 32551246, 32555592, 32556165
32556311, 32561841, 32573197, 32579075, 32580852, 32583315, 32583355
32583692, 32584375, 32584505, 32585832, 32587305, 32587793, 32587994
32588656, 32593877, 32594965, 32597099, 32597637, 32602194, 32602990
32603092, 32606093, 32607991, 32608583, 32609512, 32610185, 32610271
32618819, 32619195, 32620859, 32621140, 32621309, 32625160, 32625356
32626756, 32626830, 32628168, 32629028, 32630060, 32634049, 32635881
32635931, 32639432, 32639860, 32642587, 32645139, 32649737, 32649749
32651063, 32651773, 32652605, 32653470, 32662165, 32665836, 32669149
32672057, 32674819, 32675095, 32677000, 32682586, 32685286, 32685989
32690400, 32692372, 32697157, 32697859, 32698508, 32700455, 32701048
32703155, 32704013, 32705734, 32709170, 32710534, 32712791, 32712916
32719288, 32719445, 32719456, 32720344, 32724505, 32726772, 32728984
32730701, 32732179, 32733845, 32734021, 32734171, 32734800, 32735915
32736370, 32737827, 32737969, 32740515, 32743290, 32747680, 32747738
32748806, 32750940, 32753472, 32754044, 32754574, 32755517, 32760868
32761294, 32761932, 32763050, 32763283, 32763544, 32764690, 32766397
32766407, 32766916, 32768752, 32769880, 32770651, 32771735, 32775512
32775526, 32776891, 32781826, 32782851, 32786308, 32789228, 32790012
32794261, 32797486, 32800137, 32800539, 32801192, 32801303, 32801337
32802926, 32803807, 32804609, 32806069, 32806915, 32809152, 32810125
32818545, 32822436, 32822847, 32823545, 32823692, 32827206, 32829563
32831451, 32831901, 32834394, 32834426, 32838028, 32838533, 32842415
32843672, 32846876, 32848060, 32848816, 32850174, 32851615, 32852484
32852504, 32856375, 32856640, 32857881, 32863795, 32864736, 32866089
32868344, 32868369, 32869560, 32874225, 32874773, 32875003, 32875118
32879447, 32880390, 32881057, 32881462, 32883252, 32883853, 32887649
32888458, 32889096, 32891500, 32893951, 32897184, 32897679, 32898672
32898678, 32898971, 32901237, 32903472, 32903625, 32904867, 32907741
32908249, 32908946, 32909255, 32910846, 32912828, 32913527, 32913610
32914711, 32915747, 32915760, 32915847, 32916025, 32918041, 32918585
32920489, 32922090, 32924796, 32925703, 32926513, 32926653, 32930360

32930665, 32931078, 32931941, 32935045, 32935932, 32936005, 32936402
32936424, 32936537, 32937167, 32937338, 32940440, 32940955, 32941096
32941792, 32943694, 32945404, 32946347, 32947264, 32947268, 32952285
32955962, 32956896, 32958616, 32961142, 32962378, 32965460, 32966389
32967871, 32968221, 32968634, 32969863, 32970478, 32972633, 32973406
32974802, 32976022, 32977489, 32978151, 32980826, 32982562, 32983419
32983750, 32983871, 32984625, 32984679, 32985908, 32987004, 32987308
32988028, 32989794, 32991289, 32991527, 32993522, 32994080, 32995206
32995242, 32995863, 32996974, 32998659, 32999086, 33000440, 33000980
33001615, 33004888, 33005241, 33005831, 33009224, 33009351, 33010444
33011078, 33011198, 33013379, 33015716, 33016007, 33018951, 33020088
33020510, 33021036, 33021642, 33022043, 33022140, 33022926, 33023671
33025005, 33026313, 33026533, 33026796, 33027377, 33027525, 33027553
33028013, 33028286, 33028462, 33032299, 33032579, 33034642, 33034846
33035201, 33035710, 33037531, 33037895, 33038120, 33038479, 33038537
33039277, 33040335, 33042780, 33043590, 33043881, 33044062, 33045137
33047645, 33047827, 33048074, 33049012, 33050587, 33050622, 33050626
33051299, 33053538, 33056383, 33056579, 33059891, 33060161, 33061152
33061339, 33061595, 33063919, 33064324, 33064565, 33065343, 33065437
33065526, 33065979, 33068672, 33069366, 33069889, 33072392, 33075093
33075133, 33075246, 33075452, 33076129, 33080651, 33085296, 33085361
33088863, 33089096, 33089556, 33090110, 33090127, 33090781, 33090848
33092087, 33096609, 33097433, 33098505, 33100270, 33100352, 33101055
33101058, 33102477, 33105276, 33105656, 33106822, 33106897, 33107872
33109335, 33110192, 33110580, 33110642, 33110992, 33111729, 33113848
33114640, 33115438, 33116481, 33120828, 33120920, 33121866, 33121880
33121934, 33123402, 33123404, 33123985, 33126216, 33127141, 33127312
33131526, 33131742, 33132050, 33134819, 33135083, 33135374, 33136252
33136601, 33137328, 33139230, 33140218, 33141420, 33142123, 33142479
33142533, 33142739, 33145153, 33146001, 33147065, 33150236, 33152388
33153797, 33156632, 33157547, 33161424, 33161535, 33161726, 33163159
33163187, 33165183, 33165391, 33166116, 33166125, 33166242, 33166560
33168480, 33169254, 33172549, 33172631, 33172679, 33176672, 33177660
33178223, 33178248, 33179718, 33181349, 33181498, 33182152, 33182656
33184467, 33185231, 33185773, 33186650, 33188597, 33189199, 33190454
33190694, 33190761, 33191073, 33191584, 33193293, 33195897, 33196009
33196035, 33196475, 33197565, 33199431, 33199858, 33201415, 33203951
33205229, 33205781, 33207143, 33208644, 33210231, 33211160, 33212112
33216590, 33216667, 33218194, 33219840, 33220282, 33223248, 33225584
33225678, 33227044, 33230882, 33232128, 33233560, 33234302, 33235620
33239083, 33241118, 33241692, 33242408, 33243077, 33244297, 33245879
33245940, 33247372, 33251004, 33251111, 33252648, 33253466, 33253504
33254019, 33261707, 33261786, 33266449, 33268162, 33271125, 33271941
33273598, 33273638, 33278133, 33278440, 33278509, 33279489, 33281287

33282502, 33282504, 33282605, 33282971, 33287418, 33288427, 33289442
33289734, 33292174, 33292175, 33292429, 33292896, 33294123, 33295267
33297275, 33298903, 33300422, 33304435, 33304775, 33304830, 33305175
33305254, 33306852, 33307945, 33308107, 33308736, 33309324, 33312816
33312823, 33312932, 33313554, 33314122, 33314523, 33315230, 33316711
33316815, 33317279, 33317740, 33317752, 33317996, 33318949, 33319065
33320455, 33322041, 33322672, 33323634, 33323903, 33324226, 33325981
33326105, 33327118, 33329192, 33330508, 33331329, 33332612, 33332891
33334340, 33334404, 33334957, 33335201, 33335941, 33337385, 33338247
33338891, 33339444, 33339868, 33344767, 33345269, 33347947, 33349744
33351136, 33351978, 33352740, 33353474, 33354011, 33355007, 33357283
33360246, 33364012, 33367076, 33367184, 33367909, 33370332, 33372080
33373644, 33373693, 33375194, 33376694, 33380058, 33380871, 33381652
33381839, 33382108, 33382224, 33382529, 33382620, 33384092, 33384505
33387767, 33388473, 33389651, 33390717, 33390917, 33390925, 33392448
33392926, 33393503, 33397495, 33397605, 33398383, 33401519, 33402361
33402406, 33402456, 33407135, 33408858, 33409163, 33409759, 33409841
33410321, 33416405, 33417145, 33417828, 33417987, 33418112, 33418443
33420096, 33420490, 33421108, 33421305, 33421440, 33422596, 33422877
33424192, 33425127, 33426135, 33427823, 33427991, 33428316, 33428795
33435313, 33440442, 33440899, 33441073, 33444647, 33446226, 33447015
33447957, 33448908, 33451134, 33454288, 33454299, 33455225, 33456703
33456848, 33457235, 33457584, 33457842, 33458732, 33460521, 33460870
33462620, 33463044, 33464061, 33466822, 33467715, 33470092, 33470254
33471858, 33473795, 33474916, 33479703, 33480765, 33480963, 33482590
33485134, 33486067, 33489699, 33491676, 33492066, 33492136, 33497132
33498037, 33499125, 33499867, 33500486, 33503732, 33504158, 33504432
33504626, 33504902, 33505158, 33507610, 33507953, 33510171, 33513526
33513906, 33514179, 33514440, 33516571, 33517445, 33517703, 33520658
33522799, 33523982, 33525448, 33527630, 33527663, 33531067, 33531364
33532517, 33532755, 33533269, 33534589, 33536809, 33537229, 33538063
33540746, 33545633, 33545698, 33548709, 33548869, 33550827, 33553452
33553902, 33555482, 33558058, 33558087, 33558391, 33559316, 33561671
33561845, 33562255, 33563137, 33563167, 33566611, 33568355, 33571225
33575100, 33580595, 33581395, 33584404, 33584585, 33584637, 33586107
33589615, 33596056, 33596361, 33596364, 33598703, 33599734, 33601195
33601673, 33601849, 33607613, 33613512, 33613829, 33613833, 33617587
33617685, 33618962, 33621794, 33622325, 33624052, 33624356, 33630464
33631068, 33631562, 33632754, 33633875, 33637219, 33641592, 33647716
33647820, 33651003, 33651993, 33655399, 33656104, 33656679, 33657553
33660093, 33660782, 33661960, 33663444, 33664959, 33664976, 33666803
33674035, 33676296, 33677163, 33679665, 33681814, 33681832, 33684377
33695048, 33704431, 33705050, 33708958, 33710568, 33711151, 33714000
33718848, 33726682, 33727390, 33727406, 33727922, 33729569, 33729692

33734040, 33736618, 33737965, 33738702, 33742827, 33743745, 33743884
33746114, 33749984, 33750344, 33751080, 33753873, 33755161, 33757064
33759379, 33761538, 33763570, 33764761, 33767425, 33768421, 33770883
33770960, 33774856, 33777176, 33780001, 33785175, 33786208, 33794088
33796040, 33798328, 33805155, 33809062, 33809642, 33809904, 33810177
33810360, 33813849, 33814415, 33817717, 33817746, 33822187, 33833554
33843512, 33845824, 33848060, 33848294, 33850437, 33853330, 33860895
33861312, 33863150, 33863183, 33863261, 33865116, 33865495, 33866472
33867208, 33867451, 33867491, 33870373, 33871591, 33871761, 33875167
33876357, 33879054, 33886862, 33890694, 33893127, 33896341, 33896412
33897055, 33901168, 33902235, 33909838, 33915925, 33916081, 33921410
33928944, 33932721, 33933784, 33937333, 33937705, 33945728, 33947516
33947548, 33954999, 33957025, 33959377, 33959383, 33960647, 33967599
33970659, 33973695, 33978449, 33987170, 33987636, 33987734, 33988974
33990985, 33993386, 33998365, 34001406, 34003643, 34004063, 34006614
34006650, 34010877, 34019087, 34023644, 34024924, 34030468, 34033430
34034279, 34053514, 34054215, 34058951, 34060425, 34066251, 34069959
34088194, 34094291, 34100909, 34103647, 34106567, 34110342, 34110724
34113643, 34116531, 34118219, 34139110, 34139217, 34146833, 34149263
34154060, 34162325, 34164828, 34170459, 34171855, 34177554, 34183461
34191990, 34208572, 34220943, 34229442, 34233694, 34238278, 34238626
34240339, 34244147, 34248786, 34256079, 34256867, 34257221, 34259389
34261947, 34264633, 34266633, 34269255, 34271874, 34276007, 34279907
34291104, 34301719, 34304388, 34309783, 34310198, 34310304, 34314448
34319499, 34324384, 34324942, 34326245, 34330164, 34339332, 34339511
34351706, 34363214, 34363828, 34366627, 34387852, 34398456, 34400514
34411060, 34421053, 34422622, 34454450, 34461697, 34473578, 34491739
34509863, 34533061, 34533150, 34536480, 34538832, 34539284, 34545148
34545238, 34559195, 34559432, 34570620, 34574048, 34574650, 34580665
34587326, 34596863, 34598617, 34599800, 34602706, 34604941, 34629086
34635086, 34651385, 34659006, 34680126, 34681779, 34692403, 34694304
34698179, 34698475, 34699616, 34700228, 34713413, 34714760, 34715072
34720762, 34738737, 34740434, 34743869, 34763622, 34773547, 34777399
34782365, 34785277, 34786432, 34787623, 34798436, 34810533, 34813568
34816792, 34820652, 34830523, 34839112, 34843376, 34847038, 34855429
34873945, 34884137, 34891346, 34922278, 34929834, 34930370, 34957489
34993116, 34996911, 34997341, 34998034, 35001950, 35004964, 35021301
35034357, 35066263, 35079982, 35097019, 35099667, 35099674, 35116995
35121905, 35154926, 35157812, 35163085, 35167216, 35171598, 35175684
35176667, 35176824, 35177608, 35220732, 35225526, 35239280, 35257415
35278276, 35285795, 35314366, 35331461, 35336918, 35354098, 35414664

Version 21.0.0.0.ru-2023-04.rur-2023-04.r1

Version 21.0.0.0.ru-2023-04.rur-2023-04.r1 includes the following:

- Patch [35239280](#): DSTV42 UPDATE - TZDATA2023C - NEED OJVM FIX
- Patch [35220732](#): RDBMS - DSTV42 UPDATE - TZDATA2023C
- Patch [35099667](#): RDBMS - DSTV41 UPDATE - TZDATA2022G
- Patch [34698179](#): RDBMS - DSTV40 UPDATE - TZDATA2022E
- Patch [34533061](#): RDBMS - DSTV39 UPDATE - TZDATA2022C
- Patch [34006614](#): RDBMS - DSTV38 UPDATE - TZDATA2022A
- Patch [33613829](#): RDBMS - DSTV37 UPDATE - TZDATA2021E
- Patch [32327201](#): RDBMS - DSTV36 UPDATE - TZDATA2020E
- Patch [35134934](#): Database Release Update : 21.10.0.0.230418 (35134934)

Combined patches for version 21.0.0.0.ru-2023-04.rur-2023-04.r1, released April 2023

Bugs fixed:

```
12565410, 12949919, 14112098, 15897884, 16799766, 17443054, 18759260
19397646, 19884953, 19958239, 20875943, 22037067, 22873666, 23614160
24559425, 24597536, 24701882, 24916492, 25173172, 25562258, 25655012
25881271, 26139817, 26352569, 26950182, 27015468, 27162036, 27751518
27897090, 27979632, 28044739, 28089112, 28127287, 28294439, 28337860
28513129, 28632799, 28852334, 28882751, 28994721, 29027914, 29413205
29524043, 29587488, 29591661, 29617414, 29811720, 29900186, 29927360
29948154, 29997959, 30082402, 30343750, 30481004, 30610097, 30706073
30710917, 30722105, 30747820, 30771009, 30808364, 30840150, 30846263
30876666, 30933117, 30961824, 31006259, 31006953, 31026870, 31044504
31073424, 31079198, 31110887, 31113682, 31138371, 31192261, 31243859
31251325, 31287296, 31335142, 31356954, 31385668, 31387123, 31414524
31429692, 31487775, 31488085, 31504723, 31526250, 31531079, 31535516
31588631, 31596817, 31615736, 31628975, 31649223, 31652763, 31656601
31676324, 31720377, 31725154, 31731407, 31768866, 31773909, 31780567
31781944, 31800059, 31800139, 31824792, 31827584, 31834214, 31834611
31834677, 31841210, 31843716, 31843845, 31844137, 31844357, 31844557
31872320, 31897178, 31912834, 31918462, 31923463, 31927078, 31932042
31933842, 31933846, 31933914, 31938116, 31939767, 31951628, 31954223
```

31959140, 31960603, 31969646, 31974187, 31982879, 31986827, 31987278
31987922, 31988833, 31992242, 31992615, 31992953, 31993051, 31994298
31996331, 31997660, 32003908, 32008408, 32008716, 32009197, 32012400
32013253, 32015642, 32017570, 32017635, 32020701, 32041003, 32055692
32056529, 32057565, 32069508, 32071457, 32075130, 32078078, 32081381
32092797, 32097767, 32102542, 32102722, 32104578, 32114541, 32114746
32115403, 32118543, 32119144, 32122804, 32132504, 32133898, 32159343
32161381, 32166950, 32178966, 32183102, 32183756, 32184235, 32184577
32184844, 32185296, 32190419, 32196943, 32198292, 32198368, 32198396
32199681, 32205514, 32212062, 32219835, 32224140, 32225117, 32225742
32233406, 32234148, 32240272, 32249371, 32254686, 32255529, 32255753
32255762, 32258388, 32258423, 32277793, 32284608, 32285563, 32287989
32292805, 32294031, 32297469, 32297849, 32298173, 32298782, 32300822
32302470, 32312412, 32327201, 32327208, 32335257, 32338919, 32342345
32343092, 32345050, 32346254, 32346649, 32357412, 32361175, 32361677
32362072, 32365085, 32366303, 32368480, 32371828, 32372554, 32372725
32373696, 32374616, 32377901, 32379001, 32380591, 32382021, 32386720
32390629, 32393137, 32394623, 32396326, 32408640, 32417301, 32423678
32423985, 32424465, 32425778, 32425862, 32426213, 32427158, 32427583
32427953, 32428097, 32431049, 32431251, 32432078, 32432245, 32436460
32436721, 32439726, 32441128, 32441671, 32442229, 32449909, 32459632
32460145, 32462153, 32465193, 32465209, 32465495, 32468643, 32471100
32471251, 32472485, 32478452, 32481807, 32486955, 32492382, 32498569
32498752, 32503790, 32506166, 32506473, 32506809, 32507542, 32509814
32514516, 32515850, 32523613, 32524841, 32526703, 32529396, 32530202
32531647, 32533461, 32535156, 32538824, 32540706, 32540772, 32544740
32546937, 32549277, 32550894, 32551246, 32555592, 32556165, 32556311
32561841, 32573197, 32579075, 32580852, 32583315, 32583355, 32583692
32584375, 32584505, 32585832, 32587305, 32587793, 32587994, 32588656
32593877, 32594965, 32597099, 32597637, 32602194, 32602990, 32603092
32606093, 32607991, 32608583, 32609512, 32610185, 32610271, 32618819
32619195, 32620859, 32621140, 32621309, 32625160, 32625356, 32626756
32626830, 32628168, 32629028, 32630060, 32634049, 32635881, 32635931
32639432, 32639860, 32642587, 32645139, 32649737, 32649749, 32651063
32651773, 32652605, 32653470, 32662165, 32665836, 32669149, 32672057
32674819, 32675095, 32677000, 32682586, 32685286, 32685989, 32690400
32692372, 32697157, 32697859, 32698508, 32700455, 32701048, 32703155
32704013, 32705734, 32709170, 32710534, 32712791, 32712916, 32719288
32719445, 32719456, 32720344, 32724505, 32726772, 32728984, 32730701
32732179, 32733845, 32734021, 32734171, 32734800, 32735915, 32736370
32737827, 32737969, 32740515, 32743290, 32747680, 32747738, 32748806
32750940, 32753472, 32754044, 32754574, 32755517, 32760868, 32761294
32761932, 32763050, 32763283, 32763544, 32764690, 32766397, 32766407
32766916, 32768752, 32769880, 32770651, 32771735, 32775512, 32775526

32776891, 32781826, 32782851, 32786308, 32789228, 32790012, 32794261
32797486, 32800137, 32800539, 32801192, 32801303, 32801337, 32802926
32803807, 32804609, 32806069, 32806915, 32809152, 32810125, 32818545
32822436, 32822847, 32823545, 32823692, 32827206, 32829563, 32831451
32831901, 32834394, 32834426, 32838028, 32838533, 32842415, 32843672
32846876, 32848060, 32848816, 32850174, 32851615, 32852484, 32852504
32856375, 32856640, 32857881, 32863795, 32864736, 32866089, 32868344
32868369, 32869560, 32874225, 32874773, 32875003, 32875118, 32879447
32880390, 32881057, 32881462, 32883252, 32883853, 32887649, 32888458
32889096, 32891500, 32893951, 32897184, 32897679, 32898672, 32898678
32898971, 32901237, 32903472, 32903625, 32904867, 32907741, 32908249
32908946, 32909255, 32910846, 32912828, 32913527, 32913610, 32914711
32915747, 32915760, 32915847, 32916025, 32918041, 32918585, 32920489
32922090, 32924796, 32925703, 32926513, 32926653, 32930360, 32930665
32931078, 32931941, 32935045, 32935932, 32936005, 32936402, 32936424
32936537, 32937167, 32937338, 32940440, 32940955, 32941096, 32941792
32943694, 32945404, 32946347, 32947264, 32947268, 32952285, 32955962
32956896, 32958616, 32961142, 32962378, 32965460, 32966389, 32967871
32968221, 32968634, 32969863, 32970478, 32972633, 32973406, 32974802
32976022, 32977489, 32978151, 32980826, 32982562, 32983419, 32983750
32983871, 32984625, 32984679, 32985908, 32987004, 32987308, 32988028
32989794, 32991289, 32991527, 32993522, 32994080, 32995206, 32995242
32995863, 32996974, 32998659, 32999086, 33000440, 33000980, 33001615
33004888, 33005241, 33005831, 33009224, 33009351, 33010444, 33011078
33011198, 33013379, 33015716, 33016007, 33018951, 33020088, 33020510
33021036, 33021642, 33022043, 33022140, 33022926, 33023671, 33025005
33026313, 33026533, 33026796, 33027377, 33027525, 33027553, 33028013
33028286, 33028462, 33032299, 33032579, 33034642, 33034846, 33035201
33035710, 33037531, 33037895, 33038120, 33038479, 33038537, 33039277
33040335, 33042780, 33043590, 33043881, 33044062, 33045137, 33047645
33047827, 33048074, 33049012, 33050587, 33050622, 33050626, 33051299
33053538, 33056383, 33056579, 33059891, 33060161, 33061152, 33061339
33061595, 33063919, 33064324, 33064565, 33065343, 33065437, 33065526
33065979, 33068672, 33069366, 33069889, 33072392, 33075093, 33075133
33075246, 33075452, 33076129, 33080651, 33085296, 33085361, 33088863
33089096, 33089556, 33090110, 33090127, 33090781, 33090848, 33092087
33096609, 33097433, 33098505, 33100270, 33100352, 33101055, 33101058
33102477, 33105276, 33105656, 33106822, 33106897, 33107872, 33109335
33110192, 33110580, 33110642, 33110992, 33111729, 33113848, 33114640
33115438, 33116481, 33120828, 33120920, 33121866, 33121880, 33121934
33123402, 33123404, 33123985, 33126216, 33127141, 33127312, 33131526
33131742, 33132050, 33134819, 33135083, 33135374, 33136252, 33136601
33137328, 33139230, 33140218, 33141420, 33142123, 33142479, 33142533
33142739, 33145153, 33146001, 33147065, 33150236, 33152388, 33153797

33156632, 33157547, 33161424, 33161535, 33161726, 33163159, 33163187
33165183, 33165391, 33166116, 33166125, 33166242, 33166560, 33168480
33169254, 33172549, 33172631, 33172679, 33176672, 33177660, 33178223
33178248, 33179718, 33181349, 33181498, 33182152, 33182656, 33184467
33185231, 33185773, 33186650, 33188597, 33189199, 33190454, 33190694
33190761, 33191073, 33191584, 33193293, 33195897, 33196009, 33196035
33196475, 33197565, 33199431, 33199858, 33201415, 33203951, 33205229
33205781, 33207143, 33208644, 33210231, 33211160, 33212112, 33216590
33216667, 33218194, 33219840, 33220282, 33223248, 33225584, 33225678
33227044, 33230882, 33232128, 33233560, 33234302, 33235620, 33239083
33241118, 33241692, 33242408, 33243077, 33244297, 33245879, 33245940
33247372, 33251004, 33251111, 33252648, 33253466, 33253504, 33254019
33261707, 33261786, 33266449, 33268162, 33271125, 33271941, 33273598
33273638, 33278133, 33278440, 33278509, 33279489, 33281287, 33282502
33282504, 33282605, 33282971, 33287418, 33288427, 33289442, 33289734
33292174, 33292175, 33292429, 33292896, 33294123, 33295267, 33297275
33298903, 33300422, 33304435, 33304775, 33304830, 33305175, 33305254
33306852, 33307945, 33308107, 33308736, 33309324, 33312816, 33312823
33312932, 33313554, 33314122, 33314523, 33315230, 33316711, 33316815
33317279, 33317740, 33317752, 33317996, 33318949, 33319065, 33320455
33322041, 33322672, 33323634, 33323903, 33324226, 33325981, 33326105
33327118, 33329192, 33330508, 33331329, 33332612, 33332891, 33334340
33334404, 33334957, 33335201, 33335941, 33337385, 33338247, 33338891
33339444, 33339868, 33344767, 33345269, 33347947, 33349744, 33351136
33351978, 33352740, 33353474, 33354011, 33355007, 33357283, 33360246
33364012, 33367076, 33367184, 33367909, 33370332, 33372080, 33373644
33373693, 33375194, 33376694, 33380058, 33380871, 33381652, 33381839
33382108, 33382224, 33382529, 33382620, 33384092, 33384505, 33387767
33388473, 33389651, 33390717, 33390917, 33390925, 33392448, 33392926
33393503, 33397495, 33397605, 33401519, 33402361, 33402406, 33402456
33407135, 33408858, 33409163, 33409759, 33409841, 33410321, 33416405
33417145, 33417828, 33417987, 33418112, 33418443, 33420096, 33420490
33421108, 33421305, 33421440, 33422596, 33422877, 33424192, 33425127
33426135, 33427823, 33427991, 33428316, 33428795, 33435313, 33440442
33440899, 33441073, 33444647, 33446226, 33447015, 33447957, 33448908
33451134, 33454288, 33454299, 33455225, 33456703, 33456848, 33457235
33457584, 33457842, 33458732, 33460521, 33460870, 33462620, 33463044
33464061, 33466822, 33467715, 33470092, 33470254, 33471858, 33473795
33474916, 33479703, 33480765, 33480963, 33482590, 33485134, 33486067
33489699, 33491676, 33492066, 33492136, 33497132, 33498037, 33499125
33499867, 33500486, 33503732, 33504158, 33504432, 33504626, 33504902
33505158, 33507610, 33507953, 33510171, 33513526, 33513906, 33514179
33514440, 33516571, 33517445, 33517703, 33520658, 33522799, 33523982
33525448, 33527630, 33527663, 33531067, 33531364, 33532517, 33532755

33533269, 33534589, 33536809, 33537229, 33538063, 33540746, 33545633
33545698, 33548709, 33548869, 33550827, 33553452, 33553902, 33555482
33558058, 33558087, 33558391, 33559316, 33561671, 33561845, 33562255
33563137, 33563167, 33566611, 33568355, 33571225, 33575100, 33580595
33581395, 33584404, 33584585, 33584637, 33586107, 33589615, 33596056
33596361, 33596364, 33598703, 33599734, 33601195, 33601673, 33601849
33607613, 33613512, 33613829, 33613833, 33617587, 33617685, 33618962
33621794, 33622325, 33624052, 33624356, 33630464, 33631068, 33631562
33632754, 33633875, 33637219, 33641592, 33647716, 33647820, 33651003
33651993, 33655399, 33656104, 33656679, 33657553, 33660093, 33660782
33661960, 33663444, 33664959, 33664976, 33666803, 33674035, 33676296
33677163, 33679665, 33681814, 33681832, 33684377, 33695048, 33704431
33705050, 33708958, 33710568, 33711151, 33714000, 33718848, 33726682
33727390, 33727406, 33727922, 33729569, 33729692, 33734040, 33736618
33737965, 33738702, 33742827, 33743745, 33746114, 33749984, 33750344
33751080, 33753873, 33755161, 33757064, 33759379, 33761538, 33763570
33764761, 33767425, 33768421, 33770883, 33770960, 33774856, 33777176
33780001, 33785175, 33786208, 33794088, 33796040, 33798328, 33805155
33809062, 33809642, 33809904, 33810177, 33810360, 33813849, 33814415
33817717, 33817746, 33822187, 33833554, 33843512, 33845824, 33848060
33848294, 33850437, 33853330, 33860895, 33861312, 33863150, 33863183
33863261, 33865116, 33865495, 33866472, 33867208, 33867451, 33867491
33870373, 33871591, 33871761, 33875167, 33876357, 33879054, 33886862
33890694, 33893127, 33896341, 33896412, 33897055, 33901168, 33902235
33909838, 33915925, 33916081, 33921410, 33928944, 33932721, 33933784
33937333, 33937705, 33945728, 33947516, 33947548, 33954999, 33957025
33959377, 33959383, 33960647, 33967599, 33970659, 33973695, 33978449
33987170, 33987636, 33987734, 33988974, 33990985, 33993386, 33998365
34001406, 34003643, 34004063, 34006614, 34006650, 34010877, 34019087
34023644, 34024924, 34033430, 34034279, 34053514, 34054215, 34060425
34066251, 34069959, 34088194, 34094291, 34100909, 34103647, 34106567
34110342, 34110724, 34113643, 34116531, 34118219, 34139110, 34139217
34146833, 34149263, 34162325, 34164828, 34170459, 34177554, 34183461
34191990, 34208572, 34220943, 34229442, 34233694, 34238278, 34238626
34240339, 34244147, 34248786, 34256079, 34256867, 34257221, 34261947
34264633, 34266633, 34269255, 34271874, 34276007, 34279907, 34291104
34301719, 34304388, 34309783, 34310304, 34314448, 34319499, 34324384
34324942, 34326245, 34330164, 34339332, 34339511, 34351706, 34363214
34363828, 34366627, 34387852, 34398456, 34400514, 34411060, 34421053
34422622, 34454450, 34461697, 34473578, 34491739, 34509863, 34533061
34533150, 34536480, 34539284, 34545148, 34545238, 34559195, 34570620
34574048, 34574650, 34580665, 34587326, 34596863, 34598617, 34602706
34604941, 34629086, 34635086, 34651385, 34659006, 34680126, 34692403
34694304, 34698179, 34698475, 34699616, 34700228, 34713413, 34714760

34715072, 34720762, 34738737, 34740434, 34743869, 34763622, 34773547
 34777399, 34785277, 34786432, 34787623, 34798436, 34810533, 34816792
 34820652, 34830523, 34839112, 34843376, 34873945, 34884137, 34891346
 34929834, 34930370, 34957489, 34993116, 34997341, 35021301, 35034357
 35066263, 35099667, 35099674, 35121905, 35154926, 35157812, 35163085
 35175684, 35220732, 35239280

Version 21.0.0.0.ru-2023-01.rur-2023-01.r2

Version 21.0.0.0.ru-2023-01.rur-2023-01.r2 includes the following:

- Patch [35099674](#): DSTV41 UPDATE - TZDATA2022G - NEED OJVM FIX
- Patch [35099667](#): RDBMS - DSTV41 UPDATE - TZDATA2022G
- Patch [34698179](#): RDBMS - DSTV40 UPDATE - TZDATA2022E
- Patch [34533061](#): RDBMS - DSTV39 UPDATE - TZDATA2022C
- Patch [34006614](#): RDBMS - DSTV38 UPDATE - TZDATA2022A
- Patch [33613829](#): RDBMS - DSTV37 UPDATE - TZDATA2021E
- Patch [32327201](#): RDBMS - DSTV36 UPDATE - TZDATA2020E
- Patch [34839741](#): Database Release Update : 21.9.0.0.230117 (34839741)

Combined patches for version 21.0.0.0.ru-2023-01.rur-2023-01.r2, released January 2023

Bugs fixed:

12565410, 12949919, 14112098, 15897884, 16799766, 17443054, 18759260
 19397646, 19884953, 19958239, 20875943, 22037067, 22873666, 23614160
 24559425, 24597536, 24701882, 24916492, 25173172, 25562258, 25655012
 25881271, 26139817, 26352569, 27015468, 27162036, 27751518, 27897090
 27979632, 28044739, 28089112, 28127287, 28294439, 28337860, 28513129
 28632799, 28852334, 28882751, 28994721, 29027914, 29413205, 29524043
 29587488, 29591661, 29617414, 29811720, 29900186, 29927360, 29948154
 29997959, 30082402, 30343750, 30481004, 30610097, 30706073, 30710917
 30722105, 30747820, 30771009, 30808364, 30840150, 30846263, 30876666
 30933117, 30961824, 31006259, 31006953, 31026870, 31044504, 31073424
 31079198, 31110887, 31113682, 31138371, 31192261, 31243859, 31251325
 31287296, 31335142, 31356954, 31385668, 31387123, 31414524, 31487775
 31488085, 31504723, 31526250, 31531079, 31535516, 31588631, 31615736

31628975, 31649223, 31652763, 31656601, 31676324, 31720377, 31725154
31731407, 31768866, 31773909, 31780567, 31781944, 31800059, 31800139
31824792, 31827584, 31834214, 31834611, 31834677, 31841210, 31843716
31843845, 31844137, 31844357, 31844557, 31872320, 31897178, 31912834
31918462, 31923463, 31927078, 31932042, 31933842, 31933846, 31933914
31938116, 31939767, 31951628, 31954223, 31959140, 31960603, 31969646
31974187, 31982879, 31986827, 31987278, 31987922, 31988833, 31992242
31992615, 31992953, 31993051, 31994298, 31996331, 31997660, 32003908
32008408, 32008716, 32009197, 32012400, 32013253, 32015642, 32017570
32017635, 32020701, 32041003, 32055692, 32056529, 32057565, 32069508
32071457, 32075130, 32078078, 32081381, 32092797, 32097767, 32102542
32102722, 32104578, 32114541, 32114746, 32115403, 32118543, 32119144
32122804, 32132504, 32133898, 32159343, 32161381, 32166950, 32178966
32183102, 32183756, 32184235, 32184577, 32184844, 32185296, 32190419
32196943, 32198292, 32198368, 32198396, 32199681, 32205514, 32212062
32219835, 32224140, 32225117, 32225742, 32233406, 32234148, 32240272
32249371, 32254686, 32255529, 32255753, 32255762, 32258388, 32258423
32277793, 32284608, 32287989, 32292805, 32294031, 32297469, 32297849
32298173, 32298782, 32300822, 32302470, 32312412, 32327201, 32327208
32335257, 32338919, 32342345, 32343092, 32345050, 32346254, 32346649
32357412, 32361175, 32361677, 32362072, 32365085, 32366303, 32368480
32371828, 32372554, 32372725, 32373696, 32374616, 32377901, 32379001
32380591, 32382021, 32386720, 32390629, 32393137, 32394623, 32396326
32408640, 32417301, 32423678, 32423985, 32424465, 32425778, 32425862
32426213, 32427158, 32427583, 32427953, 32428097, 32431049, 32431251
32432078, 32432245, 32436460, 32436721, 32439726, 32441128, 32441671
32442229, 32449909, 32459632, 32460145, 32462153, 32465193, 32465209
32465495, 32468643, 32471100, 32471251, 32472485, 32478452, 32481807
32486955, 32492382, 32498569, 32498752, 32503790, 32506166, 32506473
32506809, 32507542, 32509814, 32514516, 32515850, 32523613, 32524841
32526703, 32529396, 32530202, 32531647, 32533461, 32535156, 32538824
32540706, 32540772, 32544740, 32546937, 32549277, 32550894, 32551246
32555592, 32556165, 32556311, 32561841, 32573197, 32579075, 32580852
32583315, 32583355, 32583692, 32584375, 32584505, 32585832, 32587305
32587793, 32587994, 32588656, 32593877, 32594965, 32597099, 32597637
32602194, 32602990, 32603092, 32606093, 32607991, 32608583, 32609512
32610185, 32610271, 32618819, 32619195, 32620859, 32621140, 32621309
32625160, 32625356, 32626756, 32626830, 32628168, 32629028, 32630060
32634049, 32635881, 32635931, 32639432, 32639860, 32642587, 32645139
32649737, 32649749, 32651063, 32651773, 32652605, 32653470, 32662165
32665836, 32669149, 32672057, 32674819, 32675095, 32677000, 32682586
32685286, 32685989, 32690400, 32692372, 32697157, 32697859, 32698508
32700455, 32701048, 32703155, 32704013, 32705734, 32709170, 32710534
32712791, 32712916, 32719288, 32719445, 32719456, 32720344, 32724505

32726772, 32728984, 32730701, 32732179, 32733845, 32734021, 32734171
32734800, 32735915, 32736370, 32737827, 32737969, 32740515, 32743290
32747680, 32747738, 32748806, 32750940, 32753472, 32754044, 32754574
32755517, 32760868, 32761294, 32761932, 32763050, 32763283, 32763544
32764690, 32766397, 32766407, 32766916, 32768752, 32769880, 32770651
32771735, 32775512, 32775526, 32776891, 32781826, 32782851, 32786308
32789228, 32790012, 32794261, 32797486, 32800137, 32800539, 32801192
32801303, 32801337, 32802926, 32803807, 32804609, 32806069, 32806915
32809152, 32810125, 32818545, 32822436, 32822847, 32823545, 32823692
32827206, 32829563, 32831451, 32831901, 32834394, 32834426, 32838028
32838533, 32842415, 32843672, 32846876, 32848060, 32848816, 32850174
32851615, 32852484, 32852504, 32856375, 32856640, 32857881, 32863795
32864736, 32866089, 32868344, 32868369, 32869560, 32874225, 32874773
32875003, 32875118, 32879447, 32880390, 32881057, 32881462, 32883252
32883853, 32887649, 32888458, 32889096, 32891500, 32893951, 32897184
32897679, 32898672, 32898678, 32898971, 32901237, 32903472, 32903625
32904867, 32907741, 32908249, 32908946, 32909255, 32910846, 32912828
32913527, 32913610, 32914711, 32915747, 32915760, 32915847, 32916025
32918041, 32918585, 32920489, 32922090, 32924796, 32925703, 32926513
32926653, 32930360, 32930665, 32931078, 32931941, 32935045, 32935932
32936005, 32936402, 32936424, 32936537, 32937167, 32937338, 32940440
32940955, 32941096, 32941792, 32943694, 32945404, 32946347, 32947264
32947268, 32952285, 32955962, 32956896, 32958616, 32961142, 32962378
32965460, 32966389, 32967871, 32968221, 32968634, 32969863, 32970478
32972633, 32973406, 32974802, 32976022, 32977489, 32978151, 32980826
32982562, 32983419, 32983750, 32983871, 32984625, 32984679, 32985908
32987004, 32987308, 32988028, 32989794, 32991289, 32991527, 32993522
32994080, 32995206, 32995242, 32995863, 32996974, 32998659, 32999086
33000440, 33000980, 33001615, 33004888, 33005241, 33005831, 33009224
33009351, 33010444, 33011078, 33011198, 33013379, 33015716, 33016007
33018951, 33020088, 33020510, 33021036, 33021642, 33022043, 33022140
33022926, 33023671, 33025005, 33026313, 33026533, 33026796, 33027377
33027525, 33027553, 33028013, 33028286, 33028462, 33032299, 33032579
33034642, 33034846, 33035201, 33035710, 33037531, 33037895, 33038120
33038479, 33038537, 33039277, 33040335, 33042780, 33043590, 33043881
33044062, 33045137, 33047645, 33047827, 33048074, 33049012, 33050587
33050622, 33050626, 33051299, 33053538, 33056383, 33056579, 33059891
33060161, 33061152, 33061339, 33061595, 33063919, 33064324, 33064565
33065343, 33065437, 33065526, 33065979, 33068672, 33069366, 33069889
33072392, 33075093, 33075133, 33075246, 33075452, 33076129, 33080651
33085296, 33085361, 33088863, 33089096, 33089556, 33090110, 33090127
33090781, 33090848, 33092087, 33096609, 33097433, 33098505, 33100270
33100352, 33101055, 33101058, 33102477, 33105276, 33105656, 33106822
33106897, 33107872, 33109335, 33110192, 33110580, 33110642, 33110992

33111729, 33113848, 33114640, 33115438, 33116481, 33120828, 33120920
33121866, 33121880, 33121934, 33123402, 33123404, 33123985, 33126216
33127141, 33127312, 33131526, 33131742, 33132050, 33134819, 33135083
33135374, 33136252, 33136601, 33137328, 33139230, 33140218, 33141420
33142123, 33142479, 33142533, 33142739, 33145153, 33146001, 33147065
33150236, 33152388, 33153797, 33156632, 33157547, 33161424, 33161535
33161726, 33163159, 33163187, 33165183, 33165391, 33166116, 33166125
33166242, 33166560, 33168480, 33169254, 33172549, 33172631, 33172679
33176672, 33177660, 33178223, 33178248, 33179718, 33181349, 33181498
33182152, 33182656, 33184467, 33185231, 33185773, 33186650, 33188597
33189199, 33190454, 33190694, 33190761, 33191073, 33191584, 33193293
33195897, 33196009, 33196035, 33196475, 33197565, 33199431, 33199858
33201415, 33203951, 33205229, 33205781, 33207143, 33208644, 33210231
33211160, 33212112, 33216590, 33216667, 33218194, 33219840, 33220282
33223248, 33225584, 33225678, 33227044, 33230882, 33232128, 33233560
33234302, 33235620, 33239083, 33241118, 33241692, 33242408, 33243077
33244297, 33245879, 33245940, 33247372, 33251004, 33251111, 33252648
33253466, 33253504, 33254019, 33261707, 33261786, 33266449, 33268162
33271125, 33271941, 33273598, 33273638, 33278133, 33278440, 33278509
33279489, 33281287, 33282502, 33282504, 33282605, 33282971, 33287418
33288427, 33289442, 33289734, 33292174, 33292175, 33292429, 33292896
33294123, 33295267, 33297275, 33298903, 33300422, 33304435, 33304775
33304830, 33305175, 33305254, 33306852, 33307945, 33308107, 33308736
33309324, 33312816, 33312823, 33312932, 33313554, 33314122, 33314523
33315230, 33316711, 33316815, 33317279, 33317740, 33317752, 33317996
33318949, 33319065, 33320455, 33322672, 33323634, 33323903, 33324226
33325981, 33326105, 33327118, 33329192, 33330508, 33331329, 33332612
33332891, 33334340, 33334404, 33334957, 33335201, 33335941, 33337385
33338247, 33338891, 33339444, 33339868, 33344767, 33345269, 33347947
33349744, 33351136, 33351978, 33352740, 33353474, 33354011, 33355007
33357283, 33360246, 33364012, 33367076, 33367184, 33367909, 33370332
33372080, 33373644, 33373693, 33375194, 33376694, 33380058, 33380871
33381652, 33381839, 33382108, 33382224, 33382529, 33382620, 33384092
33384505, 33387767, 33388473, 33389651, 33390717, 33390917, 33390925
33392448, 33392926, 33393503, 33397495, 33397605, 33401519, 33402361
33402406, 33402456, 33407135, 33408858, 33409163, 33409759, 33409841
33410321, 33416405, 33417145, 33417828, 33417987, 33418112, 33418443
33420096, 33420490, 33421305, 33421440, 33422596, 33422877, 33424192
33425127, 33426135, 33427823, 33427991, 33428316, 33428795, 33435313
33440442, 33440899, 33441073, 33444647, 33446226, 33447015, 33447957
33448908, 33451134, 33454288, 33454299, 33455225, 33456703, 33456848
33457235, 33457584, 33457842, 33458732, 33460521, 33460870, 33462620
33463044, 33464061, 33466822, 33467715, 33470092, 33470254, 33471858
33473795, 33474916, 33479703, 33480765, 33480963, 33482590, 33485134

33486067, 33489699, 33491676, 33492066, 33492136, 33497132, 33498037
33499125, 33499867, 33500486, 33503732, 33504158, 33504432, 33504626
33504902, 33505158, 33507610, 33507953, 33510171, 33513526, 33513906
33514179, 33514440, 33516571, 33517445, 33517703, 33520658, 33522799
33523982, 33525448, 33527630, 33527663, 33531067, 33531364, 33532517
33532755, 33533269, 33534589, 33536809, 33537229, 33538063, 33540746
33545633, 33545698, 33548709, 33548869, 33550827, 33553452, 33553902
33555482, 33558058, 33558087, 33558391, 33559316, 33561671, 33561845
33562255, 33563137, 33563167, 33566611, 33568355, 33571225, 33575100
33580595, 33581395, 33584404, 33584585, 33584637, 33586107, 33589615
33596056, 33596361, 33596364, 33598703, 33599734, 33601195, 33601673
33601849, 33607613, 33613512, 33613829, 33613833, 33617587, 33617685
33618962, 33621794, 33622325, 33624052, 33624356, 33631068, 33631562
33632754, 33633875, 33637219, 33641592, 33647716, 33647820, 33651003
33651993, 33655399, 33656104, 33656679, 33657553, 33660093, 33660782
33661960, 33663444, 33664959, 33664976, 33666803, 33674035, 33676296
33677163, 33679665, 33681814, 33681832, 33684377, 33695048, 33704431
33705050, 33708958, 33710568, 33711151, 33714000, 33718848, 33726682
33727390, 33727406, 33727922, 33729569, 33729692, 33734040, 33736618
33737965, 33738702, 33742827, 33743745, 33746114, 33749984, 33750344
33751080, 33753873, 33755161, 33757064, 33759379, 33761538, 33763570
33764761, 33767425, 33768421, 33770883, 33770960, 33774856, 33777176
33780001, 33785175, 33786208, 33794088, 33796040, 33798328, 33805155
33809062, 33809642, 33809904, 33810177, 33810360, 33813849, 33814415
33817717, 33817746, 33822187, 33833554, 33843512, 33845824, 33848060
33848294, 33850437, 33853330, 33860895, 33861312, 33863150, 33863183
33863261, 33865116, 33865495, 33866472, 33867208, 33867451, 33867491
33870373, 33871591, 33871761, 33875167, 33876357, 33879054, 33886862
33890694, 33893127, 33897055, 33901168, 33902235, 33909838, 33915925
33916081, 33921410, 33928944, 33932721, 33933784, 33937333, 33937705
33945728, 33947516, 33947548, 33954999, 33957025, 33959377, 33959383
33960647, 33967599, 33970659, 33973695, 33978449, 33987170, 33987636
33987734, 33988974, 33990985, 33993386, 34001406, 34003643, 34004063
34006614, 34006650, 34010877, 34019087, 34023644, 34024924, 34033430
34034279, 34053514, 34054215, 34066251, 34069959, 34088194, 34094291
34100909, 34103647, 34106567, 34110342, 34110724, 34113643, 34116531
34118219, 34139110, 34139217, 34146833, 34149263, 34162325, 34164828
34170459, 34177554, 34183461, 34191990, 34208572, 34220943, 34229442
34233694, 34238278, 34238626, 34240339, 34244147, 34248786, 34256867
34257221, 34261947, 34264633, 34266633, 34271874, 34276007, 34279907
34291104, 34301719, 34304388, 34309783, 34310304, 34314448, 34319499
34324384, 34324942, 34326245, 34330164, 34339332, 34339511, 34351706
34363214, 34366627, 34387852, 34398456, 34400514, 34411060, 34421053
34422622, 34454450, 34461697, 34473578, 34491739, 34509863, 34533061

34533150, 34536480, 34545148, 34545238, 34559195, 34570620, 34574048
 34574650, 34580665, 34587326, 34596863, 34598617, 34604941, 34651385
 34659006, 34680126, 34692403, 34698179, 34698475, 34699616, 34700228
 34713413, 34714760, 34715072, 34738737, 34786432, 34810533, 34830523
 34839112, 34843376, 34929834, 35099667, 35099674

Version 21.0.0.0.ru-2023-01.rur-2023-01.r1

Version 21.0.0.0.ru-2023-01.rur-2023-01.r1 includes the following:

- Patch [34699616](#):DSTV40 UPDATE - TZDATA2022E - NEED OJVM FIX
- Patch [34698179](#):RDBMS - DSTV40 UPDATE - TZDATA2022E
- Patch [34533061](#):RDBMS - DSTV39 UPDATE - TZDATA2022C
- Patch [34006614](#):RDBMS - DSTV38 UPDATE - TZDATA2022A
- Patch [33613829](#):RDBMS - DSTV37 UPDATE - TZDATA2021E
- Patch [32327201](#):RDBMS - DSTV36 UPDATE - TZDATA2020E
- Patch [34839741](#):Database Release Update : 21.9.0.0.230117 (34839741)

Combined patches for version 21.0.0.0.ru-2023-01.rur-2023-01.r1, released January, 2023

Bugs fixed:

12565410, 12949919, 14112098, 15897884, 16799766, 17443054, 18759260
 19397646, 19884953, 19958239, 20875943, 22037067, 22873666, 23614160
 24559425, 24597536, 24701882, 24916492, 25173172, 25562258, 25655012
 25881271, 26139817, 26352569, 27015468, 27162036, 27751518, 27897090
 27979632, 28044739, 28089112, 28127287, 28294439, 28337860, 28513129
 28632799, 28852334, 28882751, 28994721, 29027914, 29413205, 29524043
 29587488, 29591661, 29617414, 29811720, 29900186, 29927360, 29948154
 29997959, 30082402, 30343750, 30481004, 30610097, 30706073, 30710917
 30722105, 30747820, 30771009, 30808364, 30840150, 30846263, 30876666
 30933117, 30961824, 31006259, 31006953, 31026870, 31044504, 31073424
 31079198, 31110887, 31113682, 31138371, 31192261, 31243859, 31251325
 31287296, 31335142, 31356954, 31385668, 31387123, 31414524, 31487775
 31488085, 31504723, 31526250, 31531079, 31535516, 31588631, 31615736
 31628975, 31649223, 31652763, 31656601, 31676324, 31720377, 31725154
 31731407, 31768866, 31773909, 31780567, 31781944, 31800059, 31800139

31824792, 31827584, 31834214, 31834611, 31834677, 31841210, 31843716
31843845, 31844137, 31844357, 31844557, 31872320, 31897178, 31912834
31918462, 31923463, 31927078, 31932042, 31933842, 31933846, 31933914
31938116, 31939767, 31951628, 31954223, 31959140, 31960603, 31969646
31974187, 31982879, 31986827, 31987278, 31987922, 31988833, 31992242
31992615, 31992953, 31993051, 31994298, 31996331, 31997660, 32003908
32008408, 32008716, 32009197, 32012400, 32013253, 32015642, 32017570
32017635, 32020701, 32041003, 32055692, 32056529, 32057565, 32069508
32071457, 32075130, 32078078, 32081381, 32092797, 32097767, 32102542
32102722, 32104578, 32114541, 32114746, 32115403, 32118543, 32119144
32122804, 32132504, 32133898, 32159343, 32161381, 32166950, 32178966
32183102, 32183756, 32184235, 32184577, 32184844, 32185296, 32190419
32196943, 32198292, 32198368, 32198396, 32199681, 32205514, 32212062
32219835, 32224140, 32225117, 32225742, 32233406, 32234148, 32240272
32249371, 32254686, 32255529, 32255753, 32255762, 32258388, 32258423
32277793, 32284608, 32287989, 32292805, 32294031, 32297469, 32297849
32298173, 32298782, 32300822, 32302470, 32312412, 32327201, 32327208
32335257, 32338919, 32342345, 32343092, 32345050, 32346254, 32346649
32357412, 32361175, 32361677, 32362072, 32365085, 32366303, 32368480
32371828, 32372554, 32372725, 32373696, 32374616, 32377901, 32379001
32380591, 32382021, 32386720, 32390629, 32393137, 32394623, 32396326
32408640, 32417301, 32423678, 32423985, 32424465, 32425778, 32425862
32426213, 32427158, 32427583, 32427953, 32428097, 32431049, 32431251
32432078, 32432245, 32436460, 32436721, 32439726, 32441128, 32441671
32442229, 32449909, 32459632, 32460145, 32462153, 32465193, 32465209
32465495, 32468643, 32471100, 32471251, 32472485, 32478452, 32481807
32486955, 32492382, 32498569, 32498752, 32503790, 32506166, 32506473
32506809, 32507542, 32509814, 32514516, 32515850, 32523613, 32524841
32526703, 32529396, 32530202, 32531647, 32533461, 32535156, 32538824
32540706, 32540772, 32544740, 32546937, 32549277, 32550894, 32551246
32555592, 32556165, 32556311, 32561841, 32573197, 32579075, 32580852
32583315, 32583355, 32583692, 32584375, 32584505, 32585832, 32587305
32587793, 32587994, 32588656, 32593877, 32594965, 32597099, 32597637
32602194, 32602990, 32603092, 32606093, 32607991, 32608583, 32609512
32610185, 32610271, 32618819, 32619195, 32620859, 32621140, 32621309
32625160, 32625356, 32626756, 32626830, 32628168, 32629028, 32630060
32634049, 32635881, 32635931, 32639432, 32639860, 32642587, 32645139
32649737, 32649749, 32651063, 32651773, 32652605, 32653470, 32662165
32665836, 32669149, 32672057, 32674819, 32675095, 32677000, 32682586
32685286, 32685989, 32690400, 32692372, 32697157, 32697859, 32698508
32700455, 32701048, 32703155, 32704013, 32705734, 32709170, 32710534
32712791, 32712916, 32719288, 32719445, 32719456, 32720344, 32724505
32726772, 32728984, 32730701, 32732179, 32733845, 32734021, 32734171
32734800, 32735915, 32736370, 32737827, 32737969, 32740515, 32743290

32747680, 32747738, 32748806, 32750940, 32753472, 32754044, 32754574
32755517, 32760868, 32761294, 32761932, 32763050, 32763283, 32763544
32764690, 32766397, 32766407, 32766916, 32768752, 32769880, 32770651
32771735, 32775512, 32775526, 32776891, 32781826, 32782851, 32786308
32789228, 32790012, 32794261, 32797486, 32800137, 32800539, 32801192
32801303, 32801337, 32802926, 32803807, 32804609, 32806069, 32806915
32809152, 32810125, 32818545, 32822436, 32822847, 32823545, 32823692
32827206, 32829563, 32831451, 32831901, 32834394, 32834426, 32838028
32838533, 32842415, 32843672, 32846876, 32848060, 32848816, 32850174
32851615, 32852484, 32852504, 32856375, 32856640, 32857881, 32863795
32864736, 32866089, 32868344, 32868369, 32869560, 32874225, 32874773
32875003, 32875118, 32879447, 32880390, 32881057, 32881462, 32883252
32883853, 32887649, 32888458, 32889096, 32891500, 32893951, 32897184
32897679, 32898672, 32898678, 32898971, 32901237, 32903472, 32903625
32904867, 32907741, 32908249, 32908946, 32909255, 32910846, 32912828
32913527, 32913610, 32914711, 32915747, 32915760, 32915847, 32916025
32918041, 32918585, 32920489, 32922090, 32924796, 32925703, 32926513
32926653, 32930360, 32930665, 32931078, 32931941, 32935045, 32935932
32936005, 32936402, 32936424, 32936537, 32937167, 32937338, 32940440
32940955, 32941096, 32941792, 32943694, 32945404, 32946347, 32947264
32947268, 32952285, 32955962, 32956896, 32958616, 32961142, 32962378
32965460, 32966389, 32967871, 32968221, 32968634, 32969863, 32970478
32972633, 32973406, 32974802, 32976022, 32977489, 32978151, 32980826
32982562, 32983419, 32983750, 32983871, 32984625, 32984679, 32985908
32987004, 32987308, 32988028, 32989794, 32991289, 32991527, 32993522
32994080, 32995206, 32995242, 32995863, 32996974, 32998659, 32999086
33000440, 33000980, 33001615, 33004888, 33005241, 33005831, 33009224
33009351, 33010444, 33011078, 33011198, 33013379, 33015716, 33016007
33018951, 33020088, 33020510, 33021036, 33021642, 33022043, 33022140
33022926, 33023671, 33025005, 33026313, 33026533, 33026796, 33027377
33027525, 33027553, 33028013, 33028286, 33028462, 33032299, 33032579
33034642, 33034846, 33035201, 33035710, 33037531, 33037895, 33038120
33038479, 33038537, 33039277, 33040335, 33042780, 33043590, 33043881
33044062, 33045137, 33047645, 33047827, 33048074, 33049012, 33050587
33050622, 33050626, 33051299, 33053538, 33056383, 33056579, 33059891
33060161, 33061152, 33061339, 33061595, 33063919, 33064324, 33064565
33065343, 33065437, 33065526, 33065979, 33068672, 33069366, 33069889
33072392, 33075093, 33075133, 33075246, 33075452, 33076129, 33080651
33085296, 33085361, 33088863, 33089096, 33089556, 33090110, 33090127
33090781, 33090848, 33092087, 33096609, 33097433, 33098505, 33100270
33100352, 33101055, 33101058, 33102477, 33105276, 33105656, 33106822
33106897, 33107872, 33109335, 33110192, 33110580, 33110642, 33110992
33111729, 33113848, 33114640, 33115438, 33116481, 33120828, 33120920
33121866, 33121880, 33121934, 33123402, 33123404, 33123985, 33126216

33127141, 33127312, 33131526, 33131742, 33132050, 33134819, 33135083
33135374, 33136252, 33136601, 33137328, 33139230, 33140218, 33141420
33142123, 33142479, 33142533, 33142739, 33145153, 33146001, 33147065
33150236, 33152388, 33153797, 33156632, 33157547, 33161424, 33161535
33161726, 33163159, 33163187, 33165183, 33165391, 33166116, 33166125
33166242, 33166560, 33168480, 33169254, 33172549, 33172631, 33172679
33176672, 33177660, 33178223, 33178248, 33179718, 33181349, 33181498
33182152, 33182656, 33184467, 33185231, 33185773, 33186650, 33188597
33189199, 33190454, 33190694, 33190761, 33191073, 33191584, 33193293
33195897, 33196009, 33196035, 33196475, 33197565, 33199431, 33199858
33201415, 33203951, 33205229, 33205781, 33207143, 33208644, 33210231
33211160, 33212112, 33216590, 33216667, 33218194, 33219840, 33220282
33223248, 33225584, 33225678, 33227044, 33230882, 33232128, 33233560
33234302, 33235620, 33239083, 33241118, 33241692, 33242408, 33243077
33244297, 33245879, 33245940, 33247372, 33251004, 33251111, 33252648
33253466, 33253504, 33254019, 33261707, 33261786, 33266449, 33268162
33271125, 33271941, 33273598, 33273638, 33278133, 33278440, 33278509
33279489, 33281287, 33282502, 33282504, 33282605, 33282971, 33287418
33288427, 33289442, 33289734, 33292174, 33292175, 33292429, 33292896
33294123, 33295267, 33297275, 33298903, 33300422, 33304435, 33304775
33304830, 33305175, 33305254, 33306852, 33307945, 33308107, 33308736
33309324, 33312816, 33312823, 33312932, 33313554, 33314122, 33314523
33315230, 33316711, 33316815, 33317279, 33317740, 33317752, 33317996
33318949, 33319065, 33320455, 33322672, 33323634, 33323903, 33324226
33325981, 33326105, 33327118, 33329192, 33330508, 33331329, 33332612
33332891, 33334340, 33334404, 33334957, 33335201, 33335941, 33337385
33338247, 33338891, 33339444, 33339868, 33344767, 33345269, 33347947
33349744, 33351136, 33351978, 33352740, 33353474, 33354011, 33355007
33357283, 33360246, 33364012, 33367076, 33367184, 33367909, 33370332
33372080, 33373644, 33373693, 33375194, 33376694, 33380058, 33380871
33381652, 33381839, 33382108, 33382224, 33382529, 33382620, 33384092
33384505, 33387767, 33388473, 33389651, 33390717, 33390917, 33390925
33392448, 33392926, 33393503, 33397495, 33397605, 33401519, 33402361
33402406, 33402456, 33407135, 33408858, 33409163, 33409759, 33409841
33410321, 33416405, 33417145, 33417828, 33417987, 33418112, 33418443
33420096, 33420490, 33421305, 33421440, 33422596, 33422877, 33424192
33425127, 33426135, 33427823, 33427991, 33428316, 33428795, 33435313
33440442, 33440899, 33441073, 33444647, 33446226, 33447015, 33447957
33448908, 33451134, 33454288, 33454299, 33455225, 33456703, 33456848
33457235, 33457584, 33457842, 33458732, 33460521, 33460870, 33462620
33463044, 33464061, 33466822, 33467715, 33470092, 33470254, 33471858
33473795, 33474916, 33479703, 33480765, 33480963, 33482590, 33485134
33486067, 33489699, 33491676, 33492066, 33492136, 33497132, 33498037
33499125, 33499867, 33500486, 33503732, 33504158, 33504432, 33504626

33504902, 33505158, 33507610, 33507953, 33510171, 33513526, 33513906
33514179, 33514440, 33516571, 33517445, 33517703, 33520658, 33522799
33523982, 33525448, 33527630, 33527663, 33531067, 33531364, 33532517
33532755, 33533269, 33534589, 33536809, 33537229, 33538063, 33540746
33545633, 33545698, 33548709, 33548869, 33550827, 33553452, 33553902
33555482, 33558058, 33558087, 33558391, 33559316, 33561671, 33561845
33562255, 33563137, 33563167, 33566611, 33568355, 33571225, 33575100
33580595, 33581395, 33584404, 33584585, 33584637, 33586107, 33589615
33596056, 33596361, 33596364, 33598703, 33599734, 33601195, 33601673
33601849, 33607613, 33613512, 33613829, 33613833, 33617587, 33617685
33618962, 33621794, 33622325, 33624052, 33624356, 33631068, 33631562
33632754, 33633875, 33637219, 33641592, 33647716, 33647820, 33651003
33651993, 33655399, 33656104, 33656679, 33657553, 33660093, 33660782
33661960, 33663444, 33664959, 33664976, 33666803, 33674035, 33676296
33677163, 33679665, 33681814, 33681832, 33684377, 33695048, 33704431
33705050, 33708958, 33710568, 33711151, 33714000, 33718848, 33726682
33727390, 33727406, 33727922, 33729569, 33729692, 33734040, 33736618
33737965, 33738702, 33742827, 33743745, 33746114, 33749984, 33750344
33751080, 33753873, 33755161, 33757064, 33759379, 33761538, 33763570
33764761, 33767425, 33768421, 33770883, 33770960, 33774856, 33777176
33780001, 33785175, 33786208, 33794088, 33796040, 33798328, 33805155
33809062, 33809642, 33809904, 33810177, 33810360, 33813849, 33814415
33817717, 33817746, 33822187, 33833554, 33843512, 33845824, 33848060
33848294, 33850437, 33853330, 33860895, 33861312, 33863150, 33863183
33863261, 33865116, 33865495, 33866472, 33867208, 33867451, 33867491
33870373, 33871591, 33871761, 33875167, 33876357, 33879054, 33886862
33890694, 33893127, 33897055, 33901168, 33902235, 33909838, 33915925
33916081, 33921410, 33928944, 33932721, 33933784, 33937333, 33937705
33945728, 33947516, 33947548, 33954999, 33957025, 33959377, 33959383
33960647, 33967599, 33970659, 33973695, 33978449, 33987170, 33987636
33987734, 33988974, 33990985, 33993386, 34001406, 34003643, 34004063
34006614, 34006650, 34010877, 34019087, 34023644, 34024924, 34033430
34034279, 34053514, 34054215, 34066251, 34069959, 34088194, 34094291
34100909, 34103647, 34106567, 34110342, 34110724, 34113643, 34116531
34118219, 34139110, 34139217, 34146833, 34149263, 34162325, 34164828
34170459, 34177554, 34183461, 34191990, 34208572, 34220943, 34229442
34233694, 34238278, 34238626, 34240339, 34244147, 34248786, 34256867
34257221, 34261947, 34264633, 34266633, 34271874, 34276007, 34279907
34291104, 34301719, 34304388, 34309783, 34310304, 34314448, 34319499
34324384, 34324942, 34326245, 34330164, 34339332, 34339511, 34351706
34363214, 34366627, 34387852, 34398456, 34400514, 34411060, 34421053
34422622, 34454450, 34461697, 34473578, 34491739, 34509863, 34533061
34533150, 34536480, 34545148, 34545238, 34559195, 34570620, 34574048
34574650, 34580665, 34587326, 34596863, 34598617, 34604941, 34651385

34659006, 34680126, 34692403, 34698179, 34698475, 34699616, 34700228
34713413, 34714760, 34715072, 34738737, 34786432, 34810533, 34830523
34839112, 34843376, 34929834

Version 21.0.0.0.ru-2022-10.rur-2022-10.r1

Version 21.0.0.0.ru-2022-10.rur-2022-10.r1 includes the following:

- Patch [34160444](#): DATABASE RELEASE UPDATE 21.7.0.0.0
- Patch [34533061](#): RDBMS - DSTV39 UPDATE - TZDATA2022C
- Patch [34533150](#): DSTV39 UPDATE - TZDATA2022C - NEED OJVM FIX

Combined patches for version 21.0.0.0.ru-2022-10.rur-2022-10.r1, released October 2022

Bugs fixed:

12565410, 12949919, 14112098, 15897884, 16799766, 17443054, 18759260
19397646, 19884953, 19958239, 20875943, 22037067, 22873666, 23614160
24559425, 24597536, 24701882, 24916492, 25173172, 25562258, 25655012
25881271, 26139817, 26352569, 27015468, 27162036, 27751518, 27897090
27979632, 28044739, 28089112, 28127287, 28294439, 28337860, 28513129
28632799, 28852334, 28882751, 28994721, 29027914, 29413205, 29524043
29587488, 29591661, 29617414, 29811720, 29900186, 29927360, 29948154
29997959, 30082402, 30343750, 30481004, 30610097, 30706073, 30710917
30722105, 30747820, 30771009, 30808364, 30840150, 30846263, 30876666
30933117, 30961824, 31006259, 31006953, 31026870, 31044504, 31073424
31079198, 31110887, 31113682, 31138371, 31192261, 31243859, 31251325
31287296, 31335142, 31356954, 31385668, 31387123, 31414524, 31487775
31488085, 31504723, 31526250, 31531079, 31535516, 31588631, 31615736
31628975, 31652763, 31656601, 31676324, 31720377, 31725154, 31731407
31768866, 31773909, 31780567, 31781944, 31800059, 31800139, 31824792
31827584, 31834214, 31834611, 31834677, 31841210, 31843716, 31843845
31844137, 31844357, 31844557, 31872320, 31897178, 31912834, 31918462
31923463, 31927078, 31932042, 31933842, 31933846, 31933914, 31938116
31939767, 31951628, 31954223, 31959140, 31960603, 31969646, 31974187
31982879, 31986827, 31987278, 31988833, 31992242, 31992615, 31992953
31993051, 31994298, 31996331, 31997660, 32003908, 32008408, 32008716
32009197, 32012400, 32013253, 32015642, 32017570, 32017635, 32020701
32041003, 32055692, 32056529, 32057565, 32069508, 32071457, 32075130

32078078, 32081381, 32092797, 32097767, 32102542, 32102722, 32104578
32114541, 32114746, 32115403, 32118543, 32119144, 32122804, 32132504
32133898, 32159343, 32161381, 32166950, 32178966, 32183102, 32183756
32184235, 32184577, 32184844, 32185296, 32190419, 32196943, 32198292
32198368, 32198396, 32199681, 32205514, 32212062, 32219835, 32224140
32225117, 32225742, 32233406, 32234148, 32240272, 32249371, 32254686
32255529, 32255753, 32255762, 32258388, 32258423, 32277793, 32284608
32287989, 32292805, 32294031, 32297469, 32297849, 32298173, 32298782
32300822, 32302470, 32312412, 32327201, 32327208, 32335257, 32338919
32342345, 32343092, 32345050, 32346254, 32346649, 32357412, 32361175
32361677, 32362072, 32365085, 32366303, 32368480, 32371828, 32372725
32373696, 32374616, 32377901, 32379001, 32380591, 32382021, 32386720
32390629, 32393137, 32394623, 32396326, 32408640, 32417301, 32423678
32423985, 32424465, 32425778, 32425862, 32426213, 32427158, 32427583
32427953, 32428097, 32431049, 32431251, 32432078, 32432245, 32436460
32436721, 32439726, 32441128, 32441671, 32442229, 32449909, 32459632
32460145, 32462153, 32465193, 32465209, 32465495, 32468643, 32471100
32471251, 32472485, 32478452, 32481807, 32486955, 32492382, 32498569
32498752, 32503790, 32506166, 32506473, 32506809, 32507542, 32509814
32514516, 32515850, 32523613, 32524841, 32526703, 32529396, 32530202
32531647, 32533461, 32535156, 32538824, 32540706, 32540772, 32544740
32546937, 32549277, 32550894, 32551246, 32555592, 32556165, 32556311
32561841, 32573197, 32579075, 32580852, 32583315, 32583355, 32583692
32584375, 32584505, 32585832, 32587305, 32587793, 32587994, 32588656
32593877, 32594965, 32597099, 32597637, 32602194, 32602990, 32603092
32606093, 32607991, 32608583, 32609512, 32610185, 32610271, 32618819
32619195, 32620859, 32621140, 32621309, 32625160, 32625356, 32626756
32626830, 32628168, 32629028, 32630060, 32634049, 32635881, 32635931
32639432, 32639860, 32642587, 32645139, 32649737, 32649749, 32651063
32651773, 32652605, 32653470, 32662165, 32665836, 32669149, 32672057
32675095, 32677000, 32682586, 32685286, 32685989, 32690400, 32692372
32697157, 32697859, 32698508, 32700455, 32701048, 32703155, 32704013
32705734, 32709170, 32710534, 32712791, 32712916, 32719288, 32719445
32720344, 32724505, 32726772, 32728984, 32730701, 32732179, 32733845
32734021, 32734171, 32734800, 32735915, 32736370, 32737827, 32737969
32740515, 32743290, 32747680, 32747738, 32748806, 32750940, 32753472
32754044, 32754574, 32755517, 32760868, 32761294, 32761932, 32763050
32763283, 32763544, 32764690, 32766397, 32766407, 32766916, 32768752
32769880, 32771735, 32775512, 32775526, 32776891, 32781826, 32782851
32786308, 32789228, 32790012, 32794261, 32797486, 32800137, 32800539
32801192, 32801303, 32801337, 32802926, 32803807, 32804609, 32806069
32806915, 32809152, 32810125, 32818545, 32822436, 32822847, 32823545
32823692, 32827206, 32829563, 32831451, 32831901, 32834394, 32834426
32838028, 32838533, 32842415, 32843672, 32846876, 32848060, 32848816

32850174, 32851615, 32852484, 32852504, 32856375, 32856640, 32857881
32863795, 32864736, 32866089, 32868344, 32868369, 32869560, 32874225
32874773, 32875003, 32875118, 32879447, 32880390, 32881057, 32881462
32883252, 32883853, 32887649, 32888458, 32889096, 32891500, 32893951
32897184, 32897679, 32898672, 32898678, 32898971, 32901237, 32903472
32903625, 32904867, 32907741, 32908249, 32908946, 32909255, 32910846
32913527, 32913610, 32914711, 32915747, 32915760, 32915847, 32916025
32918041, 32918585, 32920489, 32922090, 32924796, 32925703, 32926653
32930360, 32930665, 32931078, 32931941, 32935932, 32936005, 32936402
32936424, 32936537, 32937167, 32937338, 32940440, 32940955, 32941096
32941792, 32943694, 32945404, 32946347, 32947264, 32947268, 32952285
32955962, 32956896, 32958616, 32961142, 32962378, 32965460, 32966389
32967871, 32968221, 32968634, 32969863, 32970478, 32972633, 32973406
32976022, 32977489, 32978151, 32980826, 32982562, 32983419, 32983750
32983871, 32984625, 32984679, 32985908, 32987004, 32987308, 32988028
32991289, 32991527, 32993522, 32994080, 32995206, 32995242, 32995863
32996974, 32998659, 32999086, 33000440, 33000980, 33001615, 33004888
33005241, 33005831, 33009224, 33009351, 33010444, 33011078, 33011198
33013379, 33015716, 33016007, 33018951, 33020088, 33020510, 33021036
33021642, 33022043, 33022140, 33022926, 33023671, 33025005, 33026533
33026796, 33027377, 33027525, 33027553, 33028013, 33028286, 33028462
33032299, 33032579, 33034642, 33034846, 33035201, 33035710, 33037531
33037895, 33038120, 33038479, 33038537, 33039277, 33040335, 33042780
33043590, 33043881, 33044062, 33045137, 33047645, 33047827, 33048074
33049012, 33050587, 33050622, 33050626, 33051299, 33056383, 33056579
33059891, 33060161, 33061339, 33061595, 33063919, 33064324, 33064565
33065343, 33065437, 33065526, 33065979, 33069366, 33069889, 33072392
33075093, 33075133, 33075246, 33075452, 33076129, 33080651, 33085296
33085361, 33088863, 33089096, 33089556, 33090110, 33090127, 33090781
33090848, 33092087, 33096609, 33097433, 33098505, 33100270, 33100352
33101055, 33101058, 33102477, 33105276, 33105656, 33106822, 33106897
33107872, 33109335, 33110192, 33110580, 33110642, 33110992, 33111729
33113848, 33114640, 33115438, 33116481, 33120828, 33120920, 33121866
33121880, 33121934, 33123402, 33123404, 33123985, 33126216, 33127141
33127312, 33131526, 33131742, 33132050, 33134819, 33135083, 33135374
33136252, 33136601, 33137328, 33139230, 33140218, 33141420, 33142123
33142479, 33142533, 33142739, 33145153, 33146001, 33147065, 33150236
33152388, 33153797, 33156632, 33161424, 33161535, 33161726, 33163159
33163187, 33165183, 33165391, 33166116, 33166242, 33166560, 33168480
33169254, 33172549, 33172631, 33172679, 33176672, 33177660, 33178223
33178248, 33179718, 33181349, 33182152, 33182656, 33184467, 33185773
33186650, 33188597, 33189199, 33190454, 33190694, 33190761, 33191073
33191584, 33193293, 33195897, 33196009, 33196035, 33196475, 33197565
33199431, 33199858, 33201415, 33203951, 33205229, 33205781, 33207143

33208644, 33210231, 33211160, 33212112, 33216590, 33216667, 33218194
33219840, 33220282, 33223248, 33225584, 33225678, 33227044, 33230882
33232128, 33233560, 33234302, 33235620, 33239083, 33241118, 33241692
33242408, 33244297, 33245879, 33245940, 33247372, 33251004, 33251111
33252648, 33253466, 33253504, 33254019, 33261707, 33261786, 33266449
33268162, 33271125, 33271941, 33273638, 33278133, 33278440, 33278509
33279489, 33281287, 33282502, 33282504, 33282605, 33282971, 33287418
33288427, 33289442, 33289734, 33292174, 33292175, 33292429, 33292896
33294123, 33295267, 33297275, 33298903, 33300422, 33304435, 33304775
33304830, 33305175, 33305254, 33306852, 33307945, 33308107, 33308736
33309324, 33312823, 33312932, 33314122, 33314523, 33315230, 33316711
33316815, 33317279, 33317740, 33317752, 33317996, 33318949, 33319065
33320455, 33322672, 33323634, 33323903, 33324226, 33325981, 33326105
33327118, 33329192, 33330508, 33331329, 33332612, 33332891, 33334340
33334404, 33334957, 33335201, 33335941, 33337385, 33338247, 33338891
33339444, 33339868, 33344767, 33345269, 33347947, 33349744, 33351136
33351978, 33352740, 33353474, 33354011, 33355007, 33360246, 33364012
33367076, 33367184, 33367909, 33370332, 33372080, 33373644, 33373693
33375194, 33376694, 33380058, 33380871, 33381652, 33381839, 33382108
33382224, 33382529, 33382620, 33384092, 33384505, 33387767, 33388473
33389651, 33390717, 33390917, 33390925, 33392448, 33392926, 33397495
33397605, 33401519, 33402361, 33402406, 33402456, 33407135, 33408858
33409163, 33409759, 33409841, 33410321, 33416405, 33417145, 33417828
33417987, 33418112, 33418443, 33420096, 33420490, 33421305, 33421440
33422596, 33422877, 33424192, 33425127, 33426135, 33427823, 33427991
33428316, 33428795, 33435313, 33440442, 33440899, 33441073, 33444647
33446226, 33447015, 33447957, 33448908, 33451134, 33454288, 33454299
33455225, 33456703, 33456848, 33457235, 33457584, 33457842, 33458732
33460521, 33460870, 33462620, 33464061, 33466822, 33467715, 33470092
33470254, 33471858, 33473795, 33474916, 33479703, 33480765, 33480963
33482590, 33485134, 33486067, 33489699, 33491676, 33492066, 33492136
33497132, 33498037, 33499125, 33499867, 33500486, 33503732, 33504158
33504432, 33504626, 33504902, 33505158, 33507610, 33507953, 33510171
33513906, 33514179, 33514440, 33516571, 33517445, 33517703, 33520658
33522799, 33523982, 33525448, 33527630, 33527663, 33531067, 33531364
33532517, 33532755, 33533269, 33534589, 33536809, 33537229, 33538063
33540746, 33545633, 33545698, 33548709, 33548869, 33550827, 33553452
33553902, 33555482, 33558058, 33558087, 33558391, 33559316, 33561671
33561845, 33562255, 33563137, 33563167, 33566611, 33568355, 33571225
33580595, 33581395, 33584404, 33584585, 33584637, 33586107, 33589615
33596056, 33596361, 33598703, 33599734, 33601195, 33601673, 33601849
33607613, 33613512, 33613829, 33613833, 33617587, 33617685, 33618962
33621794, 33622325, 33624052, 33624356, 33631068, 33631562, 33632754
33633875, 33637219, 33641592, 33647716, 33647820, 33651003, 33651993

33655399, 33656104, 33656679, 33657553, 33660093, 33660782, 33661960
33663444, 33664959, 33664976, 33666803, 33674035, 33676296, 33677163
33679665, 33681814, 33681832, 33684377, 33695048, 33704431, 33708958
33710568, 33714000, 33718848, 33727390, 33727406, 33727922, 33729569
33729692, 33736618, 33738702, 33743745, 33746114, 33749984, 33750344
33751080, 33753873, 33755161, 33757064, 33761538, 33763570, 33764761
33767425, 33768421, 33770883, 33774856, 33777176, 33780001, 33786208
33794088, 33796040, 33798328, 33805155, 33809062, 33810177, 33810360
33813849, 33817717, 33822187, 33845824, 33848294, 33850437, 33853330
33861312, 33863183, 33863261, 33865116, 33865495, 33867208, 33870373
33871591, 33871761, 33875167, 33879054, 33893127, 33897055, 33902235
33909838, 33916081, 33921410, 33932721, 33933784, 33937333, 33947516
33954999, 33957025, 33960647, 33967599, 33970659, 33973695, 33987170
33987636, 33988974, 33990985, 34001406, 34003643, 34006614, 34006650
34023644, 34053514, 34066251, 34094291, 34110342, 34139217, 34149263
34164828, 34183461, 34220943, 34240339, 34261947, 34533061, 34533150

Version 21.0.0.0.ru-2022-07.rur-2022-07.r1

Version 21.0.0.0.ru-2022-07.rur-2022-07.r1 includes the following:

- Patch [34160444](#): DATABASE RELEASE UPDATE 21.7.0.0.0
- Patch [34533061](#): RDBMS - DSTV39 UPDATE - TZDATA2022C
- Patch [34533150](#): DSTV39 UPDATE - TZDATA2022C - NEED OJVM FIX

Combined patches for version 21.0.0.0.ru-2022-07.rur-2022-07.r1, released July 2022

Bugs fixed:

12565410, 12949919, 14112098, 15897884, 16799766, 17443054, 18759260
19397646, 19884953, 19958239, 20875943, 22037067, 22873666, 23614160
24559425, 24597536, 24701882, 24916492, 25173172, 25562258, 25655012
25881271, 26139817, 26352569, 27015468, 27162036, 27751518, 27897090
27979632, 28044739, 28089112, 28127287, 28294439, 28337860, 28513129
28632799, 28852334, 28882751, 28994721, 29027914, 29413205, 29524043
29587488, 29591661, 29617414, 29811720, 29900186, 29927360, 29948154
29997959, 30082402, 30343750, 30481004, 30610097, 30706073, 30710917
30722105, 30747820, 30771009, 30808364, 30840150, 30846263, 30876666
30933117, 30961824, 31006259, 31006953, 31026870, 31044504, 31073424

31079198, 31110887, 31113682, 31138371, 31192261, 31243859, 31251325
31287296, 31335142, 31356954, 31385668, 31387123, 31414524, 31487775
31488085, 31504723, 31526250, 31531079, 31535516, 31588631, 31615736
31628975, 31652763, 31656601, 31676324, 31720377, 31725154, 31731407
31768866, 31773909, 31780567, 31781944, 31800059, 31800139, 31824792
31827584, 31834214, 31834611, 31834677, 31841210, 31843716, 31843845
31844137, 31844357, 31844557, 31872320, 31897178, 31912834, 31918462
31923463, 31927078, 31932042, 31933842, 31933846, 31933914, 31938116
31939767, 31951628, 31954223, 31959140, 31960603, 31969646, 31974187
31982879, 31986827, 31987278, 31988833, 31992242, 31992615, 31992953
31993051, 31994298, 31996331, 31997660, 32003908, 32008408, 32008716
32009197, 32012400, 32013253, 32015642, 32017570, 32017635, 32020701
32041003, 32055692, 32056529, 32057565, 32069508, 32071457, 32075130
32078078, 32081381, 32092797, 32097767, 32102542, 32102722, 32104578
32114541, 32114746, 32115403, 32118543, 32119144, 32122804, 32132504
32133898, 32159343, 32161381, 32166950, 32178966, 32183102, 32183756
32184235, 32184577, 32184844, 32185296, 32190419, 32196943, 32198292
32198368, 32198396, 32199681, 32205514, 32212062, 32219835, 32224140
32225117, 32225742, 32233406, 32234148, 32240272, 32249371, 32254686
32255529, 32255753, 32255762, 32258388, 32258423, 32277793, 32284608
32287989, 32292805, 32294031, 32297469, 32297849, 32298173, 32298782
32300822, 32302470, 32312412, 32327201, 32327208, 32335257, 32338919
32342345, 32343092, 32345050, 32346254, 32346649, 32357412, 32361175
32361677, 32362072, 32365085, 32366303, 32368480, 32371828, 32372725
32373696, 32374616, 32377901, 32379001, 32380591, 32382021, 32386720
32390629, 32393137, 32394623, 32396326, 32408640, 32417301, 32423678
32423985, 32424465, 32425778, 32425862, 32426213, 32427158, 32427583
32427953, 32428097, 32431049, 32431251, 32432078, 32432245, 32436460
32436721, 32439726, 32441128, 32441671, 32442229, 32449909, 32459632
32460145, 32462153, 32465193, 32465209, 32465495, 32468643, 32471100
32471251, 32472485, 32478452, 32481807, 32486955, 32492382, 32498569
32498752, 32503790, 32506166, 32506473, 32506809, 32507542, 32509814
32514516, 32515850, 32523613, 32524841, 32526703, 32529396, 32530202
32531647, 32533461, 32535156, 32538824, 32540706, 32540772, 32544740
32546937, 32549277, 32550894, 32551246, 32555592, 32556165, 32556311
32561841, 32573197, 32579075, 32580852, 32583315, 32583355, 32583692
32584375, 32584505, 32585832, 32587305, 32587793, 32587994, 32588656
32593877, 32594965, 32597099, 32597637, 32602194, 32602990, 32603092
32606093, 32607991, 32608583, 32609512, 32610185, 32610271, 32618819
32619195, 32620859, 32621140, 32621309, 32625160, 32625356, 32626756
32626830, 32628168, 32629028, 32630060, 32634049, 32635881, 32635931
32639432, 32639860, 32642587, 32645139, 32649737, 32649749, 32651063
32651773, 32652605, 32653470, 32662165, 32665836, 32669149, 32672057
32675095, 32677000, 32682586, 32685286, 32685989, 32690400, 32692372

32697157, 32697859, 32698508, 32700455, 32701048, 32703155, 32704013
32705734, 32709170, 32710534, 32712791, 32712916, 32719288, 32719445
32720344, 32724505, 32726772, 32728984, 32730701, 32732179, 32733845
32734021, 32734171, 32734800, 32735915, 32736370, 32737827, 32737969
32740515, 32743290, 32747680, 32747738, 32748806, 32750940, 32753472
32754044, 32754574, 32755517, 32760868, 32761294, 32761932, 32763050
32763283, 32763544, 32764690, 32766397, 32766407, 32766916, 32768752
32769880, 32771735, 32775512, 32775526, 32776891, 32781826, 32782851
32786308, 32789228, 32790012, 32794261, 32797486, 32800137, 32800539
32801192, 32801303, 32801337, 32802926, 32803807, 32804609, 32806069
32806915, 32809152, 32810125, 32818545, 32822436, 32822847, 32823545
32823692, 32827206, 32829563, 32831451, 32831901, 32834394, 32834426
32838028, 32838533, 32842415, 32843672, 32846876, 32848060, 32848816
32850174, 32851615, 32852484, 32852504, 32856375, 32856640, 32857881
32863795, 32864736, 32866089, 32868344, 32868369, 32869560, 32874225
32874773, 32875003, 32875118, 32879447, 32880390, 32881057, 32881462
32883252, 32883853, 32887649, 32888458, 32889096, 32891500, 32893951
32897184, 32897679, 32898672, 32898678, 32898971, 32901237, 32903472
32903625, 32904867, 32907741, 32908249, 32908946, 32909255, 32910846
32913527, 32913610, 32914711, 32915747, 32915760, 32915847, 32916025
32918041, 32918585, 32920489, 32922090, 32924796, 32925703, 32926653
32930360, 32930665, 32931078, 32931941, 32935932, 32936005, 32936402
32936424, 32936537, 32937167, 32937338, 32940440, 32940955, 32941096
32941792, 32943694, 32945404, 32946347, 32947264, 32947268, 32952285
32955962, 32956896, 32958616, 32961142, 32962378, 32965460, 32966389
32967871, 32968221, 32968634, 32969863, 32970478, 32972633, 32973406
32976022, 32977489, 32978151, 32980826, 32982562, 32983419, 32983750
32983871, 32984625, 32984679, 32985908, 32987004, 32987308, 32988028
32991289, 32991527, 32993522, 32994080, 32995206, 32995242, 32995863
32996974, 32998659, 32999086, 33000440, 33000980, 33001615, 33004888
33005241, 33005831, 33009224, 33009351, 33010444, 33011078, 33011198
33013379, 33015716, 33016007, 33018951, 33020088, 33020510, 33021036
33021642, 33022043, 33022140, 33022926, 33023671, 33025005, 33026533
33026796, 33027377, 33027525, 33027553, 33028013, 33028286, 33028462
33032299, 33032579, 33034642, 33034846, 33035201, 33035710, 33037531
33037895, 33038120, 33038479, 33038537, 33039277, 33040335, 33042780
33043590, 33043881, 33044062, 33045137, 33047645, 33047827, 33048074
33049012, 33050587, 33050622, 33050626, 33051299, 33056383, 33056579
33059891, 33060161, 33061339, 33061595, 33063919, 33064324, 33064565
33065343, 33065437, 33065526, 33065979, 33069366, 33069889, 33072392
33075093, 33075133, 33075246, 33075452, 33076129, 33080651, 33085296
33085361, 33088863, 33089096, 33089556, 33090110, 33090127, 33090781
33090848, 33092087, 33096609, 33097433, 33098505, 33100270, 33100352
33101055, 33101058, 33102477, 33105276, 33105656, 33106822, 33106897

33107872, 33109335, 33110192, 33110580, 33110642, 33110992, 33111729
33113848, 33114640, 33115438, 33116481, 33120828, 33120920, 33121866
33121880, 33121934, 33123402, 33123404, 33123985, 33126216, 33127141
33127312, 33131526, 33131742, 33132050, 33134819, 33135083, 33135374
33136252, 33136601, 33137328, 33139230, 33140218, 33141420, 33142123
33142479, 33142533, 33142739, 33145153, 33146001, 33147065, 33150236
33152388, 33153797, 33156632, 33161424, 33161535, 33161726, 33163159
33163187, 33165183, 33165391, 33166116, 33166242, 33166560, 33168480
33169254, 33172549, 33172631, 33172679, 33176672, 33177660, 33178223
33178248, 33179718, 33181349, 33182152, 33182656, 33184467, 33185773
33186650, 33188597, 33189199, 33190454, 33190694, 33190761, 33191073
33191584, 33193293, 33195897, 33196009, 33196035, 33196475, 33197565
33199431, 33199858, 33201415, 33203951, 33205229, 33205781, 33207143
33208644, 33210231, 33211160, 33212112, 33216590, 33216667, 33218194
33219840, 33220282, 33223248, 33225584, 33225678, 33227044, 33230882
33232128, 33233560, 33234302, 33235620, 33239083, 33241118, 33241692
33242408, 33244297, 33245879, 33245940, 33247372, 33251004, 33251111
33252648, 33253466, 33253504, 33254019, 33261707, 33261786, 33266449
33268162, 33271125, 33271941, 33273638, 33278133, 33278440, 33278509
33279489, 33281287, 33282502, 33282504, 33282605, 33282971, 33287418
33288427, 33289442, 33289734, 33292174, 33292175, 33292429, 33292896
33294123, 33295267, 33297275, 33298903, 33300422, 33304435, 33304775
33304830, 33305175, 33305254, 33306852, 33307945, 33308107, 33308736
33309324, 33312823, 33312932, 33314122, 33314523, 33315230, 33316711
33316815, 33317279, 33317740, 33317752, 33317996, 33318949, 33319065
33320455, 33322672, 33323634, 33323903, 33324226, 33325981, 33326105
33327118, 33329192, 33330508, 33331329, 33332612, 33332891, 33334340
33334404, 33334957, 33335201, 33335941, 33337385, 33338247, 33338891
33339444, 33339868, 33344767, 33345269, 33347947, 33349744, 33351136
33351978, 33352740, 33353474, 33354011, 33355007, 33360246, 33364012
33367076, 33367184, 33367909, 33370332, 33372080, 33373644, 33373693
33375194, 33376694, 33380058, 33380871, 33381652, 33381839, 33382108
33382224, 33382529, 33382620, 33384092, 33384505, 33387767, 33388473
33389651, 33390717, 33390917, 33390925, 33392448, 33392926, 33397495
33397605, 33401519, 33402361, 33402406, 33402456, 33407135, 33408858
33409163, 33409759, 33409841, 33410321, 33416405, 33417145, 33417828
33417987, 33418112, 33418443, 33420096, 33420490, 33421305, 33421440
33422596, 33422877, 33424192, 33425127, 33426135, 33427823, 33427991
33428316, 33428795, 33435313, 33440442, 33440899, 33441073, 33444647
33446226, 33447015, 33447957, 33448908, 33451134, 33454288, 33454299
33455225, 33456703, 33456848, 33457235, 33457584, 33457842, 33458732
33460521, 33460870, 33462620, 33464061, 33466822, 33467715, 33470092
33470254, 33471858, 33473795, 33474916, 33479703, 33480765, 33480963
33482590, 33485134, 33486067, 33489699, 33491676, 33492066, 33492136

33497132, 33498037, 33499125, 33499867, 33500486, 33503732, 33504158
33504432, 33504626, 33504902, 33505158, 33507610, 33507953, 33510171
33513906, 33514179, 33514440, 33516571, 33517445, 33517703, 33520658
33522799, 33523982, 33525448, 33527630, 33527663, 33531067, 33531364
33532517, 33532755, 33533269, 33534589, 33536809, 33537229, 33538063
33540746, 33545633, 33545698, 33548709, 33548869, 33550827, 33553452
33553902, 33555482, 33558058, 33558087, 33558391, 33559316, 33561671
33561845, 33562255, 33563137, 33563167, 33566611, 33568355, 33571225
33580595, 33581395, 33584404, 33584585, 33584637, 33586107, 33589615
33596056, 33596361, 33598703, 33599734, 33601195, 33601673, 33601849
33607613, 33613512, 33613829, 33613833, 33617587, 33617685, 33618962
33621794, 33622325, 33624052, 33624356, 33631068, 33631562, 33632754
33633875, 33637219, 33641592, 33647716, 33647820, 33651003, 33651993
33655399, 33656104, 33656679, 33657553, 33660093, 33660782, 33661960
33663444, 33664959, 33664976, 33666803, 33674035, 33676296, 33677163
33679665, 33681814, 33681832, 33684377, 33695048, 33704431, 33708958
33710568, 33714000, 33718848, 33727390, 33727406, 33727922, 33729569
33729692, 33736618, 33738702, 33743745, 33746114, 33749984, 33750344
33751080, 33753873, 33755161, 33757064, 33761538, 33763570, 33764761
33767425, 33768421, 33770883, 33774856, 33777176, 33780001, 33786208
33794088, 33796040, 33798328, 33805155, 33809062, 33810177, 33810360
33813849, 33817717, 33822187, 33845824, 33848294, 33850437, 33853330
33861312, 33863183, 33863261, 33865116, 33865495, 33867208, 33870373
33871591, 33871761, 33875167, 33879054, 33893127, 33897055, 33902235
33909838, 33916081, 33921410, 33932721, 33933784, 33937333, 33947516
33954999, 33957025, 33960647, 33967599, 33970659, 33973695, 33987170
33987636, 33988974, 33990985, 34001406, 34003643, 34006614, 34006650
34023644, 34053514, 34066251, 34094291, 34110342, 34139217, 34149263
34164828, 34183461, 34220943, 34240339, 34261947, 34533061, 34533150

Version 21.0.0.0.ru-2022-04.rur-2022-04.r1

Version 21.0.0.0.ru-2022-04.rur-2022-04.r1 includes the following:

- Patch [33843745](#): DATABASE RELEASE UPDATE 21.6.0.0.0
- Patch [34006614](#): RDBMS - DSTV38 UPDATE - TZDATA2022A
- Patch [34006650](#): DSTV38 UPDATE - TZDATA2022A - NEED OJVM FIX

Combined patches for version 21.0.0.0.ru-2022-04.rur-2022-04.r1, released April 2022

Bugs fixed:

19884953, 19958239, 24559425, 24597536, 24916492, 25562258, 26139817
26352569, 27162036, 27751518, 27897090, 27979632, 28294439, 28337860
28632799, 28882751, 28994721, 29027914, 29524043, 29587488, 29591661
29617414, 29900186, 30082402, 30343750, 30481004, 30610097, 30710917
30722105, 30747820, 30808364, 30840150, 30846263, 30876666, 30933117
30961824, 31006259, 31006953, 31026870, 31044504, 31073424, 31079198
31110887, 31113682, 31138371, 31243859, 31251325, 31287296, 31356954
31385668, 31387123, 31414524, 31488085, 31526250, 31535516, 31588631
31615736, 31628975, 31652763, 31656601, 31720377, 31725154, 31731407
31773909, 31780567, 31781944, 31800059, 31800139, 31824792, 31827584
31834214, 31834677, 31841210, 31843716, 31843845, 31844137, 31844357
31844557, 31872320, 31897178, 31912834, 31918462, 31923463, 31927078
31932042, 31933842, 31933846, 31933914, 31938116, 31939767, 31951628
31954223, 31959140, 31969646, 31982879, 31986827, 31987278, 31988833
31992242, 31992615, 31992953, 31993051, 31994298, 31996331, 31997660
32003908, 32008408, 32008716, 32009197, 32013253, 32015642, 32017635
32020701, 32041003, 32055692, 32056529, 32057565, 32069508, 32071457
32075130, 32078078, 32081381, 32092797, 32097767, 32102542, 32102722
32114541, 32114746, 32115403, 32118543, 32119144, 32132504, 32133898
32159343, 32161381, 32178966, 32183102, 32183756, 32184235, 32184577
32184844, 32185296, 32190419, 32198292, 32198368, 32198396, 32199681
32205514, 32212062, 32219835, 32225117, 32225742, 32249371, 32254686
32255753, 32258423, 32277793, 32284608, 32287989, 32292805, 32297469
32297849, 32298173, 32298782, 32300822, 32302470, 32312412, 32327201
32335257, 32342345, 32343092, 32345050, 32346254, 32346649, 32357412
32361175, 32361677, 32362072, 32365085, 32366303, 32368480, 32372725
32373696, 32374616, 32377901, 32379001, 32380591, 32382021, 32386720
32390629, 32393137, 32394623, 32396326, 32408640, 32417301, 32423678
32423985, 32424465, 32425778, 32425862, 32426213, 32427158, 32427583
32427953, 32428097, 32431049, 32431251, 32432078, 32432245, 32436460
32436721, 32439726, 32441128, 32441671, 32442229, 32459632, 32460145
32462153, 32465193, 32465209, 32465495, 32468643, 32471100, 32471251
32472485, 32478452, 32481807, 32486955, 32492382, 32498569, 32498752
32503790, 32506473, 32506809, 32507542, 32509814, 32515850, 32523613
32524841, 32526703, 32529396, 32530202, 32531647, 32533461, 32538824
32540706, 32540772, 32544740, 32546937, 32549277, 32551246, 32555592
32556165, 32561841, 32573197, 32579075, 32580852, 32583315, 32583355
32583692, 32584375, 32584505, 32585832, 32587305, 32587793, 32587994

32588656, 32594965, 32597099, 32597637, 32602194, 32602990, 32603092
32607991, 32608583, 32610185, 32610271, 32618819, 32619195, 32620859
32621140, 32621309, 32625356, 32626756, 32626830, 32628168, 32629028
32630060, 32634049, 32635881, 32635931, 32639432, 32639860, 32642587
32645139, 32649749, 32651063, 32651773, 32652605, 32653470, 32662165
32665836, 32669149, 32672057, 32675095, 32677000, 32685286, 32685989
32690400, 32692372, 32697157, 32697859, 32698508, 32700455, 32701048
32703155, 32704013, 32709170, 32710534, 32712916, 32719288, 32719445
32720344, 32724505, 32728984, 32730701, 32733845, 32734021, 32734171
32734800, 32735915, 32736370, 32737969, 32740515, 32743290, 32747680
32747738, 32748806, 32750940, 32753472, 32754044, 32754574, 32755517
32760868, 32761294, 32761932, 32763050, 32763283, 32763544, 32764690
32766397, 32766407, 32766916, 32768752, 32769880, 32771735, 32775512
32775526, 32776891, 32781826, 32782851, 32786308, 32789228, 32790012
32794261, 32797486, 32800137, 32800539, 32801192, 32801303, 32801337
32803807, 32806069, 32806915, 32809152, 32810125, 32818545, 32822436
32822847, 32823545, 32823692, 32827206, 32829563, 32831451, 32831901
32834394, 32834426, 32838028, 32838533, 32842415, 32843672, 32846876
32848816, 32850174, 32851615, 32852504, 32856375, 32857881, 32863795
32864736, 32866089, 32868369, 32869560, 32874773, 32875003, 32875118
32879447, 32880390, 32881057, 32881462, 32883252, 32883853, 32887649
32888458, 32889096, 32891500, 32893951, 32897184, 32897679, 32898672
32898678, 32898971, 32901237, 32903472, 32903625, 32904867, 32907741
32908249, 32908946, 32909255, 32910846, 32913527, 32914711, 32915747
32915760, 32915847, 32916025, 32918041, 32918585, 32922090, 32924796
32925703, 32930360, 32930665, 32931078, 32931941, 32935932, 32936005
32936402, 32936424, 32937167, 32937338, 32940955, 32941096, 32941792
32945404, 32946347, 32947264, 32952285, 32955962, 32956896, 32962378
32965460, 32966389, 32967871, 32968221, 32968634, 32969863, 32970478
32972633, 32973406, 32976022, 32977489, 32978151, 32980826, 32982562
32983419, 32983750, 32983871, 32984625, 32984679, 32985908, 32987004
32987308, 32988028, 32991289, 32991527, 32993522, 32994080, 32995206
32995242, 32995863, 32996974, 32998659, 32999086, 33000440, 33000980
33004888, 33005831, 33009224, 33009351, 33010444, 33011078, 33011198
33013379, 33015716, 33016007, 33018951, 33020088, 33020510, 33021036
33021642, 33022043, 33022140, 33023671, 33026533, 33026796, 33027377
33027525, 33027553, 33028013, 33028286, 33028462, 33032299, 33032579
33034642, 33035201, 33035710, 33037531, 33037895, 33038479, 33038537
33039277, 33040335, 33042780, 33043590, 33043881, 33044062, 33045137
33047827, 33049012, 33050587, 33050622, 33050626, 33051299, 33056383
33056579, 33059891, 33060161, 33061339, 33063919, 33064324, 33064565
33065437, 33065979, 33069366, 33072392, 33075133, 33075246, 33075452
33076129, 33085296, 33085361, 33089556, 33090110, 33090127, 33090781
33090848, 33092087, 33096609, 33097433, 33098505, 33100270, 33100352

33101055, 33101058, 33102477, 33105276, 33105656, 33106822, 33106897
33107872, 33109335, 33110192, 33110580, 33110642, 33110992, 33111729
33113848, 33114640, 33115438, 33120828, 33121866, 33121880, 33123402
33123404, 33123985, 33126216, 33127141, 33127312, 33131526, 33131742
33134819, 33135083, 33136252, 33137328, 33139230, 33140218, 33141420
33142123, 33142533, 33142739, 33145153, 33150236, 33152388, 33153797
33156632, 33161535, 33161726, 33163159, 33163187, 33165183, 33165391
33166116, 33166242, 33166560, 33168480, 33169254, 33172549, 33172631
33172679, 33176672, 33177660, 33178223, 33178248, 33182152, 33182656
33184467, 33185773, 33188597, 33190454, 33190694, 33191073, 33191584
33193293, 33196009, 33196035, 33196475, 33197565, 33199431, 33199858
33205781, 33207143, 33208644, 33210231, 33211160, 33212112, 33216667
33218194, 33219840, 33220282, 33223248, 33225584, 33225678, 33227044
33230882, 33232128, 33233560, 33234302, 33235620, 33239083, 33242408
33244297, 33245940, 33247372, 33251004, 33251111, 33252648, 33253466
33253504, 33261786, 33266449, 33268162, 33271125, 33271941, 33273638
33278133, 33278509, 33279489, 33281287, 33282605, 33282971, 33287418
33288427, 33289442, 33292174, 33292175, 33292896, 33295267, 33297275
33298903, 33300422, 33304435, 33304775, 33304830, 33305254, 33306852
33307945, 33308107, 33312823, 33314122, 33314523, 33316711, 33317279
33317996, 33318949, 33322672, 33323634, 33323903, 33324226, 33325981
33326105, 33327118, 33330508, 33331329, 33332612, 33332891, 33334340
33334404, 33335201, 33335941, 33337385, 33338247, 33338891, 33344767
33347947, 33349744, 33351136, 33351978, 33353474, 33354011, 33355007
33360246, 33364012, 33367184, 33367909, 33372080, 33373644, 33373693
33375194, 33380871, 33381652, 33382108, 33382224, 33382529, 33382620
33384092, 33384505, 33387767, 33388473, 33392448, 33397495, 33401519
33402406, 33407135, 33408858, 33409163, 33409759, 33409841, 33416405
33417145, 33417828, 33417987, 33420490, 33421305, 33422596, 33425127
33426135, 33427823, 33428316, 33428795, 33435313, 33440442, 33441073
33444647, 33446226, 33448908, 33451134, 33454288, 33454299, 33455225
33456703, 33456848, 33457235, 33457584, 33457842, 33458732, 33460521
33462620, 33466822, 33470092, 33471858, 33473795, 33474916, 33479703
33480963, 33482590, 33489699, 33497132, 33498037, 33499125, 33499867
33500486, 33504432, 33504902, 33507610, 33507953, 33510171, 33514179
33517445, 33522799, 33531067, 33531364, 33532755, 33534589, 33536809
33537229, 33538063, 33540746, 33545698, 33548709, 33548869, 33550827
33553902, 33558058, 33558391, 33559316, 33561671, 33561845, 33562255
33563137, 33563167, 33566611, 33571225, 33584404, 33586107, 33589615
33599734, 33601195, 33601849, 33613512, 33613829, 33617685, 33618962
33621794, 33622325, 33624356, 33631068, 33631562, 33632754, 33633875
33637219, 33641592, 33647820, 33651003, 33655399, 33656104, 33656679
33657553, 33660093, 33660782, 33661960, 33674035, 33681814, 33681832
33684377, 33695048, 33718848, 33727406, 33736618, 33738702, 33743745

33750344, 33753873, 33768421, 33794088, 33805155, 33817717, 33822187
33850437, 33853330, 33861312, 33863261, 33879054, 33893127, 33954999
33967599, 34006614, 34006650

Version 21.0.0.0.ru-2022-01.rur-2022-01.r1

Version 21.0.0.0.ru-2022-01.rur-2022-01.r1 includes the following:

- Patch [33516412](#): DATABASE RELEASE UPDATE 21.5.0.0.0
- Patch [33792011](#): DELIVER LIBCRYPTOCME.SO FOR DB 21.5 INSTALLS
- Patch [33613829](#): RDBMS - DSTV37 UPDATE - TZDATA2020E
- Patch [33613833](#): DSTV37 UPDATE - TZDATA2020E - NEED OJVM FIX

Combined patches for version 21.0.0.0.ru-2022-01.rur-2022-01.r1, released January 2022

Bugs fixed:

24559425, 25562258, 26139817, 26352569, 27162036, 27897090, 28294439
28632799, 28882751, 28994721, 29027914, 29587488, 29591661, 29617414
30082402, 30481004, 30610097, 30710917, 30722105, 30808364, 30876666
30961824, 31006259, 31006953, 31026870, 31044504, 31113682, 31251325
31287296, 31387123, 31414524, 31488085, 31526250, 31615736, 31656601
31731407, 31773909, 31780567, 31800059, 31800139, 31824792, 31834214
31834677, 31841210, 31843716, 31843845, 31844137, 31844357, 31844557
31872320, 31897178, 31912834, 31923463, 31927078, 31932042, 31933842
31933846, 31933914, 31938116, 31951628, 31959140, 31982879, 31988833
31992615, 31993051, 31994298, 31996331, 31997660, 32003908, 32008408
32008716, 32009197, 32020701, 32056529, 32057565, 32069508, 32071457
32075130, 32078078, 32081381, 32092797, 32097767, 32102542, 32114541
32114746, 32119144, 32132504, 32161381, 32178966, 32183102, 32183756
32184235, 32184577, 32185296, 32190419, 32198292, 32198396, 32199681
32212062, 32219835, 32225117, 32225742, 32249371, 32254686, 32255753
32258423, 32277793, 32292805, 32297469, 32297849, 32298173, 32298782
32300822, 32312412, 32327201, 32335257, 32342345, 32346254, 32346649
32357412, 32361175, 32361677, 32365085, 32366303, 32368480, 32372725
32373696, 32380591, 32382021, 32386720, 32390629, 32394623, 32396326
32408640, 32417301, 32423985, 32426213, 32427158, 32427953, 32428097
32431251, 32432078, 32432245, 32436460, 32436721, 32439726, 32441128
32441671, 32442229, 32460145, 32462153, 32465193, 32465209, 32465495

32468643, 32471100, 32471251, 32478452, 32481807, 32492382, 32498569
32498752, 32503790, 32506473, 32507542, 32509814, 32515850, 32523613
32526703, 32529396, 32530202, 32531647, 32533461, 32538824, 32540706
32544740, 32551246, 32556165, 32561841, 32579075, 32580852, 32583315
32583355, 32583692, 32584375, 32585832, 32587793, 32587994, 32588656
32594965, 32597099, 32597637, 32602194, 32602990, 32603092, 32607991
32608583, 32610271, 32618819, 32619195, 32620859, 32621140, 32621309
32626756, 32626830, 32628168, 32629028, 32634049, 32635881, 32635931
32639432, 32639860, 32642587, 32645139, 32651063, 32651773, 32652605
32653470, 32662165, 32672057, 32675095, 32677000, 32685286, 32690400
32692372, 32698508, 32700455, 32701048, 32704013, 32710534, 32712916
32719445, 32720344, 32728984, 32730701, 32733845, 32734021, 32734171
32734800, 32735915, 32736370, 32737969, 32740515, 32743290, 32747738
32748806, 32753472, 32755517, 32761294, 32761932, 32763050, 32764690
32766397, 32766407, 32768752, 32769880, 32771735, 32775512, 32775526
32776891, 32781826, 32789228, 32790012, 32797486, 32800137, 32800539
32801192, 32801303, 32801337, 32803807, 32806915, 32809152, 32810125
32818545, 32822847, 32823692, 32827206, 32829563, 32831451, 32831901
32834394, 32838028, 32838533, 32843672, 32846876, 32848816, 32852504
32857881, 32863795, 32866089, 32868369, 32874773, 32875003, 32875118
32879447, 32880390, 32881057, 32881462, 32883252, 32888458, 32889096
32891500, 32893951, 32897184, 32897679, 32898672, 32898971, 32903472
32903625, 32907741, 32908249, 32908946, 32909255, 32910846, 32913527
32914711, 32915747, 32915760, 32915847, 32916025, 32918585, 32922090
32930360, 32930665, 32931078, 32931941, 32935932, 32936005, 32936402
32940955, 32947264, 32952285, 32955962, 32962378, 32965460, 32966389
32968221, 32969863, 32970478, 32972633, 32973406, 32976022, 32977489
32978151, 32980826, 32983419, 32983750, 32983871, 32984679, 32985908
32987004, 32987308, 32988028, 32991527, 32993522, 32995206, 32995242
32995863, 32998659, 32999086, 33000440, 33000980, 33005831, 33009224
33009351, 33010444, 33011198, 33013379, 33015716, 33018951, 33020088
33020510, 33021036, 33021642, 33022140, 33023671, 33026533, 33026796
33027377, 33027525, 33027553, 33028013, 33028286, 33028462, 33032579
33035201, 33037531, 33037895, 33038479, 33040335, 33042780, 33043590
33044062, 33045137, 33047827, 33049012, 33050626, 33056383, 33056579
33059891, 33060161, 33061339, 33063919, 33064565, 33065437, 33065979
33069366, 33072392, 33075133, 33075246, 33085296, 33085361, 33089556
33090110, 33090127, 33090781, 33090848, 33092087, 33096609, 33097433
33100352, 33101055, 33101058, 33102477, 33105276, 33105656, 33106822
33107872, 33109335, 33110192, 33110580, 33110992, 33111729, 33113848
33114640, 33120828, 33121866, 33121880, 33123985, 33126216, 33127141
33131526, 33131742, 33134819, 33135083, 33136252, 33142123, 33142533
33142739, 33145153, 33150236, 33152388, 33153797, 33156632, 33163187
33165183, 33166116, 33166242, 33166560, 33168480, 33169254, 33172549

33172631, 33172679, 33178223, 33178248, 33182152, 33182656, 33185773
33188597, 33190454, 33190694, 33191073, 33196009, 33196035, 33196475
33197565, 33205781, 33207143, 33210231, 33211160, 33212112, 33216667
33218194, 33219840, 33220282, 33223248, 33225678, 33230882, 33232128
33233560, 33234302, 33235620, 33242408, 33245940, 33251004, 33252648
33253504, 33261786, 33271125, 33278133, 33278509, 33282971, 33287418
33289442, 33292174, 33292896, 33295267, 33300422, 33304435, 33304775
33304830, 33307945, 33308107, 33317279, 33317996, 33322672, 33325981
33326105, 33330508, 33331329, 33332891, 33334404, 33335941, 33337385
33338247, 33338891, 33349744, 33353474, 33355007, 33367909, 33373644
33381652, 33382620, 33384092, 33384505, 33387767, 33388473, 33392448
33397495, 33407135, 33408858, 33416405, 33417828, 33417987, 33421305
33425127, 33428316, 33435313, 33448908, 33457584, 33457842, 33458732
33471858, 33480963, 33482590, 33489699, 33500486, 33507610, 33507953
33514179, 33540746, 33558058, 33558391, 33559316, 33563137, 33563167
33599734, 33613512, 33613829, 33613833, 33651003, 33656104, 33661960
33674035, 33792011

Amazon RDS for Oracle Database 19c (19.0.0.0)

Amazon RDS for Oracle Database 19c (19.0.0.0) incorporates bug fixes from Oracle by using Release Updates (RUs). The naming format for an RU is as follows:

release.*ru-date*.*ru-date*.*rnumber*. For example, the Oracle Database 19c update released by Oracle Corporation in April 2023 is named 19.0.0.0.ru-2023-04.ru-2023-04.r1. The naming format has the following components:

- The *release* is the five-digit number of the release, for example, 19.0.0.0.
- The *date* is the four-digit year and two-digit month when the update was made available by Oracle, for example, 2023-04.
- The *rnumber* is the revision, for example, r1.

An upgrade to an RU is called a minor version upgrade. Even though the string *ru* appears in the name of the patch, it is an RU rather than a Release Update Revision (RUR). Amazon RDS upgrades from one RU to another RU. RDS doesn't support RURs as part of its minor version upgrade mechanism. We don't support applying one-off patches to individual DB instances.

To determine which RUs are applied to Amazon RDS for Oracle Database 19c (19.0.0.0), see the following table.

Date	Release Update (RU)
2024 April	19.0.0.0.ru-2024-04.ru-2024-04.r1
2024 January	19.0.0.0.ru-2024-01.ru-2024-01.r1
2023 October	19.0.0.0.ru-2023-10.ru-2023-10.r1
2023 July	19.0.0.0.ru-2023-07.ru-2023-07.r1
2023 April	19.0.0.0.ru-2023-04.ru-2023-04.r1
2023 January	19.0.0.0.ru-2023-01.ru-2023-01.r2 and 19.0.0.0.ru-2023-01.ru-2023-01.r1
2022 October	19.0.0.0.ru-2022-10.ru-2022-10.r1

Date	Release Update (RU)
2022 July	19.0.0.0.ru-2022-07.rur-2022-07.r1
2022 April	19.0.0.0.ru-2022-04.rur-2022-04.r1
2022 January	19.0.0.0.ru-2022-01.rur-2022-01.r1
2021 October	19.0.0.0.ru-2021-10.rur-2021-10.r1
2021 July	19.0.0.0.ru-2021-07.rur-2021-07.r1
2021 April	19.0.0.0.ru-2021-04.rur-2021-04.r1
2021 January	19.0.0.0.ru-2021-01.rur-2021-01.r2 and 19.0.0.0.ru-2021-01.rur-2021-01.r1
2020 October	19.0.0.0.ru-2020-10.rur-2020-10.r1
2020 July	19.0.0.0.ru-2020-07.rur-2020-07.r1
2020 April	19.0.0.0.ru-2020-04.rur-2020-04.r1
2020 January	19.0.0.0.ru-2020-01.rur-2020-01.r1
2019 October	19.0.0.0.ru-2019-10.rur-2019-10.r1
2019 July	19.0.0.0.ru-2019-07.rur-2019-07.r1

Version 19.0.0.0.ru-2024-04.rur-2024-04.r1

Version 19.0.0.0.ru-2024-04.rur-2024-04.r1 includes the following:

- Patch [36260537](#): DSTV43 UPDATE - TZDATA2024A - NEED OJVM FIX
- Patch [33125873](#): MAKE CACHE GLOBAL OBJECT INVALIDATION CIC NON-SERIALIZE FOR BETTER PERFORMANCE
- Patch [29213893](#): DBMS_STATS FAILING WITH ERROR ORA-01422 WHEN GATHERING STATS FOR USER\$ TABLE
- Patch [28730253](#): SUPPORT NEW ERA REIWA FOR JAPANESE IMPERIAL CALENDAR

- Patch [36199232](#): OJVM RELEASE UPDATE: 19.23.0.0.240416 (36199232)
- Patch [36233263](#): Database Release Update: 19.23.0.0.240416 (36233263)
- Patch [29585399](#): OCW RELEASE UPDATE 19.3.0.0.0 (29585399)

Combined Patches for Version 19.0.0.0.ru-2024-04.rur-2024-04.r1, Released April 2024

Bugs fixed:

1297945, 7391838, 8460502, 8476681, 9002767, 10121473, 10123661
12565410, 12949919, 14112098, 14570574, 14735102, 15897884, 15931756
15959416, 16662822, 16664572, 16750494, 16799766, 17275499, 17395507
17428816, 17443054, 17468475, 17562236, 17777718, 18534283, 18697534
18759260, 18943905, 19080742, 19138896, 19147630, 19226753, 19397646
19630878, 19697993, 19884953, 19958239, 20007421, 20044584, 20083476
20289608, 20313356, 20319830, 20479545, 20661314, 20721183, 20867658
20875943, 20922160, 21119541, 21217621, 21232786, 21245711, 21374587
21528318, 21533734, 21629064, 21639146, 21888352, 21965541, 22037067
22066547, 22252368, 22325312, 22387320, 22553815, 22580355, 22599382
22725871, 22729345, 22748979, 22813401, 22873666, 23020668, 23066463
23094775, 23125587, 23220873, 23294761, 23296836, 23311885, 23606241
23614160, 23645975, 23734075, 23734111, 23763462, 24336782, 24356932
24408754, 24559425, 24561942, 24596874, 24597536, 24669730, 24673201
24687075, 24701882, 24739455, 24833686, 24916492, 24957575, 24971456
25030027, 25033515, 25092651, 25093917, 25148135, 25153902, 25173172
25195515, 25404117, 25415139, 25416731, 25467237, 25541233, 25560538
25562258, 25607406, 25607716, 25632308, 25634827, 25642769, 25655012
25661172, 25675134, 25677036, 25707535, 25756945, 25792962, 25804387
25804908, 25806201, 25809128, 25869323, 25881271, 25883179, 25905368
25913778, 25933030, 25979242, 25986062, 25997810, 26001677, 26003708
26108369, 26127355, 26139817, 26173091, 26203132, 26247450, 26256280
26280704, 26284288, 26352569, 26352615, 26440142, 26476244, 26476323
26497655, 26499997, 26500553, 26516556, 26528202, 26577716, 26587659
26611353, 26621826, 26668264, 26716835, 26739322, 26758837, 26777814
26785852, 26789742, 26800890, 26819036, 26860844, 26872233, 26897528
26925969, 26951566, 26957541, 26960568, 26963540, 26978857, 27004798
27004828, 27015468, 27019512, 27028029, 27036163, 27044169, 27044246
27063461, 27086374, 27091809, 27096103, 27101798, 27126122, 27126938
27130348, 27131416, 27155644, 27162036, 27166935, 27175854, 27195575
27195935, 27207214, 27207959, 27221350, 27222128, 27243840, 27244999
27254335, 27260704, 27261477, 27275126, 27277677, 27302372, 27329690

27359766, 27359770, 27362994, 27369515, 27378053, 27381279, 27392968
27406105, 27411022, 27423500, 27428898, 27439716, 27453490, 27458357
27458493, 27460010, 27489107, 27497101, 27525303, 27572040, 27582210
27589260, 27595082, 27597359, 27604329, 27614573, 27622946, 27627811
27629928, 27636387, 27639208, 27654410, 27658166, 27661222, 27666312
27684864, 27691701, 27692173, 27697886, 27700413, 27710072, 27722357
27729678, 27742354, 27745728, 27751111, 27751518, 27760043, 27764052
27768096, 27782078, 27785931, 27786168, 27801144, 27825962, 27828892
27829722, 27841399, 27846298, 27860754, 27873364, 27877830, 27880025
27897090, 27899093, 27907898, 27908460, 27917890, 27929509, 27933036
27934711, 27935464, 27941110, 27950978, 27951757, 27957203, 27957963
27962025, 27967484, 27979632, 27989365, 27998559, 28001632, 28007516
28023467, 28031385, 28044739, 28052648, 28064977, 28072567, 28078186
28089605, 28092783, 28104176, 28109326, 28112563, 28125947, 28127287
28127569, 28129791, 28133903, 28138566, 28138847, 28144569, 28145995
28156781, 28162610, 28163768, 28167557, 28173612, 28181021, 28185286
28187837, 28189466, 28193268, 28198802, 28201045, 28204104, 28204262
28205555, 28209601, 28209985, 28210681, 28215483, 28227204, 28234255
28248841, 28263142, 28267957, 28271258, 28271693, 28276054, 28279176
28279456, 28279612, 28294439, 28294563, 28298401, 28302580, 28303692
28308789, 28313275, 28319114, 28322973, 28326928, 28337860, 28338211
28350595, 28351919, 28362187, 28364580, 28370061, 28371123, 28373960
28375383, 28379065, 28381939, 28383667, 28386259, 28387185, 28387574
28390177, 28390273, 28392179, 28395302, 28397317, 28402823, 28403019
28406374, 28410431, 28412163, 28414968, 28430240, 28431445, 28432345
28435333, 28436173, 28436414, 28442896, 28451312, 28452123, 28454215
28461031, 28461789, 28463226, 28469386, 28470673, 28475242, 28479352
28482048, 28482049, 28484299, 28487818, 28489419, 28492006, 28498976
28499269, 28502773, 28503081, 28504631, 28505321, 28513129, 28513333
28521330, 28522750, 28523644, 28526715, 28530171, 28530697, 28534475
28534493, 28535127, 28537481, 28538439, 28541606, 28542455, 28544270
28545395, 28546290, 28547068, 28547926, 28553649, 28553981, 28558489
28558645, 28561704, 28564479, 28565296, 28567417, 28567819, 28569897
28570589, 28572165, 28572407, 28572533, 28572544, 28572667, 28572834
28577943, 28578945, 28587723, 28589194, 28589509, 28589644, 28591817
28592647, 28593127, 28593682, 28594086, 28597221, 28598022, 28600107
28601957, 28602253, 28604647, 28605066, 28606598, 28607316, 28607632
28608211, 28612239, 28618343, 28620697, 28621543, 28621781, 28622202
28625580, 28625862, 28625873, 28627033, 28628592, 28630381, 28632796
28632799, 28636532, 28639299, 28640772, 28642469, 28642551, 28642899
28643583, 28643654, 28643718, 28644549, 28645570, 28646200, 28646939
28647544, 28649388, 28651078, 28651637, 28652776, 28655209, 28657026
28658263, 28659098, 28661333, 28661362, 28663289, 28663782, 28670402
28672124, 28672457, 28673945, 28674263, 28676706, 28681153, 28682182

28682796, 28689483, 28690694, 28692103, 28692275, 28692282, 28693954
28694526, 28694639, 28694872, 28694877, 28696373, 28697526, 28698087
28699321, 28700945, 28703812, 28704412, 28705231, 28707931, 28708400
28708585, 28709063, 28709412, 28710385, 28710469, 28710663, 28710734
28714461, 28714720, 28715655, 28715727, 28717406, 28718302, 28718469
28719348, 28720204, 28720418, 28721497, 28722229, 28729900, 28730079
28730253, 28734355, 28734910, 28740708, 28740799, 28740863, 28741374
28742555, 28745367, 28747846, 28749853, 28751498, 28752923, 28755011
28755084, 28755309, 28755846, 28757960, 28758722, 28760206, 28760662
28763291, 28765983, 28767240, 28769456, 28770865, 28771022, 28771947
28772390, 28772816, 28774416, 28776431, 28776811, 28777073, 28777214
28777478, 28778754, 28781599, 28781754, 28785273, 28785321, 28785531
28788272, 28789531, 28789533, 28791576, 28791852, 28793062, 28794230
28795452, 28795551, 28795563, 28795734, 28800508, 28802066, 28802734
28804517, 28805242, 28806517, 28807247, 28808314, 28808652, 28808656
28810381, 28811560, 28811592, 28813317, 28813931, 28815123, 28815355
28815557, 28816871, 28817449, 28818063, 28819640, 28820669, 28821847
28824482, 28826113, 28827682, 28828390, 28831971, 28833912, 28835937
28836716, 28837979, 28838385, 28839869, 28842408, 28844656, 28844738
28845346, 28846759, 28847541, 28847572, 28849494, 28849776, 28850084
28851458, 28851467, 28852325, 28852334, 28854004, 28854212, 28854733
28855520, 28855922, 28857364, 28857552, 28861861, 28862532, 28863263
28863432, 28863487, 28865544, 28865569, 28867698, 28867992, 28869215
28870496, 28871040, 28872645, 28872829, 28873575, 28874416, 28875089
28876253, 28876639, 28876926, 28877252, 28878865, 28880218, 28880864
28881191, 28881848, 28882146, 28882751, 28882784, 28884931, 28887305
28888083, 28888327, 28889389, 28889730, 28891867, 28891941, 28892794
28896556, 28897123, 28897512, 28898967, 28899663, 28900506, 28901126
28902135, 28904380, 28905312, 28905390, 28905457, 28905615, 28907196
28909769, 28909992, 28910498, 28910586, 28911140, 28912691, 28914144
28915561, 28917080, 28918429, 28919145, 28921844, 28922227, 28922456
28922485, 28922532, 28922608, 28922767, 28925250, 28925460, 28925634
28925880, 28927452, 28928462, 28930944, 28932914, 28933079, 28933158
28935293, 28935956, 28936114, 28937717, 28938167, 28938422, 28938698
28940179, 28940281, 28940472, 28941901, 28942118, 28942455, 28942694
28945421, 28945994, 28946233, 28946574, 28948554, 28949888, 28950868
28951332, 28951493, 28951533, 28952168, 28954762, 28955606, 28955883
28956145, 28956908, 28957260, 28957292, 28957723, 28958088, 28958094
28958590, 28959493, 28960863, 28962271, 28962775, 28963036, 28965084
28965095, 28965231, 28965376, 28966444, 28968211, 28968779, 28970093
28970122, 28971177, 28974083, 28974902, 28974999, 28977322, 28978664
28979289, 28980448, 28980910, 28981871, 28983095, 28983486, 28984313
28985114, 28985272, 28985362, 28985478, 28986207, 28986231, 28986257
28986326, 28986481, 28986696, 28988482, 28988864, 28989306, 28990681

28993295, 28993353, 28994307, 28994542, 28994721, 28994783, 28995287
28996376, 28998369, 28999046, 29000000, 29001305, 29001888, 29002273
29002488, 29002784, 29002927, 29003207, 29003407, 29003617, 29003738
29004934, 29005748, 29006318, 29006621, 29007321, 29007353, 29007775
29008035, 29008669, 29009513, 29010126, 29010517, 29011936, 29012609
29013475, 29013832, 29014076, 29014385, 29015118, 29015273, 29016294
29017265, 29018655, 29018680, 29019121, 29020147, 29020271, 29020423
29021063, 29021352, 29022986, 29024028, 29024054, 29024448, 29024552
29024732, 29024795, 29024876, 29026154, 29026582, 29026606, 29027456
29027694, 29027914, 29027933, 29027940, 29030184, 29030927, 29031575
29031600, 29032234, 29032276, 29032457, 29032607, 29033052, 29033145
29033164, 29033200, 29033280, 29033655, 29034331, 29034587, 29036278
29037290, 29038528, 29038728, 29038730, 29039089, 29039510, 29040032
29040739, 29041739, 29041775, 29043554, 29043651, 29043725, 29044086
29044763, 29044954, 29046482, 29047127, 29047850, 29048178, 29048289
29048498, 29048605, 29048728, 29048792, 29048858, 29049014, 29049673
29050357, 29050560, 29050765, 29050886, 29051263, 29051702, 29051953
29052726, 29052850, 29053783, 29053902, 29055644, 29056024, 29056270
29056560, 29056767, 29056894, 29058476, 29059011, 29060216, 29061016
29061959, 29062692, 29062848, 29062860, 29062868, 29110526, 29110783
29110790, 29110797, 29110802, 29110805, 29111598, 29111631, 29112455
29113282, 29113305, 29115794, 29115857, 29116779, 29117337, 29117526
29117642, 29118543, 29119077, 29119733, 29120223, 29122224, 29122254
29122367, 29123297, 29123324, 29123432, 29123444, 29123482, 29124104
29124368, 29125036, 29125374, 29125380, 29125708, 29125786, 29126345
29127957, 29128693, 29128935, 29129450, 29129476, 29129497, 29129691
29129712, 29130219, 29131539, 29131772, 29132456, 29132869, 29132938
29133470, 29134447, 29135383, 29135649, 29136111, 29138641, 29139070
29139727, 29139761, 29139780, 29139956, 29141316, 29141341, 29141685
29141886, 29142609, 29142667, 29143516, 29144995, 29145214, 29145730
29146077, 29146157, 29146810, 29147849, 29148799, 29149170, 29149829
29150338, 29151520, 29152357, 29152603, 29152752, 29154057, 29154631
29154636, 29154725, 29154829, 29155099, 29155208, 29157051, 29157389
29158139, 29158680, 29158899, 29158990, 29159216, 29159661, 29159909
29159936, 29160174, 29160462, 29160824, 29161597, 29161923, 29162095
29162749, 29163073, 29163156, 29163415, 29163437, 29163524, 29163567
29164376, 29164446, 29165682, 29167111, 29167342, 29167374, 29167940
29168137, 29168219, 29168433, 29169073, 29169215, 29169540, 29169739
29170232, 29170717, 29171683, 29171942, 29172618, 29172826, 29173140
29173373, 29173618, 29173817, 29174004, 29174753, 29175638, 29175765
29175829, 29176318, 29177466, 29177543, 29177886, 29178385, 29179097
29180313, 29180455, 29180559, 29180721, 29180893, 29181078, 29181153
29181231, 29181568, 29181620, 29181743, 29181923, 29182019, 29182517
29182535, 29182901, 29182920, 29183298, 29183912, 29184297, 29184666

29185193, 29186091, 29186456, 29186605, 29188255, 29189302, 29189307
29189889, 29190235, 29190474, 29190663, 29190740, 29191541, 29191827
29192419, 29192468, 29192685, 29193207, 29193681, 29194205, 29194367
29194493, 29194827, 29194981, 29195279, 29195337, 29195758, 29196151
29196725, 29198092, 29198913, 29199163, 29199635, 29199733, 29200316
29200700, 29201143, 29201494, 29201539, 29201695, 29201787, 29202104
29202461, 29202850, 29203041, 29203122, 29203166, 29203227, 29203425
29203443, 29203604, 29205281, 29205323, 29205419, 29205463, 29205767
29205918, 29206109, 29206605, 29206631, 29207073, 29208260, 29208732
29209545, 29210455, 29210577, 29210610, 29210624, 29210683, 29211457
29211724, 29211895, 29212012, 29212433, 29212611, 29213320, 29213351
29213613, 29213641, 29213775, 29213850, 29213879, 29213893, 29214561
29214960, 29215658, 29216312, 29216723, 29216746, 29216984, 29217294
29217472, 29217828, 29217848, 29217856, 29218570, 29219205, 29219273
29219627, 29220079, 29221248, 29221745, 29221891, 29221942, 29222031
29222534, 29222784, 29222892, 29223110, 29223833, 29223859, 29223967
29224065, 29224294, 29224605, 29224710, 29225076, 29225168, 29225758
29225861, 29227602, 29228869, 29229164, 29229754, 29229839, 29229844
29229955, 29230252, 29230565, 29231133, 29232117, 29232154, 29232449
29232533, 29232653, 29233415, 29233810, 29233953, 29234123, 29235934
29236573, 29237538, 29237575, 29237744, 29240307, 29240668, 29240759
29241345, 29241651, 29241856, 29242017, 29242561, 29242884, 29242906
29243749, 29243958, 29244495, 29244766, 29244968, 29245063, 29245137
29245160, 29246163, 29246337, 29247183, 29247415, 29247712, 29247906
29248012, 29248465, 29248495, 29248552, 29248723, 29248835, 29248858
29249289, 29249412, 29249583, 29249991, 29250059, 29250317, 29251259
29251564, 29252218, 29252510, 29252790, 29253184, 29253871, 29254031
29254177, 29254623, 29254930, 29255178, 29255273, 29255431, 29255435
29255616, 29255705, 29255718, 29255973, 29256279, 29256426, 29259119
29259320, 29260224, 29260407, 29260452, 29260956, 29261547, 29261548
29261695, 29261906, 29262143, 29262512, 29262887, 29265446, 29265448
29265780, 29266248, 29266899, 29267292, 29268412, 29269171, 29269228
29269825, 29270585, 29271019, 29273168, 29273360, 29273539, 29273570
29273735, 29273812, 29273847, 29274428, 29274564, 29274623, 29274627
29275461, 29276272, 29277317, 29278218, 29278684, 29279658, 29279751
29279854, 29281112, 29281527, 29281691, 29281796, 29282090, 29282233
29282666, 29282898, 29285197, 29285453, 29285503, 29285621, 29285788
29285956, 29286037, 29286220, 29286229, 29287130, 29287705, 29290110
29290235, 29292232, 29292253, 29292378, 29292837, 29293072, 29293574
29293806, 29294382, 29294753, 29296257, 29297863, 29297915, 29298220
29299049, 29299082, 29299830, 29299844, 29301139, 29301463, 29301566
29302565, 29302614, 29302963, 29303712, 29303918, 29304314, 29304640
29304692, 29304781, 29304853, 29305093, 29306226, 29306478, 29306713
29306790, 29307090, 29307109, 29307638, 29309698, 29311336, 29311528

29311588, 29311927, 29312310, 29312672, 29312734, 29312753, 29312889
29313347, 29313417, 29313525, 29314539, 29314636, 29314867, 29314949
29317756, 29318410, 29319441, 29319558, 29320900, 29321489, 29321689
29323946, 29323999, 29324568, 29324735, 29325087, 29325105, 29325257
29325347, 29325356, 29325497, 29325765, 29325993, 29326233, 29327044
29327892, 29327972, 29328305, 29329042, 29329087, 29329675, 29329807
29329848, 29330361, 29330791, 29331066, 29331209, 29331380, 29331493
29332292, 29332395, 29332763, 29332771, 29332966, 29333500, 29336843
29336899, 29337294, 29337310, 29337742, 29338315, 29338348, 29338453
29338780, 29338913, 29339101, 29339155, 29339299, 29339452, 29340333
29341209, 29341782, 29342099, 29343086, 29343156, 29343861, 29344541
29345382, 29345937, 29346057, 29346138, 29346211, 29346943, 29347620
29348176, 29348358, 29350052, 29350712, 29350762, 29350868, 29351044
29351386, 29351662, 29351708, 29351716, 29351735, 29351749, 29351771
29351786, 29352298, 29352724, 29352867, 29352947, 29353271, 29353389
29353432, 29353718, 29353821, 29353960, 29355654, 29355913, 29356547
29356634, 29356698, 29356704, 29356711, 29356752, 29356782, 29357424
29357821, 29358509, 29358828, 29360252, 29360285, 29360467, 29360672
29360775, 29360911, 29360950, 29361319, 29361472, 29361801, 29362596
29363090, 29363151, 29364171, 29364177, 29366406, 29366818, 29366940
29367019, 29367561, 29367971, 29368253, 29368310, 29368725, 29372069
29372173, 29372541, 29372562, 29373418, 29373588, 29374179, 29374604
29374627, 29375355, 29375941, 29375984, 29376346, 29377804, 29377986
29378029, 29378287, 29378834, 29378913, 29379299, 29379381, 29379552
29379750, 29379978, 29380527, 29381000, 29382296, 29382641, 29382784
29382815, 29383695, 29384740, 29384781, 29384854, 29384864, 29384960
29385339, 29385429, 29385652, 29385774, 29386125, 29386502, 29386557
29386635, 29386660, 29386835, 29387073, 29387274, 29387310, 29387329
29387337, 29388020, 29388072, 29388094, 29388524, 29388830, 29389408
29389889, 29390011, 29390435, 29390501, 29390785, 29391030, 29391237
29391301, 29391438, 29391849, 29391925, 29392554, 29392966, 29393291
29393649, 29394014, 29394140, 29394749, 29394761, 29395657, 29396481
29397841, 29397954, 29397996, 29398192, 29398488, 29398863, 29399046
29399100, 29399121, 29399336, 29399938, 29399959, 29402110, 29402131
29403307, 29404425, 29404483, 29405012, 29405462, 29405651, 29405996
29407488, 29407637, 29407804, 29407932, 29408853, 29409149, 29409455
29410311, 29410834, 29411037, 29411427, 29411469, 29411931, 29412066
29412269, 29413205, 29413360, 29413382, 29413517, 29413544, 29413634
29413956, 29415493, 29415774, 29416339, 29416688, 29416700, 29417084
29417113, 29417173, 29417719, 29417884, 29418165, 29418341, 29420254
29420834, 29421059, 29423003, 29423016, 29423156, 29423227, 29423491
29423826, 29424094, 29424999, 29426241, 29426320, 29426521, 29428230
29429017, 29429087, 29429264, 29429336, 29429466, 29429566, 29429895
29430524, 29430866, 29431192, 29431402, 29431485, 29431985, 29432176

29434301, 29434777, 29434869, 29435474, 29435652, 29435966, 29436454
29436514, 29436522, 29436727, 29437029, 29437379, 29437594, 29437702
29437712, 29438150, 29438277, 29438736, 29439522, 29440651, 29441196
29442400, 29442936, 29443187, 29443250, 29443559, 29444072, 29444275
29444282, 29444524, 29444583, 29444602, 29444906, 29445548, 29445707
29446319, 29446669, 29447460, 29448498, 29449477, 29449845, 29449852
29450162, 29450193, 29450273, 29450421, 29450812, 29450936, 29451085
29451224, 29451386, 29451660, 29452251, 29452576, 29452736, 29452739
29452809, 29452813, 29452864, 29452936, 29452953, 29452973, 29452977
29453104, 29453105, 29453109, 29453681, 29453682, 29454450, 29454467
29454468, 29454469, 29454470, 29454471, 29454978, 29455424, 29455773
29456538, 29456714, 29457312, 29457319, 29457370, 29457502, 29457807
29457978, 29458113, 29458132, 29460252, 29461420, 29461791, 29461971
29462594, 29462767, 29462957, 29463047, 29463528, 29463553, 29463798
29464616, 29464779, 29465047, 29465177, 29466674, 29466707, 29467622
29469563, 29469565, 29470059, 29470205, 29470291, 29470634, 29470636
29470729, 29470814, 29470880, 29471633, 29471832, 29471857, 29471860
29472170, 29472172, 29472176, 29472204, 29472235, 29472319, 29472402
29472404, 29472405, 29472408, 29472411, 29472446, 29472618, 29473708
29474348, 29475386, 29476473, 29476702, 29477015, 29481584, 29482021
29483452, 29483532, 29483626, 29483672, 29483685, 29483712, 29483723
29483771, 29485099, 29485731, 29485785, 29485877, 29486181, 29486848
29487150, 29487189, 29487407, 29488091, 29488894, 29488996, 29489436
29489546, 29490032, 29490256, 29491784, 29492127, 29492939, 29493122
29493821, 29494101, 29494245, 29494788, 29494934, 29495057, 29495146
29495171, 29495684, 29496977, 29497053, 29497311, 29497588, 29497696
29497778, 29498198, 29499077, 29500257, 29500826, 29500963, 29501218
29502561, 29503543, 29503631, 29503827, 29504103, 29504492, 29504682
29505225, 29505589, 29505668, 29506942, 29507270, 29507616, 29508681
29508751, 29508998, 29509777, 29509975, 29510278, 29511064, 29511611
29511771, 29511980, 29512125, 29512773, 29512890, 29514284, 29514479
29515134, 29515240, 29515476, 29515534, 29515766, 29515834, 29516300
29516452, 29516727, 29516766, 29516943, 29517168, 29517443, 29517883
29518604, 29518767, 29519131, 29521187, 29521688, 29521748, 29521862
29522358, 29522561, 29522662, 29523055, 29523216, 29523511, 29524043
29524599, 29524985, 29525366, 29525467, 29525886, 29526966, 29527595
29527610, 29528184, 29528368, 29529147, 29529436, 29530414, 29530440
29530515, 29530812, 29530909, 29531654, 29531836, 29532112, 29532532
29534218, 29536342, 29536445, 29536794, 29537829, 29538631, 29539027
29539413, 29540327, 29540831, 29540862, 29541517, 29541742, 29541769
29541973, 29542084, 29542449, 29542474, 29542580, 29542643, 29543034
29543956, 29544552, 29546817, 29547010, 29547867, 29548413, 29548427
29548592, 29548687, 29548722, 29549040, 29549071, 29549104, 29549154
29549730, 29550530, 29552402, 29552773, 29553141, 29554092, 29554351

29554554, 29554997, 29555105, 29555239, 29557144, 29557261, 29557336
29557556, 29558238, 29558452, 29558926, 29558975, 29559187, 29559395
29559446, 29559908, 29559981, 29560019, 29564592, 29564593, 29565611
29579919, 29580394, 29580983, 29581460, 29581771, 29583018, 29584261
29584693, 29586143, 29587299, 29587488, 29587720, 29587765, 29588580
29588732, 29589544, 29590666, 29591311, 29591343, 29591641, 29591661
29592011, 29592215, 29592433, 29592595, 29592946, 29593820, 29597158
29597536, 29597716, 29597754, 29598039, 29598040, 29598046, 29598226
29598233, 29598338, 29598873, 29598981, 29599008, 29599243, 29599300
29599552, 29601461, 29602831, 29603460, 29603884, 29604002, 29604257
29606261, 29607136, 29607797, 29608000, 29608023, 29608888, 29609434
29609468, 29609603, 29610506, 29611020, 29611991, 29613733, 29614206
29614931, 29614987, 29615824, 29616244, 29616414, 29617414, 29618074
29618190, 29620042, 29620564, 29622936, 29623323, 29623592, 29624124
29624408, 29625065, 29625804, 29625827, 29625876, 29626154, 29626732
29628200, 29628647, 29629430, 29629650, 29629681, 29629745, 29630221
29631749, 29632095, 29632265, 29632611, 29632751, 29633697, 29633753
29633936, 29634643, 29635427, 29635717, 29635990, 29637362, 29637526
29637560, 29638285, 29638928, 29641373, 29641736, 29642451, 29643721
29644426, 29644464, 29645167, 29645349, 29646315, 29647176, 29647770
29648928, 29649694, 29651183, 29651517, 29651520, 29652809, 29653132
29653246, 29655164, 29655416, 29655668, 29655855, 29655895, 29656400
29656819, 29656843, 29657399, 29657422, 29657744, 29657960, 29657973
29658056, 29661028, 29661065, 29661722, 29663191, 29663368, 29663494
29663601, 29663813, 29664087, 29664161, 29665168, 29665940, 29666451
29667527, 29667994, 29668005, 29668253, 29669241, 29669413, 29670713
29670782, 29671363, 29672507, 29675446, 29676089, 29676921, 29677051
29677173, 29677733, 29677927, 29678217, 29679856, 29680700, 29681987
29683039, 29683189, 29683211, 29683643, 29684518, 29685137, 29685276
29687214, 29687220, 29687459, 29687718, 29687727, 29687763, 29688867
29689145, 29689255, 29690795, 29690806, 29692115, 29692694, 29693847
29694869, 29695425, 29695821, 29695841, 29695964, 29695987, 29696242
29696310, 29697928, 29700125, 29700460, 29700770, 29701425, 29701720
29701755, 29701937, 29703932, 29704426, 29705793, 29705928, 29706141
29706160, 29707099, 29707493, 29707582, 29707896, 29708324, 29708353
29708876, 29708915, 29710188, 29710858, 29713810, 29715220, 29715647
29715703, 29716029, 29716194, 29716227, 29716491, 29716602, 29716871
29717659, 29717901, 29718198, 29719146, 29720133, 29720373, 29721418
29721576, 29722026, 29722092, 29722167, 29722389, 29723113, 29724497
29724658, 29725115, 29725421, 29725425, 29725476, 29725781, 29726695
29737941, 29738374, 29738400, 29739576, 29741319, 29741976, 29742223
29742926, 29743448, 29744225, 29744400, 29744637, 29745288, 29745624
29746003, 29746962, 29747493, 29747648, 29747653, 29748285, 29748325
29748336, 29748513, 29749469, 29749471, 29750673, 29751094, 29753244

29754196, 29754640, 29754951, 29755821, 29756274, 29756444, 29757099
29757264, 29757651, 29757687, 29757814, 29758203, 29758217, 29758350
29758661, 29761678, 29761837, 29761911, 29763158, 29764644, 29765035
29765219, 29765347, 29765393, 29765493, 29766207, 29766435, 29766503
29766679, 29768487, 29768899, 29769549, 29769695, 29769901, 29770750
29771032, 29771242, 29772514, 29772761, 29773185, 29773197, 29773205
29773459, 29773633, 29773842, 29774362, 29775393, 29775473, 29779196
29779368, 29779793, 29779901, 29780140, 29780459, 29780507, 29780633
29782211, 29782284, 29782501, 29782823, 29782866, 29783142, 29784106
29785169, 29785239, 29785251, 29785311, 29785544, 29785550, 29785831
29787292, 29787766, 29788820, 29789911, 29791152, 29791880, 29791916
29792213, 29792433, 29793141, 29793151, 29793318, 29794174, 29794462
29795712, 29795957, 29796335, 29796378, 29796916, 29797209, 29797726
29801164, 29802382, 29802695, 29803593, 29803638, 29803948, 29804052
29804875, 29805368, 29805772, 29806390, 29806964, 29807964, 29809792
29809837, 29809997, 29810012, 29810013, 29811616, 29811720, 29812084
29812166, 29812489, 29813503, 29813650, 29813671, 29814455, 29814995
29815341, 29815713, 29816887, 29817278, 29817547, 29817784, 29818794
29819753, 29820341, 29821130, 29821582, 29822714, 29825525, 29827647
29827792, 29827852, 29828644, 29829339, 29829453, 29830374, 29831196
29831404, 29831567, 29833406, 29833984, 29834506, 29836096, 29836424
29838337, 29838485, 29838740, 29838773, 29839481, 29839715, 29840619
29841267, 29841687, 29842369, 29843238, 29843277, 29843692, 29843831
29844131, 29844226, 29844275, 29845449, 29845530, 29845691, 29846126
29846525, 29846645, 29846688, 29847627, 29848084, 29848849, 29848986
29849100, 29849139, 29850083, 29850552, 29850566, 29850930, 29851020
29851308, 29851401, 29851474, 29851733, 29853201, 29853485, 29856420
29856506, 29856859, 29856890, 29858121, 29858376, 29858420, 29858929
29859068, 29860022, 29860028, 29860994, 29861075, 29864203, 29864261
29865188, 29865590, 29865658, 29867728, 29868639, 29868736, 29869052
29869086, 29869149, 29869404, 29869857, 29869877, 29869887, 29869906
29870065, 29870533, 29871098, 29871312, 29871360, 29872401, 29872720
29872937, 29872983, 29873206, 29873665, 29873751, 29874090, 29874761
29875200, 29875459, 29875565, 29875919, 29876358, 29876989, 29877608
29878076, 29879723, 29881050, 29881478, 29881575, 29881643, 29881839
29882427, 29882454, 29882729, 29883836, 29884958, 29885182, 29885781
29885890, 29886809, 29887045, 29887111, 29887840, 29888621, 29889184
29889358, 29890740, 29891075, 29891383, 29891533, 29891853, 29891857
29891916, 29892388, 29892604, 29892634, 29892973, 29892982, 29893132
29893197, 29893287, 29894021, 29894511, 29896510, 29897418, 29897720
29897863, 29899384, 29900186, 29900203, 29900824, 29901021, 29901025
29901419, 29901961, 29902299, 29902327, 29902330, 29902659, 29903190
29903299, 29903357, 29903454, 29904002, 29906678, 29907870, 29907942
29908389, 29908639, 29908777, 29909658, 29910218, 29910402, 29912135

29912286, 29913805, 29913934, 29913966, 29914449, 29914544, 29915182
29915217, 29915848, 29916198, 29916975, 29919782, 29919789, 29920025
29920376, 29920804, 29921214, 29921318, 29921559, 29922225, 29922435
29922461, 29923452, 29924147, 29924181, 29924479, 29925177, 29926466
29927360, 29927756, 29928040, 29928210, 29928340, 29928427, 29928564
29930457, 29931230, 29931956, 29932202, 29932310, 29932430, 29932780
29932953, 29933718, 29934048, 29934052, 29934158, 29934557, 29935685
29936841, 29937565, 29937655, 29937956, 29938063, 29938225, 29939075
29939400, 29939795, 29940373, 29941062, 29942096, 29942275, 29942554
29943670, 29943879, 29944035, 29944159, 29944660, 29944963, 29945645
29946101, 29946388, 29947145, 29947242, 29947428, 29948154, 29948165
29950018, 29950220, 29951620, 29951759, 29952700, 29955625, 29956016
29956222, 29957412, 29957493, 29958078, 29958925, 29960325, 29960884
29961080, 29961353, 29961360, 29961609, 29961847, 29962160, 29962248
29962590, 29962834, 29962927, 29962939, 29965052, 29965207, 29965603
29965888, 29966768, 29966778, 29967223, 29967386, 29967911, 29967980
29968085, 29968703, 29969557, 29969985, 29970081, 29970261, 29970273
29970298, 29970587, 29970861, 29971027, 29971481, 29971888, 29971936
29971951, 29972134, 29972176, 29973012, 29989783, 29989845, 29990779
29991257, 29992299, 29993717, 29997326, 29997553, 29997937, 29997959
30000518, 30000664, 30001105, 30001331, 30003187, 30003356, 30004660
30004856, 30006123, 30006159, 30006280, 30006411, 30006472, 30006705
30006985, 30007450, 30007536, 30007797, 30008035, 30008125, 30008198
30008214, 30008456, 30009528, 30009710, 30010995, 30012181, 30012235
30012737, 30013243, 30013535, 30014200, 30015070, 30017836, 30018017
30018126, 30018903, 30019864, 30021830, 30024618, 30025814, 30026016
30026572, 30026596, 30027614, 30027638, 30027649, 30028182, 30028599
30028649, 30029519, 30029806, 30031027, 30031613, 30032233, 30032376
30032484, 30033040, 30033547, 30034456, 30035444, 30035598, 30036258
30038392, 30038576, 30039796, 30039800, 30039959, 30040157, 30040511
30041501, 30041514, 30042490, 30043398, 30043610, 30043930, 30044108
30044507, 30045242, 30045273, 30045389, 30045484, 30045983, 30046497
30047510, 30047531, 30047702, 30047765, 30047931, 30048688, 30049966
30051176, 30051783, 30051804, 30052740, 30052928, 30053036, 30053501
30053748, 30054980, 30055640, 30056058, 30057718, 30057799, 30058149
30058453, 30059106, 30059109, 30059821, 30060267, 30060330, 30062364
30062429, 30062736, 30062819, 30064268, 30066352, 30067565, 30068101
30068384, 30068792, 30068871, 30070064, 30070506, 30071446, 30072018
30072038, 30072905, 30073314, 30073422, 30073744, 30074250, 30074296
30074349, 30074469, 30074472, 30074820, 30075037, 30076058, 30076197
30076253, 30076604, 30078586, 30078675, 30078934, 30079495, 30079949
30080111, 30080266, 30080297, 30080988, 30081055, 30081546, 30081580
30082145, 30082402, 30083100, 30083216, 30083488, 30083807, 30084458
30084606, 30084971, 30085897, 30086596, 30086992, 30087165, 30087509

30088229, 30088421, 30090568, 30092254, 30092280, 30092859, 30094929
30094948, 30095499, 30095591, 30095952, 30096138, 30096570, 30097092
30097115, 30098251, 30098719, 30099302, 30099420, 30099454, 30099852
30100354, 30101090, 30101186, 30101541, 30101847, 30102774, 30103551
30103553, 30104348, 30104378, 30104555, 30104722, 30104850, 30105458
30106748, 30106901, 30108012, 30109365, 30109839, 30110224, 30110370
30110518, 30114477, 30114489, 30114534, 30116085, 30116203, 30116753
30116854, 30117209, 30117220, 30117335, 30117469, 30117593, 30118261
30118279, 30120608, 30121009, 30122523, 30122583, 30123138, 30124026
30125765, 30126145, 30126470, 30127145, 30127522, 30127805, 30127904
30128047, 30128231, 30130240, 30131253, 30131286, 30131645, 30132708
30132989, 30133841, 30134103, 30134746, 30135396, 30135731, 30135899
30135942, 30136102, 30136346, 30137792, 30138600, 30138948, 30139392
30140411, 30140425, 30141240, 30142527, 30142802, 30142812, 30142815
30142907, 30143470, 30143593, 30145712, 30146593, 30146969, 30147195
30147307, 30147308, 30147473, 30147928, 30148343, 30148929, 30148966
30148999, 30149035, 30149658, 30150606, 30150710, 30151636, 30153533
30153552, 30153885, 30154633, 30155241, 30155320, 30155388, 30155489
30155814, 30155837, 30155999, 30156569, 30157526, 30158313, 30159329
30159488, 30159511, 30159536, 30159690, 30159752, 30159760, 30160025
30160625, 30161094, 30163243, 30164238, 30164714, 30165493, 30165503
30165876, 30165892, 30165897, 30166257, 30166352, 30166591, 30167787
30169254, 30169841, 30170104, 30172925, 30173113, 30173370, 30173556
30174102, 30174394, 30174401, 30175180, 30175291, 30175478, 30175587
30177597, 30178250, 30178839, 30178990, 30179012, 30179038, 30179644
30179894, 30180195, 30180208, 30180643, 30181756, 30182498, 30183367
30183696, 30183715, 30183920, 30184102, 30185852, 30186319, 30186476
30186706, 30187627, 30187866, 30188215, 30188631, 30189516, 30189535
30190090, 30191274, 30192691, 30192729, 30192853, 30193165, 30193262
30193505, 30193506, 30193584, 30193736, 30194612, 30194710, 30194972
30195667, 30195668, 30195684, 30195773, 30196195, 30196358, 30196629
30198239, 30198598, 30198861, 30198905, 30199890, 30200034, 30200132
30200237, 30200680, 30200758, 30202349, 30202388, 30202407, 30203918
30203929, 30204042, 30204542, 30206220, 30206493, 30206675, 30207473
30207519, 30208327, 30208690, 30208723, 30209222, 30209736, 30210027
30210429, 30210753, 30210884, 30211567, 30213031, 30213540, 30213590
30214769, 30214826, 30215130, 30215302, 30215351, 30217206, 30217562
30217982, 30218044, 30218317, 30218956, 30219222, 30220932, 30221115
30221237, 30221298, 30222187, 30222512, 30222669, 30222975, 30223712
30223847, 30223990, 30224544, 30224650, 30224725, 30224868, 30224950
30225265, 30225439, 30225443, 30225718, 30225837, 30225844, 30226244
30227400, 30228422, 30228567, 30229030, 30229126, 30229683, 30230183
30232638, 30233105, 30233536, 30233934, 30234132, 30234227, 30235878
30235919, 30235979, 30236092, 30236399, 30236554, 30236746, 30236883

30236964, 30237477, 30237640, 30238211, 30238715, 30239480, 30240010
30240547, 30240858, 30240930, 30240972, 30241567, 30241807, 30241829
30241920, 30242120, 30242724, 30243216, 30243720, 30244340, 30244831
30246053, 30246179, 30247305, 30248520, 30248531, 30248564, 30249432
30249738, 30249927, 30251003, 30251130, 30251627, 30252005, 30252098
30252156, 30252458, 30252977, 30253035, 30253090, 30253608, 30253705
30253761, 30253835, 30254206, 30254525, 30254576, 30254726, 30255143
30255528, 30256542, 30257412, 30257908, 30259120, 30259469, 30260523
30260595, 30261244, 30262248, 30263013, 30263377, 30264405, 30265523
30265608, 30265615, 30265703, 30266791, 30267155, 30269428, 30269748
30270647, 30270744, 30271114, 30272329, 30273212, 30274090, 30274188
30274324, 30274662, 30275434, 30275548, 30275569, 30275578, 30275784
30276144, 30276243, 30277120, 30277451, 30277589, 30277648, 30277733
30277884, 30277887, 30278402, 30281428, 30281615, 30282501, 30282591
30282918, 30283296, 30283577, 30283579, 30283581, 30283832, 30283932
30284219, 30284369, 30284751, 30285026, 30285166, 30285251, 30285341
30285457, 30285540, 30285843, 30286961, 30288343, 30288491, 30289074
30289294, 30289458, 30290185, 30290700, 30291536, 30292305, 30293345
30293935, 30294267, 30294465, 30294671, 30294865, 30295110, 30295137
30295549, 30295790, 30295808, 30297905, 30299367, 30299817, 30299934
30300030, 30300342, 30300363, 30300523, 30300538, 30304037, 30305163
30305264, 30305395, 30305568, 30305603, 30305880, 30306407, 30307814
30307883, 30308368, 30308578, 30308624, 30308772, 30308947, 30309098
30309566, 30309798, 30310195, 30311826, 30312094, 30312546, 30313749
30313848, 30313989, 30314079, 30314198, 30314837, 30316667, 30316897
30317005, 30317209, 30317386, 30317397, 30318638, 30318943, 30319080
30319099, 30320029, 30321076, 30321398, 30322980, 30323219, 30323658
30323820, 30323849, 30324059, 30324180, 30324466, 30324649, 30325407
30325786, 30326115, 30326882, 30327149, 30327581, 30327678, 30327810
30328168, 30328209, 30328690, 30329209, 30329737, 30329751, 30330123
30331254, 30331356, 30331759, 30332505, 30332893, 30333443, 30334484
30334563, 30335127, 30335832, 30335987, 30336032, 30336383, 30336530
30336742, 30336996, 30337245, 30338434, 30338591, 30339049, 30339103
30339605, 30340540, 30341713, 30342371, 30342878, 30343370, 30343750
30344614, 30345201, 30345432, 30345593, 30345809, 30345926, 30345950
30346330, 30346729, 30346847, 30346867, 30347215, 30347410, 30349714
30350177, 30350543, 30351059, 30352278, 30352532, 30352581, 30352623
30352715, 30353841, 30354034, 30355490, 30356060, 30356461, 30357463
30357698, 30357897, 30358416, 30359614, 30360383, 30360653, 30361070
30361635, 30362003, 30362850, 30363088, 30363193, 30363311, 30363658
30363716, 30364329, 30364481, 30364613, 30364835, 30365265, 30365745
30367193, 30368048, 30368482, 30368534, 30368668, 30368917, 30371264
30371623, 30371909, 30372081, 30372782, 30373419, 30373541, 30373550
30374345, 30374570, 30374739, 30375109, 30376986, 30377347, 30377692

30377729, 30379468, 30379537, 30380511, 30380907, 30381207, 30381525
30381614, 30382364, 30382646, 30382982, 30383286, 30384121, 30384152
30387628, 30387666, 30388341, 30388853, 30389229, 30389414, 30389507
30389821, 30390279, 30390382, 30390635, 30391272, 30391794, 30392011
30392870, 30392987, 30393110, 30393317, 30393653, 30393944, 30394509
30394738, 30394974, 30395132, 30396120, 30396328, 30396946, 30396974
30397100, 30398099, 30398251, 30398257, 30398422, 30398770, 30399906
30402386, 30403210, 30403284, 30403412, 30403763, 30403877, 30403881
30403902, 30403989, 30404117, 30404153, 30404357, 30404639, 30406227
30406709, 30408128, 30408443, 30408515, 30408808, 30408872, 30409207
30409339, 30409469, 30409472, 30409590, 30412188, 30412772, 30412863
30412885, 30412921, 30413137, 30413294, 30414491, 30414679, 30414714
30414725, 30416034, 30416603, 30417648, 30417732, 30418926, 30419024
30419196, 30419450, 30420105, 30420452, 30421009, 30421026, 30421204
30421439, 30421476, 30421706, 30422487, 30423135, 30423218, 30424347
30430921, 30431235, 30431274, 30431500, 30431504, 30431582, 30431698
30431703, 30431717, 30431867, 30432101, 30432470, 30433177, 30434793
30436326, 30436399, 30436406, 30437003, 30437149, 30438224, 30439985
30440651, 30440712, 30441277, 30441687, 30441959, 30442266, 30442749
30442805, 30442874, 30442884, 30443393, 30446436, 30446583, 30446820
30447060, 30447498, 30447589, 30447994, 30448182, 30448348, 30448355
30448917, 30449194, 30449837, 30450787, 30453442, 30454090, 30455427
30457633, 30457697, 30458080, 30458233, 30458568, 30458593, 30460095
30460558, 30460842, 30460922, 30461123, 30461458, 30462439, 30463938
30464250, 30464655, 30464667, 30466081, 30466214, 30469579, 30469777
30470402, 30470495, 30470947, 30472891, 30473634, 30474167, 30474386
30474497, 30474774, 30475041, 30475115, 30475813, 30476768, 30477588
30477685, 30477691, 30477767, 30479252, 30479647, 30479715, 30480591
30480872, 30481004, 30483065, 30483140, 30483217, 30483521, 30484042
30484623, 30484801, 30485255, 30486436, 30486896, 30487387, 30487697
30489582, 30490014, 30490578, 30490671, 30491456, 30492380, 30492786
30493331, 30493518, 30493656, 30494087, 30494259, 30494900, 30495035
30495078, 30495133, 30495483, 30496957, 30497057, 30497120, 30497765
30498824, 30500224, 30500297, 30500344, 30500582, 30501574, 30502029
30502415, 30503943, 30505029, 30505497, 30506794, 30506991, 30506996
30507032, 30507313, 30507505, 30508100, 30509112, 30509277, 30510347
30510527, 30510718, 30512690, 30513285, 30513353, 30513480, 30513848
30515886, 30516868, 30517214, 30517516, 30517527, 30517635, 30518114
30518349, 30518447, 30518923, 30519188, 30520662, 30521788, 30522285
30522998, 30523137, 30523526, 30523538, 30523601, 30523750, 30524736
30527198, 30527275, 30528547, 30528637, 30528687, 30528704, 30528731
30528935, 30529790, 30529915, 30529940, 30530585, 30532811, 30533132
30533472, 30533580, 30534351, 30534549, 30534662, 30534827, 30535905
30536237, 30537403, 30537405, 30537533, 30537584, 30538141, 30538818

30539519, 30539866, 30540109, 30540407, 30544247, 30544595, 30544629
30544752, 30545040, 30545281, 30545556, 30549223, 30549255, 30549368
30549637, 30549789, 30549881, 30549883, 30551000, 30551123, 30554178
30556326, 30556523, 30556581, 30556807, 30557386, 30557803, 30558561
30559129, 30559218, 30559252, 30560365, 30560513, 30561404, 30561590
30561737, 30564139, 30564343, 30564898, 30565004, 30565595, 30565699
30565805, 30566054, 30567372, 30568514, 30568896, 30570083, 30571095
30571306, 30572816, 30573236, 30573703, 30575243, 30575697, 30576112
30576393, 30576853, 30577071, 30577591, 30578221, 30579051, 30580813
30580887, 30581448, 30582035, 30582221, 30582500, 30584726, 30584767
30585141, 30585407, 30586493, 30587001, 30587089, 30588738, 30589914
30591028, 30591475, 30592859, 30593046, 30593104, 30593863, 30593899
30594167, 30595114, 30595408, 30595860, 30596024, 30596270, 30596320
30596488, 30596694, 30598682, 30598746, 30598919, 30599377, 30599405
30599407, 30600173, 30600184, 30600230, 30602230, 30602828, 30603211
30605215, 30605676, 30606345, 30606451, 30608583, 30609737, 30609799
30610052, 30610097, 30610406, 30610667, 30611527, 30611603, 30612199
30613035, 30613937, 30613971, 30614411, 30614497, 30615851, 30616406
30616738, 30616776, 30617002, 30617626, 30618056, 30618230, 30618406
30619112, 30619138, 30619182, 30619383, 30619414, 30619436, 30619525
30619665, 30619728, 30619787, 30620805, 30621255, 30621910, 30622393
30622528, 30622755, 30623138, 30623142, 30624243, 30624792, 30624864
30624874, 30625121, 30626046, 30628834, 30628899, 30629139, 30629643
30629799, 30630172, 30630391, 30630829, 30630930, 30631393, 30631523
30633259, 30633395, 30633938, 30634026, 30634548, 30634559, 30635183
30635302, 30635326, 30635360, 30637270, 30637319, 30637841, 30638712
30639996, 30640436, 30641541, 30641755, 30641900, 30642046, 30642124
30644358, 30644403, 30644530, 30644766, 30644889, 30645590, 30645896
30645938, 30646077, 30647133, 30649310, 30649360, 30649766, 30650297
30650404, 30651231, 30651570, 30651621, 30651674, 30652515, 30652595
30652813, 30652853, 30654131, 30654558, 30655504, 30655906, 30656839
30657196, 30657365, 30657566, 30657624, 30657706, 30657875, 30657906
30657940, 30658421, 30658533, 30658555, 30658702, 30659940, 30660412
30661000, 30661939, 30662634, 30662651, 30662668, 30662736, 30662803
30663591, 30663646, 30664266, 30665036, 30665399, 30665720, 30666902
30668407, 30668754, 30669938, 30670096, 30670228, 30670328, 30670369
30670584, 30671606, 30671720, 30671813, 30671958, 30674373, 30674959
30675651, 30676209, 30677633, 30679595, 30679707, 30679771, 30679804
30681085, 30681222, 30681462, 30681516, 30681521, 30681697, 30681727
30682289, 30684902, 30685163, 30686017, 30686131, 30686736, 30686809
30687047, 30689557, 30689988, 30690686, 30691604, 30691731, 30691857
30692462, 30692473, 30692760, 30693791, 30694947, 30695670, 30696566
30696821, 30698289, 30698310, 30699770, 30702732, 30703610, 30704826
30705448, 30706073, 30707740, 30708735, 30710088, 30710506, 30710783

30710807, 30710917, 30711370, 30711386, 30712670, 30713133, 30714151
30714715, 30716001, 30716863, 30718769, 30718841, 30718862, 30719327
30719419, 30720736, 30720844, 30722105, 30722705, 30723671, 30724679
30724881, 30726204, 30727629, 30727701, 30727759, 30728196, 30729278
30729604, 30729839, 30730026, 30732711, 30733270, 30733563, 30734242
30734362, 30734707, 30735091, 30735153, 30735624, 30735736, 30736348
30736718, 30737970, 30739013, 30739876, 30740115, 30740250, 30740440
30740444, 30740669, 30740997, 30741263, 30747820, 30748411, 30748707
30749181, 30749644, 30749722, 30750219, 30750991, 30751171, 30751521
30751527, 30751639, 30751968, 30753432, 30755348, 30758836, 30758854
30758943, 30759573, 30759585, 30760739, 30761871, 30761878, 30763272
30763305, 30763639, 30763754, 30763970, 30764405, 30764663, 30764706
30764976, 30765486, 30765995, 30767277, 30767654, 30768636, 30769312
30769454, 30770717, 30771009, 30772069, 30773164, 30773696, 30773797
30776416, 30776676, 30776929, 30777519, 30777759, 30778855, 30779240
30781032, 30781041, 30781461, 30781970, 30782266, 30782300, 30782414
30783395, 30783551, 30785101, 30786237, 30786641, 30786655, 30787365
30788973, 30789427, 30789904, 30789973, 30790047, 30790441, 30796980
30801050, 30801296, 30801510, 30803210, 30804646, 30806757, 30806984
30807723, 30807888, 30808109, 30808364, 30808869, 30809087, 30809226
30809267, 30810418, 30810680, 30810765, 30812574, 30814266, 30814285
30815204, 30815269, 30815495, 30815852, 30815994, 30816760, 30816938
30817822, 30819340, 30819629, 30819756, 30820155, 30821297, 30822207
30822502, 30822919, 30823744, 30825391, 30825419, 30825656, 30826474
30827849, 30828205, 30828350, 30829779, 30829844, 30830555, 30832466
30832775, 30833454, 30834068, 30834110, 30834705, 30835184, 30835219
30835853, 30836129, 30838605, 30839253, 30839315, 30839451, 30839836
30839961, 30840150, 30840791, 30840793, 30841241, 30842277, 30843271
30844395, 30844839, 30845806, 30846063, 30846159, 30846263, 30846782
30847442, 30847871, 30848028, 30848097, 30848773, 30849278, 30851448
30851951, 30852945, 30852954, 30855101, 30856358, 30856923, 30857501
30857721, 30858444, 30858810, 30858877, 30858919, 30860741, 30860768
30860803, 30861988, 30862285, 30863115, 30864607, 30865346, 30865805
30866141, 30866988, 30867685, 30868010, 30868186, 30869131, 30870043
30870248, 30870439, 30870513, 30871716, 30871792, 30873527, 30874084
30874270, 30874337, 30874660, 30876062, 30876666, 30878110, 30879169
30879708, 30880774, 30880913, 30881161, 30881407, 30883715, 30883785
30883877, 30886188, 30887199, 30887435, 30887501, 30887777, 30887976
30887989, 30889443, 30889607, 30889723, 30890720, 30890752, 30890971
30891760, 30891792, 30892319, 30893601, 30894306, 30894554, 30895426
30895577, 30896615, 30896620, 30896685, 30898131, 30898366, 30898381
30898748, 30898939, 30901889, 30902655, 30903129, 30904672, 30905604
30906274, 30906407, 30909329, 30909596, 30909907, 30909918, 30910255
30910264, 30910267, 30913399, 30914272, 30914411, 30914674, 30915781

30917976, 30919403, 30919587, 30919691, 30919804, 30920082, 30920427
30921136, 30921259, 30922450, 30922936, 30922996, 30923514, 30923517
30923597, 30923732, 30923940, 30924599, 30925316, 30925419, 30925828
30927440, 30927821, 30929206, 30930149, 30930339, 30931068, 30931311
30931981, 30932330, 30932674, 30932923, 30933117, 30936251, 30936831
30936942, 30937340, 30937391, 30937410, 30938413, 30939307, 30939317
30939934, 30940259, 30940382, 30940868, 30940869, 30941056, 30942353
30944643, 30945005, 30945772, 30946072, 30946141, 30946595, 30946768
30946843, 30946876, 30946896, 30947294, 30948278, 30950326, 30950786
30952104, 30952191, 30953157, 30953266, 30953836, 30954062, 30954071
30955702, 30956374, 30956571, 30956647, 30957739, 30958493, 30960314
30960356, 30960590, 30960736, 30961566, 30961824, 30962322, 30963567
30964068, 30964194, 30964787, 30965111, 30965554, 30965649, 30966205
30966496, 30967084, 30968128, 30968737, 30968781, 30970518, 30972817
30972841, 30972887, 30972947, 30972951, 30972959, 30972966, 30973085
30973113, 30973127, 30973137, 30973143, 30973197, 30973698, 30973715
30973877, 30974207, 30974512, 30974813, 30975289, 30976603, 30977294
30977411, 30978313, 30978554, 30978747, 30978868, 30979701, 30980023
30980115, 30980280, 30980317, 30980733, 30981182, 30981240, 30983064
30985027, 30985906, 30986176, 30986423, 30987088, 30987105, 30987243
30987717, 30987724, 30988444, 30989951, 30990034, 30992120, 30992330
30992477, 30992597, 30992670, 30993198, 30993518, 30993604, 30994996
30996945, 30996991, 30997375, 30997584, 30997960, 30998035, 30998475
30998662, 30998759, 30998847, 30999219, 31000312, 31001017, 31001455
31001490, 31001859, 31002223, 31002346, 31002923, 31003137, 31003659
31003759, 31004077, 31004717, 31004719, 31004844, 31004871, 31005003
31006011, 31006259, 31006792, 31006953, 31008240, 31008858, 31008907
31009032, 31009271, 31009545, 31009590, 31009680, 31010218, 31010554
31010976, 31011361, 31011690, 31013127, 31013531, 31014323, 31015330
31016413, 31018218, 31019249, 31019407, 31021068, 31021109, 31021157
31021324, 31021542, 31021780, 31022858, 31025267, 31025520, 31025531
31025859, 31026220, 31026591, 31026860, 31026870, 31027747, 31028883
31028986, 31029936, 31030898, 31031240, 31031955, 31032463, 31032725
31032904, 31032913, 31033380, 31034794, 31035287, 31035916, 31037421
31038220, 31038447, 31038817, 31039337, 31039445, 31039618, 31039627
31039928, 31040847, 31041540, 31042208, 31042337, 31043483, 31043630
31043695, 31043747, 31043942, 31044145, 31044460, 31044504, 31044951
31045929, 31046188, 31046619, 31046830, 31047022, 31047169, 31047333
31047697, 31047740, 31047795, 31048025, 31048741, 31049215, 31049995
31050103, 31050433, 31050557, 31051056, 31051075, 31052735, 31052809
31053669, 31054031, 31054177, 31054874, 31055142, 31056909, 31057402
31058548, 31061482, 31061504, 31062010, 31062645, 31063315, 31063380
31063769, 31064025, 31065701, 31065838, 31066082, 31066250, 31066265
31066554, 31067456, 31067483, 31067892, 31067913, 31069059, 31069872

31070528, 31071080, 31072746, 31073424, 31073440, 31073586, 31074032
31074875, 31075323, 31075960, 31077117, 31077365, 31078391, 31078757
31079204, 31080474, 31081558, 31082719, 31082726, 31084650, 31084778
31084921, 31086467, 31086869, 31086954, 31087361, 31087679, 31088115
31088341, 31089259, 31089270, 31090262, 31091402, 31091469, 31091868
31092129, 31092233, 31092581, 31092921, 31093712, 31094183, 31094228
31094249, 31094374, 31094625, 31094688, 31095972, 31096846, 31097760
31097961, 31098661, 31098870, 31099312, 31099926, 31099981, 31100172
31101386, 31101840, 31103065, 31103804, 31104809, 31105225, 31105733
31105896, 31106140, 31106577, 31107577, 31108603, 31108644, 31109506
31109924, 31110021, 31110225, 31110887, 31112088, 31112209, 31112530
31112972, 31113089, 31113177, 31113249, 31113426, 31113682, 31114116
31114265, 31114671, 31115201, 31115502, 31115653, 31117282, 31118486
31118702, 31118809, 31118844, 31119057, 31119368, 31119467, 31119846
31120361, 31121222, 31122876, 31123976, 31124213, 31124363, 31124821
31124914, 31125773, 31125849, 31125918, 31126053, 31126058, 31126362
31127043, 31127457, 31127961, 31127968, 31127969, 31128086, 31129851
31130156, 31132732, 31133839, 31134430, 31137765, 31138106, 31138371
31139643, 31140940, 31141792, 31142377, 31142749, 31142815, 31143146
31143415, 31143870, 31145389, 31145403, 31145525, 31145688, 31145804
31146338, 31146727, 31151483, 31153120, 31153485, 31154794, 31155085
31155305, 31155634, 31156301, 31156383, 31156767, 31156898, 31158151
31158341, 31158380, 31159382, 31161861, 31162457, 31162711, 31162915
31163379, 31163498, 31163534, 31165038, 31165577, 31165722, 31166083
31166801, 31168440, 31169366, 31170082, 31171096, 31171147, 31171631
31171828, 31172207, 31172233, 31172642, 31173887, 31174836, 31175365
31176451, 31176502, 31177193, 31177204, 31177221, 31178051, 31178058
31178103, 31180519, 31181375, 31181380, 31181989, 31182159, 31182451
31182756, 31182793, 31183413, 31184230, 31184370, 31185224, 31188038
31188398, 31189749, 31190624, 31191224, 31192039, 31192261, 31192739
31193292, 31193511, 31193695, 31193745, 31193936, 31194015, 31194049
31194264, 31195090, 31195430, 31195441, 31195600, 31195838, 31196164
31196272, 31196310, 31196395, 31196812, 31197969, 31200057, 31200845
31201001, 31201366, 31201611, 31202536, 31204002, 31204412, 31204878
31205834, 31206070, 31206201, 31207446, 31208287, 31209735, 31211220
31212282, 31213034, 31214119, 31214928, 31215422, 31215438, 31215548
31215854, 31216823, 31216995, 31217946, 31218837, 31218904, 31219047
31219975, 31220134, 31220188, 31220549, 31220837, 31220850, 31220881
31220912, 31221251, 31221454, 31222103, 31222780, 31223382, 31224819
31225538, 31226448, 31226534, 31228670, 31230250, 31230775, 31233170
31233235, 31234765, 31234790, 31234983, 31235797, 31236624, 31240626
31240864, 31241124, 31242319, 31242976, 31243859, 31244165, 31244968
31245856, 31246583, 31247532, 31247838, 31248496, 31249008, 31249406
31249689, 31249696, 31250120, 31250152, 31250221, 31251325, 31251489

31252659, 31253451, 31254243, 31254297, 31254535, 31254929, 31255369
31255869, 31256383, 31257740, 31257826, 31258101, 31258344, 31258697
31258995, 31260155, 31260692, 31261467, 31261641, 31262275, 31262388
31263980, 31265651, 31265773, 31266236, 31266779, 31266843, 31268326
31268557, 31270711, 31270847, 31271032, 31274074, 31279605, 31279670
31281708, 31282037, 31283557, 31287091, 31287296, 31287741, 31287871
31289115, 31289698, 31290017, 31290300, 31290427, 31291986, 31292298
31293484, 31293791, 31293867, 31298871, 31301460, 31303032, 31303249
31304573, 31304945, 31304975, 31305114, 31305309, 31305624, 31306248
31306261, 31306470, 31306867, 31306927, 31307715, 31309379, 31309867
31310564, 31310624, 31311732, 31311830, 31312450, 31312976, 31313117
31313177, 31313214, 31313444, 31313812, 31314323, 31314885, 31315441
31315495, 31315876, 31315923, 31316250, 31317032, 31321092, 31322720
31323383, 31323484, 31324442, 31324507, 31325584, 31326320, 31326608
31326977, 31326998, 31327046, 31327259, 31327278, 31327349, 31327391
31327896, 31331265, 31331354, 31331372, 31333105, 31333156, 31334338
31334606, 31334961, 31335037, 31335142, 31336298, 31336371, 31338249
31338673, 31338686, 31338769, 31339457, 31339643, 31339744, 31341138
31341421, 31341746, 31342885, 31343110, 31344046, 31344097, 31346493
31347878, 31348711, 31348922, 31349426, 31350348, 31352517, 31353098
31353610, 31354026, 31355339, 31356601, 31356954, 31357581, 31357737
31358308, 31358474, 31358511, 31359215, 31359366, 31360146, 31360155
31360214, 31360282, 31360314, 31360323, 31360469, 31360529, 31362408
31362692, 31364001, 31364383, 31366716, 31367188, 31367364, 31368027
31369444, 31370500, 31371071, 31372498, 31373825, 31373837, 31373843
31374283, 31374449, 31374738, 31375772, 31375865, 31376011, 31376708
31377129, 31377206, 31377487, 31377701, 31377808, 31377936, 31380443
31381174, 31381389, 31381701, 31382518, 31383049, 31383396, 31383464
31383814, 31384324, 31385668, 31386394, 31386696, 31387033, 31387123
31387426, 31387443, 31388201, 31388288, 31389006, 31390936, 31390955
31391991, 31393208, 31393600, 31393991, 31394341, 31394347, 31394365
31394544, 31395222, 31395247, 31395708, 31396027, 31396609, 31396695
31396980, 31398505, 31398617, 31398663, 31398721, 31398761, 31399131
31399883, 31400754, 31401831, 31401919, 31402078, 31402598, 31403177
31403565, 31404014, 31404130, 31404263, 31404487, 31404550, 31405300
31405751, 31408636, 31408732, 31409483, 31409912, 31409964, 31410289
31410607, 31411163, 31412209, 31414023, 31414524, 31415324, 31416193
31416213, 31416250, 31417007, 31417192, 31417242, 31417336, 31417844
31417990, 31418442, 31419363, 31420295, 31420316, 31420320, 31420337
31421316, 31421471, 31422440, 31422620, 31423645, 31424838, 31425167
31425761, 31425800, 31427345, 31429020, 31429501, 31429590, 31429692
31429770, 31429784, 31429809, 31429844, 31429971, 31430722, 31430735
31430910, 31431005, 31431326, 31431771, 31431964, 31431969, 31431971
31431973, 31431975, 31431986, 31432906, 31433092, 31433579, 31433749

31434421, 31434805, 31434870, 31434915, 31435163, 31435308, 31435400
31435735, 31437030, 31437448, 31437886, 31439905, 31440252, 31440426
31440813, 31441916, 31441920, 31442332, 31442714, 31443030, 31444353
31444516, 31445356, 31446431, 31447733, 31448642, 31448680, 31448818
31449354, 31450392, 31450653, 31450942, 31451019, 31453375, 31453585
31454428, 31454972, 31454988, 31455051, 31455597, 31456383, 31456857
31457334, 31458049, 31458537, 31458634, 31458739, 31459231, 31459242
31459369, 31461990, 31462082, 31462940, 31462969, 31463613, 31464165
31465389, 31466433, 31468060, 31468705, 31469001, 31469418, 31471119
31471441, 31471589, 31471856, 31472077, 31473148, 31474315, 31475085
31475378, 31475635, 31476093, 31476603, 31476701, 31476736, 31477424
31477695, 31479072, 31479075, 31479106, 31479272, 31479772, 31481750
31481893, 31483466, 31483949, 31484385, 31484603, 31485340, 31485386
31485507, 31486061, 31486557, 31487441, 31487491, 31487775, 31487826
31487844, 31488085, 31488464, 31489032, 31489137, 31489481, 31489590
31489672, 31489731, 31489936, 31490604, 31491634, 31492171, 31492191
31492386, 31492588, 31492655, 31492856, 31493153, 31493840, 31494095
31494132, 31494264, 31494420, 31494794, 31495254, 31495297, 31495564
31496174, 31497550, 31498559, 31499370, 31499700, 31500699, 31500719
31500971, 31501139, 31502301, 31503349, 31503674, 31503688, 31503934
31504723, 31505088, 31506095, 31507107, 31507129, 31508229, 31508460
31508712, 31509279, 31510891, 31510910, 31511142, 31511519, 31511771
31511940, 31512044, 31512262, 31513011, 31515163, 31515869, 31515879
31515911, 31515929, 31516164, 31516184, 31516255, 31516265, 31517395
31517417, 31517502, 31517652, 31518068, 31518371, 31521504, 31521701
31522560, 31522708, 31522866, 31523548, 31523578, 31523585, 31523620
31523646, 31523728, 31523736, 31523836, 31525310, 31525463, 31525609
31525783, 31526250, 31526903, 31527103, 31527199, 31527381, 31527726
31528544, 31528724, 31528738, 31528962, 31529594, 31529967, 31530985
31530995, 31531079, 31532084, 31532176, 31532308, 31532339, 31533050
31533113, 31533274, 31533799, 31533817, 31533833, 31534841, 31535073
31535516, 31535782, 31535870, 31535955, 31536401, 31536703, 31536731
31537521, 31537599, 31537736, 31538274, 31538363, 31538891, 31539566
31541805, 31541864, 31541895, 31541905, 31542347, 31542356, 31542851
31542956, 31543810, 31544097, 31545109, 31545400, 31545477, 31545688
31546864, 31547220, 31547445, 31547480, 31548675, 31549221, 31549468
31551142, 31552433, 31552563, 31552615, 31552738, 31552755, 31553178
31553289, 31553674, 31553813, 31553968, 31554610, 31555126, 31555173
31555346, 31555539, 31555800, 31556044, 31556139, 31556950, 31557160
31557518, 31557663, 31558194, 31559079, 31559085, 31559415, 31559563
31560323, 31560348, 31560592, 31561886, 31562484, 31563138, 31564060
31564760, 31564795, 31567124, 31567403, 31567441, 31567719, 31568423
31569057, 31569867, 31570054, 31570161, 31571415, 31571688, 31571742
31572006, 31572046, 31572267, 31573269, 31573457, 31574122, 31574150

31574244, 31574267, 31575529, 31575649, 31575665, 31576738, 31577569
31578202, 31578994, 31580079, 31580122, 31580374, 31580437, 31581627
31582179, 31582244, 31583865, 31584056, 31584555, 31584853, 31585040
31585319, 31585351, 31585491, 31585789, 31586381, 31586862, 31587966
31588631, 31588933, 31589785, 31590099, 31590826, 31591087, 31591384
31591400, 31591409, 31591421, 31592707, 31594725, 31595025, 31595632
31597104, 31597668, 31597727, 31598146, 31599215, 31599363, 31599990
31600023, 31600291, 31600894, 31601385, 31602782, 31603199, 31603380
31603625, 31605119, 31605370, 31605737, 31606474, 31607937, 31608753
31609974, 31610024, 31611125, 31612535, 31613275, 31613838, 31615078
31615736, 31616101, 31616104, 31617492, 31617523, 31619276, 31620252
31620748, 31620829, 31620944, 31621569, 31622250, 31623413, 31623463
31625579, 31625618, 31625959, 31626438, 31626493, 31626528, 31626572
31627587, 31627856, 31628155, 31628311, 31628753, 31628975, 31629056
31630551, 31630794, 31630946, 31631985, 31632273, 31632534, 31632548
31632605, 31632663, 31632775, 31633224, 31634510, 31634805, 31635327
31635875, 31635963, 31635980, 31637094, 31637607, 31637680, 31638398
31638733, 31638943, 31639082, 31640139, 31640197, 31640240, 31642462
31642556, 31642639, 31643308, 31644542, 31644775, 31645288, 31647304
31647789, 31648120, 31648157, 31649223, 31649447, 31649818, 31649819
31649958, 31649962, 31650046, 31650112, 31650202, 31652641, 31652763
31653080, 31653167, 31653634, 31653647, 31653758, 31653913, 31653916
31653917, 31654116, 31654119, 31654122, 31654125, 31654133, 31655807
31656263, 31656601, 31657084, 31657211, 31657324, 31657462, 31657483
31657681, 31658464, 31658819, 31658943, 31659065, 31660283, 31661369
31661586, 31661865, 31661879, 31662131, 31662143, 31662504, 31662625
31662925, 31663189, 31663788, 31664203, 31664399, 31665107, 31666449
31666684, 31667096, 31667180, 31667940, 31668033, 31668061, 31668065
31668312, 31668694, 31668768, 31668872, 31669064, 31670014, 31670263
31670353, 31671512, 31671568, 31671836, 31672507, 31672605, 31673406
31674380, 31674801, 31674947, 31675568, 31675852, 31675860, 31676324
31676927, 31676941, 31677345, 31677460, 31677479, 31677587, 31678629
31679900, 31680306, 31680709, 31680713, 31680985, 31682766, 31683044
31683260, 31683311, 31683337, 31683373, 31683708, 31684080, 31684494
31685612, 31685882, 31685989, 31686545, 31686979, 31688127, 31688241
31688978, 31691030, 31691089, 31691480, 31694070, 31695062, 31695693
31696043, 31696577, 31696853, 31697741, 31699090, 31699230, 31700234
31700640, 31701239, 31701429, 31701517, 31701910, 31703614, 31705178
31705265, 31705356, 31705704, 31706000, 31706595, 31706758, 31706956
31707190, 31707557, 31708133, 31708175, 31708529, 31709647, 31709739
31709777, 31710272, 31710587, 31711155, 31711720, 31711889, 31711997
31712260, 31714645, 31715935, 31716510, 31716873, 31717010, 31718000
31718134, 31718346, 31718842, 31719167, 31720344, 31720377, 31720839
31720942, 31721557, 31721577, 31721863, 31721880, 31722558, 31722646

31723226, 31723323, 31723651, 31725154, 31727229, 31727231, 31727233
31727560, 31728149, 31728160, 31728440, 31728444, 31728447, 31728477
31728486, 31728858, 31729557, 31730485, 31730766, 31731076, 31731407
31732095, 31732311, 31732672, 31734007, 31734012, 31734017, 31734583
31735662, 31736095, 31737059, 31737603, 31739198, 31739891, 31740252
31741359, 31741938, 31743771, 31744832, 31745130, 31745233, 31745528
31746054, 31747706, 31747806, 31747818, 31747935, 31747989, 31748000
31748182, 31748233, 31748944, 31750577, 31750581, 31750889, 31752492
31752502, 31752633, 31753202, 31753425, 31753478, 31753582, 31753692
31754240, 31754546, 31754887, 31754980, 31755245, 31755451, 31756415
31756465, 31756568, 31756650, 31757357, 31757775, 31757824, 31758083
31758344, 31758846, 31758939, 31758960, 31759565, 31760278, 31760592
31760721, 31760738, 31761510, 31762819, 31763030, 31763356, 31763707
31763905, 31764089, 31764239, 31764866, 31764913, 31765068, 31765246
31765257, 31765296, 31766462, 31766499, 31766534, 31766675, 31766696
31767204, 31767237, 31767598, 31767852, 31768490, 31768497, 31768505
31768866, 31769267, 31769373, 31769511, 31769530, 31770289, 31771302
31771370, 31771410, 31771468, 31771745, 31771836, 31772002, 31772070
31773582, 31773909, 31774019, 31774132, 31775101, 31776121, 31776659
31776785, 31776994, 31777410, 31777489, 31779833, 31780567, 31781758
31781897, 31781944, 31782604, 31783422, 31783451, 31783782, 31783872
31783985, 31783991, 31784352, 31785170, 31785445, 31785572, 31786282
31786697, 31786838, 31787057, 31787236, 31787655, 31788104, 31788594
31788704, 31788761, 31788785, 31789167, 31789178, 31789335, 31790500
31790757, 31792397, 31792465, 31792615, 31793126, 31793225, 31793691
31793713, 31794336, 31794631, 31794882, 31795231, 31795696, 31796208
31796277, 31796882, 31798001, 31798323, 31798669, 31798702, 31798742
31799858, 31800053, 31800059, 31800139, 31800757, 31804838, 31805303
31805812, 31807179, 31807431, 31807516, 31808296, 31809510, 31809729
31810213, 31812352, 31812824, 31813214, 31813662, 31815099, 31815227
31816158, 31816343, 31816631, 31817206, 31817634, 31818080, 31820632
31820662, 31820842, 31820859, 31820926, 31821129, 31821701, 31821835
31822026, 31822951, 31823051, 31823327, 31823716, 31824504, 31824792
31824934, 31825151, 31825324, 31825410, 31827339, 31827605, 31827912
31828378, 31828999, 31829366, 31829617, 31829639, 31831950, 31832785
31832901, 31833172, 31833585, 31833896, 31833948, 31834191, 31834214
31834611, 31834677, 31834871, 31835300, 31835805, 31835854, 31836113
31836454, 31839038, 31839779, 31839888, 31840180, 31840490, 31840516
31840992, 31841147, 31841210, 31841696, 31842545, 31843028, 31843462
31843476, 31843716, 31843842, 31843845, 31844137, 31844357, 31844557
31844560, 31845092, 31845403, 31845549, 31845803, 31845955, 31846318
31846454, 31847489, 31847541, 31848331, 31848365, 31848391, 31848903
31849859, 31850132, 31850227, 31851383, 31851449, 31852482, 31852506
31852574, 31854285, 31854692, 31855307, 31855484, 31855526, 31855996

31857143, 31857475, 31858580, 31858621, 31858833, 31859067, 31859143
31860193, 31860406, 31860760, 31862359, 31862593, 31862611, 31863118
31863250, 31863537, 31863890, 31864818, 31864947, 31865822, 31866141
31866159, 31866388, 31867037, 31867331, 31867351, 31869348, 31869601
31869944, 31869954, 31869966, 31870010, 31870150, 31870164, 31870190
31870196, 31871384, 31871692, 31872230, 31872320, 31873155, 31875140
31876138, 31876192, 31876368, 31876867, 31877344, 31878256, 31878314
31878605, 31880154, 31881527, 31883124, 31883343, 31883739, 31883845
31886547, 31886695, 31886745, 31886848, 31887130, 31887709, 31888148
31888731, 31888964, 31889222, 31890230, 31890240, 31890516, 31892029
31892120, 31892856, 31895670, 31897023, 31897178, 31897786, 31897854
31898193, 31898257, 31898326, 31900476, 31900585, 31902517, 31902662
31903523, 31903713, 31903786, 31903962, 31904739, 31904933, 31904960
31905033, 31905839, 31905861, 31907042, 31907137, 31907510, 31907565
31907792, 31907962, 31908308, 31908345, 31908482, 31908571, 31908750
31909295, 31909807, 31911290, 31912638, 31912834, 31913650, 31913828
31913839, 31914003, 31914943, 31915444, 31915968, 31916096, 31916644
31917378, 31917494, 31917856, 31917967, 31918462, 31919563, 31919952
31921267, 31922161, 31922580, 31923463, 31923622, 31925162, 31925462
31925765, 31926203, 31926811, 31926848, 31927078, 31927510, 31927930
31928046, 31930204, 31930635, 31932042, 31932196, 31933451, 31933837
31933842, 31933846, 31933914, 31934254, 31934301, 31935336, 31935672
31935717, 31935970, 31936588, 31936983, 31938116, 31938288, 31939263
31939461, 31939486, 31939494, 31939767, 31940176, 31940458, 31941148
31941948, 31942136, 31942144, 31942258, 31942274, 31942473, 31943497
31943691, 31944980, 31945038, 31945407, 31945659, 31945701, 31945827
31945928, 31946236, 31946936, 31947385, 31947732, 31947861, 31949490
31949573, 31950145, 31950244, 31950577, 31951562, 31951599, 31951628
31952046, 31952052, 31953394, 31953449, 31953989, 31954223, 31956113
31956435, 31956920, 31957152, 31957564, 31957674, 31957683, 31958038
31958958, 31959140, 31959253, 31960124, 31960389, 31960603, 31961214
31961578, 31961940, 31963193, 31964519, 31964610, 31965012, 31965391
31965542, 31965574, 31966094, 31968431, 31969646, 31970188, 31971792
31972615, 31972671, 31973203, 31974187, 31974424, 31974597, 31974693
31976303, 31977024, 31977257, 31980125, 31980216, 31980296, 31981745
31981751, 31982390, 31982879, 31983029, 31985032, 31985494, 31985738
31985820, 31985961, 31986808, 31986836, 31986905, 31986909, 31987278
31987922, 31988079, 31988833, 31990386, 31991705, 31992242, 31992270
31992428, 31992615, 31992953, 31993051, 31993795, 31994145, 31994206
31994298, 31995577, 31995937, 31996264, 31996331, 31997107, 31997457
31997611, 31997658, 31997660, 31998181, 31998189, 31998861, 31999024
31999453, 32000837, 32001851, 32002411, 32003551, 32003908, 32004148
32004299, 32004977, 32005046, 32005048, 32005053, 32005215, 32005394
32006467, 32006703, 32006824, 32006883, 32007076, 32007698, 32008408

32008586, 32008716, 32008819, 32009197, 32009334, 32009754, 32010275
32010593, 32010707, 32011107, 32011888, 32012137, 32012400, 32012788
32012891, 32012975, 32013253, 32013403, 32014520, 32015642, 32015820
32016340, 32016884, 32017215, 32017301, 32017422, 32017570, 32017635
32017671, 32018632, 32018953, 32020701, 32021877, 32022223, 32022711
32022814, 32022867, 32023471, 32025328, 32028155, 32028269, 32032653
32032733, 32032887, 32033795, 32034085, 32034137, 32034318, 32034766
32035268, 32035483, 32035536, 32035893, 32035899, 32035902, 32036045
32037237, 32037962, 32038054, 32038780, 32038812, 32038844, 32038996
32039059, 32040940, 32040971, 32041003, 32041799, 32042256, 32042352
32042706, 32042926, 32043743, 32044533, 32044767, 32044903, 32045377
32046125, 32046412, 32046587, 32047226, 32047444, 32048412, 32048616
32048921, 32049479, 32050048, 32051896, 32052587, 32052992, 32053746
32054806, 32055692, 32055733, 32056529, 32057291, 32057333, 32057565
32057639, 32057755, 32058260, 32060164, 32060577, 32061018, 32061146
32061173, 32061648, 32062227, 32064239, 32064593, 32064682, 32064826
32066061, 32066579, 32067130, 32067356, 32067675, 32067937, 32068110
32068187, 32068190, 32068709, 32069160, 32069508, 32069696, 32069834
32070206, 32071183, 32071457, 32071582, 32072747, 32072944, 32073027
32073710, 32074450, 32074708, 32074728, 32075009, 32075020, 32075130
32075580, 32076305, 32076561, 32076599, 32077318, 32078078, 32079097
32079573, 32079739, 32080081, 32080655, 32081074, 32081381, 32082098
32084068, 32087287, 32087331, 32087597, 32087956, 32088132, 32088478
32089051, 32089820, 32090518, 32090725, 32092312, 32092797, 32093558
32094825, 32095097, 32095380, 32095610, 32095658, 32096252, 32096397
32097125, 32097387, 32097589, 32097604, 32097767, 32097882, 32097962
32098224, 32098237, 32098535, 32099153, 32099539, 32099580, 32101305
32101419, 32101499, 32102542, 32102722, 32102854, 32103383, 32103427
32103628, 32104324, 32104402, 32104578, 32104610, 32105135, 32105239
32105412, 32105468, 32107505, 32107621, 32107664, 32108094, 32108115
32108566, 32108576, 32109384, 32109796, 32111046, 32112798, 32112822
32113113, 32113530, 32113791, 32114541, 32114561, 32114572, 32114746
32115403, 32115642, 32116952, 32117115, 32117253, 32117490, 32118543
32118727, 32119144, 32119339, 32119565, 32120283, 32120453, 32121014
32121326, 32121673, 32121803, 32121885, 32121887, 32122197, 32122574
32123331, 32123673, 32124176, 32124334, 32124570, 32124594, 32124607
32124611, 32125142, 32125160, 32125845, 32127227, 32127448, 32127911
32128142, 32129659, 32130083, 32130485, 32130504, 32131010, 32131401
32131774, 32132464, 32132504, 32133039, 32133898, 32138257, 32138478
32138782, 32139064, 32139432, 32139659, 32139728, 32140616, 32140800
32142788, 32143492, 32143562, 32143669, 32144917, 32147340, 32148419
32148651, 32148662, 32149848, 32150818, 32150854, 32151098, 32152341
32153396, 32153619, 32153909, 32156194, 32157050, 32157075, 32157078
32158561, 32159343, 32161260, 32161381, 32162391, 32164053, 32164112

32164218, 32165367, 32165759, 32165814, 32165887, 32166950, 32167592
32167923, 32168026, 32169151, 32170162, 32170190, 32171622, 32171791
32172050, 32172773, 32172777, 32172783, 32173142, 32173376, 32173543
32174321, 32174405, 32174492, 32174571, 32175329, 32175780, 32176303
32176922, 32177701, 32177869, 32178111, 32178217, 32178966, 32179209
32179306, 32180918, 32181149, 32182097, 32182783, 32183102, 32183756
32183809, 32184235, 32184577, 32184844, 32184855, 32185163, 32185296
32186186, 32186983, 32187775, 32189400, 32189869, 32189952, 32190132
32190190, 32190284, 32190419, 32190573, 32191427, 32191451, 32193431
32194435, 32195333, 32195815, 32195946, 32196265, 32196492, 32196738
32196943, 32197147, 32198292, 32198368, 32198396, 32199681, 32200524
32201743, 32201903, 32201936, 32202976, 32203068, 32203354, 32205455
32205514, 32205825, 32207088, 32207920, 32208144, 32208326, 32208346
32208691, 32209784, 32210660, 32211423, 32212041, 32212062, 32212635
32212916, 32213376, 32213696, 32214021, 32214080, 32214195, 32214238
32214654, 32214743, 32214782, 32215240, 32215991, 32216027, 32216223
32216841, 32216930, 32218369, 32218395, 32218498, 32218552, 32219179
32219318, 32219835, 32219988, 32220017, 32220364, 32220709, 32221141
32222473, 32223045, 32223654, 32223669, 32224140, 32224583, 32225117
32225353, 32225742, 32225899, 32227352, 32228188, 32228677, 32229431
32229625, 32229919, 32230213, 32230775, 32230787, 32230953, 32231049
32231356, 32233406, 32234148, 32234161, 32234845, 32235513, 32236601
32236685, 32236798, 32237489, 32237778, 32238935, 32239137, 32239730
32240272, 32241889, 32242601, 32243007, 32243148, 32243814, 32243882
32243985, 32244187, 32245711, 32245850, 32246090, 32246756, 32247141
32247420, 32248131, 32248405, 32248649, 32248747, 32249207, 32249371
32249509, 32249640, 32249674, 32250232, 32250238, 32251364, 32251671
32252036, 32252213, 32252262, 32252294, 32253703, 32253937, 32254063
32254399, 32254686, 32255029, 32255073, 32255529, 32255753, 32255762
32255873, 32257449, 32258021, 32258136, 32258388, 32258423, 32259063
32259322, 32259535, 32259785, 32260010, 32260290, 32263923, 32264556
32266406, 32266906, 32267171, 32267610, 32268669, 32268800, 32269481
32269499, 32274403, 32277643, 32277793, 32279351, 32280901, 32281066
32283798, 32284241, 32284325, 32284485, 32284608, 32284725, 32285086
32285563, 32285717, 32285789, 32287797, 32287989, 32289552, 32289858
32290227, 32290313, 32290399, 32290754, 32290812, 32290949, 32290990
32291114, 32291139, 32292180, 32292805, 32293615, 32294031, 32294566
32294851, 32295794, 32296259, 32296941, 32297373, 32297469, 32297849
32298004, 32298173, 32298782, 32300098, 32300822, 32300849, 32301856
32302470, 32302561, 32303160, 32303657, 32304293, 32304712, 32305034
32305792, 32306556, 32307046, 32307586, 32307983, 32309046, 32309488
32309723, 32310880, 32311019, 32312131, 32312412, 32312586, 32312771
32315173, 32316070, 32316252, 32316326, 32317012, 32317306, 32318528
32318820, 32318914, 32319410, 32320789, 32321317, 32321319, 32321765

32322629, 32322738, 32323277, 32323488, 32323600, 32323816, 32324219
32325525, 32325574, 32325611, 32327201, 32327208, 32327690, 32328231
32328658, 32329914, 32330269, 32330540, 32331889, 32332107, 32334745
32335257, 32335769, 32336990, 32338220, 32338476, 32338579, 32338736
32338897, 32338919, 32338953, 32339259, 32339801, 32340392, 32340885
32341217, 32341260, 32341820, 32342172, 32342345, 32342750, 32342824
32343092, 32343678, 32344099, 32344168, 32344199, 32345001, 32345050
32345178, 32345272, 32345785, 32346649, 32346733, 32347957, 32350182
32351767, 32352695, 32353343, 32355765, 32355912, 32356340, 32356545
32356609, 32356628, 32357412, 32357665, 32358760, 32359044, 32361175
32361677, 32362016, 32362066, 32362072, 32362698, 32363212, 32363549
32363711, 32363981, 32364147, 32366154, 32366303, 32366461, 32366536
32367151, 32368161, 32368480, 32368789, 32368792, 32369041, 32371828
32372725, 32374050, 32374431, 32374566, 32374616, 32375438, 32375493
32376603, 32376614, 32376774, 32376872, 32376922, 32377901, 32378953
32379001, 32379140, 32379303, 32379775, 32380591, 32380842, 32381403
32381605, 32382021, 32382207, 32382667, 32385068, 32385141, 32385832
32386482, 32386683, 32386720, 32386877, 32387555, 32387818, 32388247
32389047, 32389416, 32389497, 32390629, 32390855, 32391021, 32392724
32393137, 32393612, 32394623, 32394660, 32394986, 32396085, 32396154
32396326, 32397113, 32397350, 32398714, 32400076, 32401086, 32401333
32402243, 32402292, 32403509, 32403748, 32404638, 32404933, 32405239
32406222, 32406479, 32407783, 32408640, 32409009, 32409344, 32409942
32410175, 32412340, 32413042, 32413512, 32414944, 32414996, 32415846
32415989, 32416652, 32416655, 32417227, 32417242, 32417274, 32417301
32417438, 32417632, 32417766, 32417870, 32419774, 32421958, 32422965
32423100, 32423678, 32423985, 32424465, 32425097, 32425124, 32425194
32425205, 32425778, 32425862, 32426213, 32426315, 32426900, 32427158
32427173, 32427226, 32427583, 32427953, 32428097, 32428189, 32428330
32428919, 32430745, 32431049, 32431067, 32431251, 32431290, 32431413
32432078, 32432245, 32433627, 32433687, 32434131, 32435493, 32435911
32436342, 32436460, 32436721, 32436757, 32437538, 32439726, 32440067
32440681, 32441128, 32441671, 32441834, 32442229, 32442404, 32443087
32443531, 32443744, 32443935, 32444159, 32446565, 32446740, 32447655
32449622, 32449909, 32450344, 32453583, 32453611, 32453888, 32455219
32455516, 32455650, 32455742, 32455961, 32456625, 32457252, 32457974
32459153, 32459632, 32460136, 32460145, 32461726, 32462153, 32464021
32464584, 32465193, 32465209, 32465466, 32465495, 32465853, 32465894
32466474, 32467812, 32468643, 32468791, 32469004, 32469225, 32471100
32471251, 32471346, 32471642, 32471770, 32472561, 32472589, 32473465
32474686, 32474827, 32474926, 32474997, 32475694, 32476437, 32477479
32478452, 32480419, 32480510, 32480528, 32480541, 32480873, 32481807
32482131, 32483115, 32483966, 32484945, 32485859, 32485961, 32486528
32486955, 32489206, 32490128, 32490416, 32490804, 32491443, 32492075

32492343, 32492382, 32492422, 32492452, 32494772, 32495545, 32495572
32497756, 32498459, 32498569, 32498602, 32498752, 32498783, 32499155
32500117, 32501930, 32502414, 32503790, 32504340, 32504786, 32505009
32505439, 32505557, 32505634, 32506166, 32506309, 32506473, 32506809
32507542, 32508585, 32509271, 32509318, 32509584, 32509606, 32509814
32510116, 32512048, 32512145, 32512438, 32512918, 32514516, 32515708
32515850, 32516220, 32516336, 32517405, 32517797, 32518029, 32518679
32519995, 32520525, 32520645, 32520691, 32520994, 32522300, 32522472
32523206, 32523613, 32523750, 32524841, 32525039, 32526118, 32526703
32527621, 32529396, 32529483, 32529657, 32530202, 32531259, 32531627
32531647, 32533019, 32533184, 32533225, 32533461, 32534925, 32535106
32535156, 32535159, 32535520, 32536006, 32536900, 32538436, 32538824
32539300, 32539322, 32539914, 32539936, 32540706, 32540995, 32541049
32542063, 32542641, 32544124, 32544464, 32544740, 32544784, 32545415
32546408, 32546937, 32547361, 32548580, 32548704, 32549168, 32549277
32549351, 32550051, 32550281, 32550589, 32550751, 32550894, 32551177
32551246, 32552043, 32552602, 32553241, 32555120, 32555592, 32556165
32556311, 32556891, 32557354, 32559543, 32561759, 32561791, 32561841
32562587, 32563106, 32563114, 32563151, 32563940, 32565722, 32565870
32567750, 32567788, 32568124, 32568163, 32568259, 32569603, 32569745
32573197, 32573703, 32573942, 32574796, 32576097, 32576508, 32576534
32577147, 32577408, 32578113, 32578616, 32578792, 32579075, 32579371
32579529, 32580082, 32580378, 32580852, 32583315, 32583355, 32583375
32583692, 32584347, 32584375, 32584505, 32585832, 32586534, 32587305
32587472, 32587567, 32587721, 32587793, 32587994, 32588298, 32588656
32588691, 32589147, 32589819, 32589990, 32593590, 32593845, 32593877
32593886, 32593955, 32594965, 32595551, 32596355, 32596705, 32597099
32597637, 32598380, 32598406, 32601769, 32601882, 32602194, 32602344
32602450, 32602599, 32602735, 32602871, 32602990, 32603092, 32603152
32603319, 32603564, 32603619, 32605116, 32605919, 32606093, 32606489
32606531, 32607812, 32607991, 32608297, 32608821, 32609394, 32609512
32609730, 32609886, 32610185, 32610271, 32613788, 32614157, 32614583
32615310, 32615776, 32616678, 32618819, 32619195, 32619298, 32619327
32620859, 32620919, 32621140, 32621309, 32622507, 32622612, 32625160
32625356, 32625619, 32626384, 32626756, 32627140, 32627280, 32628131
32628221, 32628237, 32629028, 32629772, 32629859, 32630060, 32631551
32631787, 32633251, 32634049, 32634996, 32635881, 32635931, 32636938
32638991, 32639432, 32639663, 32639860, 32639950, 32641593, 32641748
32642587, 32642994, 32643533, 32644392, 32645139, 32646025, 32646044
32647170, 32648248, 32649737, 32649749, 32651063, 32651304, 32651769
32651773, 32652143, 32652573, 32652605, 32653470, 32653669, 32654172
32654962, 32655446, 32655691, 32656130, 32656231, 32656275, 32657251
32658076, 32658481, 32659438, 32659574, 32659772, 32659930, 32659983
32660528, 32660747, 32661293, 32662037, 32662165, 32663019, 32664665

32665550, 32665836, 32666862, 32668900, 32668907, 32669149, 32670769
32671437, 32671481, 32672057, 32674819, 32675095, 32675227, 32675756
32676084, 32676350, 32676659, 32677000, 32677702, 32678737, 32682430
32682586, 32682703, 32684009, 32684387, 32685743, 32685989, 32686338
32686551, 32686850, 32689123, 32690400, 32690423, 32690581, 32692372
32693242, 32695999, 32697157, 32697431, 32697781, 32697859, 32698508
32698569, 32700396, 32700455, 32700548, 32700675, 32700989, 32701048
32702005, 32703155, 32704013, 32704119, 32704231, 32704765, 32705734
32705800, 32706821, 32707007, 32707211, 32710053, 32710165, 32710534
32710750, 32711099, 32711741, 32712220, 32712791, 32712916, 32715346
32715845, 32715945, 32716529, 32716726, 32718204, 32718316, 32718510
32718547, 32718721, 32719288, 32719310, 32720344, 32720458, 32722118
32724505, 32724654, 32725484, 32726772, 32727143, 32728216, 32728984
32730701, 32731498, 32732179, 32733671, 32733845, 32734021, 32734171
32734299, 32734800, 32735915, 32735980, 32736370, 32737774, 32737827
32737969, 32738356, 32739966, 32740421, 32740503, 32740506, 32740515
32740694, 32740987, 32743290, 32743511, 32746508, 32746515, 32746831
32747641, 32747680, 32747738, 32748974, 32749028, 32750264, 32750940
32751438, 32752229, 32753371, 32753472, 32753946, 32754044, 32754574
32754845, 32755356, 32755493, 32755517, 32755731, 32756125, 32756914
32757219, 32758096, 32758260, 32759503, 32760504, 32760795, 32760868
32760906, 32761229, 32761294, 32761932, 32762155, 32762231, 32763283
32763544, 32763599, 32764690, 32765738, 32766252, 32766397, 32766407
32766916, 32768752, 32769786, 32769880, 32770812, 32771735, 32775512
32775526, 32776891, 32778725, 32780676, 32781826, 32782851, 32783456
32784393, 32784403, 32786308, 32786309, 32788660, 32789228, 32790012
32790255, 32793286, 32794120, 32794261, 32795016, 32795712, 32797115
32797486, 32800137, 32800539, 32801192, 32801303, 32801337, 32802926
32803416, 32803807, 32803850, 32804604, 32804609, 32804760, 32806069
32806112, 32806856, 32806915, 32807517, 32809152, 32809234, 32810125
32810668, 32811069, 32811131, 32813351, 32813767, 32816003, 32817950
32818019, 32818230, 32818242, 32818436, 32818545, 32821107, 32822436
32822684, 32822847, 32823545, 32823692, 32827206, 32828093, 32828636
32828738, 32829060, 32829563, 32829937, 32830405, 32831451, 32831855
32831901, 32832521, 32833378, 32833812, 32834168, 32834394, 32834426
32834562, 32835524, 32836830, 32837435, 32837741, 32838028, 32838533
32838574, 32841689, 32841994, 32842415, 32842823, 32843576, 32843672
32843754, 32844640, 32846272, 32846876, 32847962, 32847975, 32848060
32848531, 32848816, 32850174, 32850514, 32851615, 32851841, 32852484
32852504, 32853080, 32855257, 32855878, 32856375, 32856546, 32856640
32857370, 32857881, 32857908, 32858358, 32858446, 32863689, 32863795
32864241, 32864736, 32866089, 32867469, 32868116, 32868344, 32868369
32869560, 32870681, 32871988, 32872266, 32872839, 32873969, 32874571
32874995, 32875003, 32875118, 32875482, 32875931, 32877550, 32878039

32879447, 32879655, 32879990, 32880225, 32880390, 32880490, 32881057
32881462, 32881853, 32883252, 32883853, 32886951, 32887649, 32888458
32888472, 32889096, 32889434, 32890532, 32891500, 32892883, 32893686
32893951, 32894842, 32895105, 32897184, 32897679, 32898672, 32898678
32898971, 32899387, 32900165, 32900208, 32902635, 32903472, 32903625
32905994, 32906999, 32907741, 32907975, 32908241, 32908249, 32908946
32909255, 32909292, 32909936, 32910846, 32912726, 32912828, 32913527
32913610, 32913791, 32914508, 32914711, 32914795, 32915110, 32915747
32915760, 32915847, 32915909, 32916025, 32916080, 32917969, 32918041
32918394, 32920489, 32920547, 32921786, 32922090, 32922635, 32924796
32925421, 32925703, 32926513, 32926653, 32930360, 32930423, 32930665
32931078, 32931941, 32932487, 32933936, 32935932, 32936005, 32936402
32936424, 32936537, 32936859, 32936950, 32936961, 32936988, 32937167
32937338, 32939376, 32939883, 32940440, 32940714, 32940955, 32941096
32941509, 32941602, 32941792, 32943694, 32945404, 32946347, 32946711
32947264, 32947268, 32951181, 32951258, 32952285, 32953258, 32955962
32956092, 32956896, 32957606, 32958616, 32959929, 32961142, 32961939
32962162, 32965460, 32966389, 32966688, 32967871, 32968221, 32968634
32969024, 32969466, 32969863, 32970478, 32972633, 32972716, 32973035
32973406, 32973518, 32976022, 32977489, 32980826, 32982562, 32983419
32983750, 32983871, 32984625, 32984679, 32985908, 32986577, 32987004
32987206, 32987308, 32988028, 32991289, 32991527, 32992004, 32993522
32993998, 32994080, 32995072, 32995206, 32995242, 32995863, 32996071
32996974, 32998659, 32999086, 32999329, 32999541, 32999836, 33000440
33000516, 33000980, 33001094, 33001615, 33003575, 33003817, 33004172
33004888, 33005241, 33007394, 33008265, 33009224, 33009321, 33009351
33010173, 33010444, 33011078, 33011198, 33012307, 33012903, 33013379
33015716, 33016007, 33018951, 33019726, 33020016, 33020510, 33021036
33021100, 33021642, 33022043, 33022140, 33022563, 33022926, 33023671
33025005, 33026533, 33026796, 33026949, 33027087, 33027377, 33027525
33027539, 33027553, 33028013, 33028286, 33028462, 33028480, 33030293
33031619, 33032299, 33032400, 33032579, 33033425, 33034103, 33034619
33034642, 33034846, 33035201, 33035710, 33035954, 33036321, 33037136
33037150, 33037531, 33037895, 33038120, 33038422, 33038479, 33038537
33039277, 33040335, 33043590, 33043854, 33044062, 33045137, 33046179
33047645, 33047827, 33048074, 33048277, 33048591, 33049012, 33049866
33049915, 33049925, 33050205, 33050587, 33050622, 33050626, 33052585
33053538, 33055560, 33055827, 33056383, 33056579, 33058363, 33059891
33059924, 33060161, 33060212, 33060935, 33061152, 33061339, 33061595
33062419, 33063919, 33064324, 33064565, 33065089, 33065343, 33065415
33065437, 33065526, 33065979, 33066892, 33068672, 33069366, 33069583
33069889, 33069936, 33071321, 33072392, 33072854, 33074509, 33075133
33075246, 33075452, 33076129, 33080651, 33082407, 33084064, 33084323
33085296, 33085361, 33088535, 33088863, 33089096, 33089130, 33089192

33090110, 33090127, 33090781, 33090848, 33092087, 33093144, 33093807
33093937, 33095358, 33096609, 33097276, 33097433, 33099666, 33099872
33100195, 33100352, 33101055, 33101058, 33101334, 33102477, 33105276
33105354, 33105656, 33106822, 33106897, 33107872, 33108317, 33109335
33109981, 33110192, 33110642, 33110992, 33111729, 33112046, 33113848
33114640, 33115438, 33115892, 33116125, 33116131, 33116481, 33117641
33120284, 33120682, 33120828, 33120920, 33121866, 33121880, 33121934
33123402, 33123404, 33123985, 33125873, 33126216, 33126290, 33127032
33127141, 33127312, 33129473, 33131149, 33131335, 33131526, 33131742
33132050, 33135083, 33136016, 33136252, 33136601, 33137328, 33137554
33139230, 33139277, 33140218, 33141420, 33141890, 33142123, 33142479
33142533, 33142739, 33142764, 33144001, 33145153, 33145583, 33146001
33146055, 33147065, 33148063, 33149578, 33149850, 33150236, 33150645
33151063, 33151089, 33151731, 33152388, 33152652, 33152838, 33153797
33155914, 33156093, 33157157, 33157547, 33159956, 33161035, 33161424
33161535, 33161726, 33163159, 33163187, 33164865, 33165183, 33165391
33166116, 33166242, 33167315, 33169254, 33172549, 33172631, 33172679
33174203, 33176523, 33176672, 33177660, 33178223, 33178248, 33179718
33180354, 33181281, 33181349, 33181881, 33182152, 33182737, 33184467
33185231, 33185773, 33186578, 33186650, 33187070, 33187513, 33188597
33189199, 33189838, 33190454, 33190694, 33190761, 33191073, 33191584
33192462, 33192939, 33193293, 33194363, 33195096, 33195330, 33195897
33196009, 33196035, 33196475, 33197296, 33198902, 33199431, 33201415
33203951, 33205229, 33205781, 33206160, 33206701, 33207143, 33207240
33207247, 33207342, 33208644, 33211160, 33211334, 33211942, 33212112
33214493, 33214554, 33214707, 33215225, 33216590, 33216667, 33218194
33218259, 33218392, 33218518, 33218694, 33219840, 33220466, 33221061
33221340, 33223248, 33224375, 33225584, 33225678, 33227044, 33227337
33228119, 33229327, 33230882, 33230975, 33232128, 33233560, 33234302
33235620, 33236729, 33237523, 33239083, 33239267, 33239946, 33239980
33240195, 33240921, 33241118, 33241359, 33241692, 33242408, 33242622
33243077, 33244297, 33245879, 33245940, 33246099, 33246700, 33247240
33247372, 33247795, 33247862, 33251111, 33251188, 33251482, 33252648
33252911, 33253370, 33253466, 33253504, 33254019, 33261707, 33261786
33263108, 33266449, 33268162, 33270427, 33270914, 33271941, 33273598
33273638, 33273682, 33274012, 33275564, 33275880, 33276748, 33278133
33278440, 33278509, 33279339, 33279489, 33279810, 33280121, 33281287
33281785, 33282110, 33282129, 33282502, 33282504, 33282605, 33282871
33282971, 33283122, 33284571, 33287418, 33288427, 33289442, 33289604
33289734, 33290765, 33291305, 33292174, 33292175, 33292429, 33292896
33292950, 33294123, 33294139, 33294845, 33295267, 33297275, 33299877
33301277, 33301919, 33303419, 33303486, 33303555, 33303725, 33304435
33304775, 33304830, 33305150, 33305175, 33305254, 33305995, 33306161
33306852, 33307945, 33308107, 33308199, 33308244, 33308736, 33309178

33309324, 33311488, 33312823, 33312932, 33313374, 33314115, 33314122
33314422, 33314523, 33315230, 33315432, 33315590, 33315801, 33315835
33316711, 33316815, 33317279, 33317740, 33317752, 33318311, 33318949
33319065, 33319353, 33319802, 33320455, 33322672, 33323634, 33323903
33324226, 33325981, 33327118, 33329027, 33329192, 33329493, 33329960
33330508, 33331329, 33332612, 33332891, 33333026, 33333179, 33333616
33334218, 33334340, 33334404, 33334945, 33334957, 33334972, 33335941
33337231, 33337385, 33337620, 33337799, 33337807, 33338247, 33338891
33339868, 33340595, 33343993, 33344767, 33345269, 33346851, 33347947
33349744, 33349880, 33350643, 33351136, 33351978, 33352629, 33352740
33352794, 33353474, 33354011, 33354275, 33354662, 33354933, 33354968
33355007, 33355136, 33355766, 33356602, 33356612, 33357029, 33357655
33358233, 33358968, 33359279, 33359773, 33359963, 33360117, 33360246
33362391, 33362597, 33364012, 33364820, 33366942, 33367076, 33367184
33367909, 33368352, 33369166, 33370332, 33371121, 33371641, 33373644
33373693, 33375194, 33376694, 33378856, 33379172, 33379714, 33380058
33380472, 33380871, 33381652, 33381775, 33381839, 33382108, 33382224
33382529, 33382620, 33382859, 33384092, 33384505, 33387120, 33387654
33387767, 33388473, 33388715, 33388927, 33389651, 33390561, 33390695
33390717, 33390917, 33390925, 33392926, 33392996, 33393503, 33393671
33394330, 33395219, 33397350, 33397495, 33397605, 33398383, 33398674
33401519, 33402361, 33402406, 33402456, 33402847, 33403040, 33403843
33404069, 33406991, 33407135, 33407139, 33408858, 33409163, 33409376
33409759, 33409841, 33410321, 33415279, 33416041, 33416405, 33417145
33417828, 33417987, 33418439, 33418443, 33420096, 33420249, 33420490
33421125, 33421339, 33421440, 33421721, 33421972, 33422596, 33422675
33422877, 33423728, 33423815, 33424192, 33425046, 33425127, 33426135
33427267, 33427786, 33427823, 33427991, 33428191, 33429020, 33431382
33433265, 33433944, 33434256, 33434602, 33434897, 33435012, 33435454
33437800, 33437802, 33440152, 33440178, 33440442, 33440899, 33441073
33441786, 33443834, 33444647, 33446226, 33446788, 33447015, 33447602
33447957, 33448908, 33450599, 33450736, 33451134, 33452091, 33454288
33454299, 33454753, 33455225, 33455471, 33456516, 33456703, 33456848
33457235, 33457584, 33457842, 33458082, 33458732, 33459161, 33459348
33460265, 33460450, 33460521, 33460870, 33462514, 33462620, 33463044
33464061, 33464358, 33464378, 33464843, 33466822, 33467243, 33467715
33469785, 33470077, 33470092, 33470254, 33471858, 33473564, 33473583
33473795, 33473815, 33473989, 33474080, 33474386, 33474769, 33474916
33476482, 33476928, 33479415, 33479703, 33480124, 33480392, 33480765
33481667, 33482137, 33482590, 33483222, 33484230, 33484387, 33485134
33485207, 33488913, 33489699, 33490023, 33490031, 33490293, 33491676
33492066, 33492136, 33493957, 33495024, 33495575, 33495588, 33496433
33497160, 33498037, 33499125, 33499867, 33500486, 33501425, 33503732
33504158, 33504432, 33504626, 33504902, 33505158, 33505495, 33507610

33507953, 33510062, 33510077, 33510171, 33510735, 33511329, 33511523
33512062, 33513037, 33513434, 33513447, 33513526, 33513906, 33514038
33514172, 33514179, 33514440, 33514881, 33515115, 33516571, 33517445
33517703, 33520658, 33521864, 33522170, 33522372, 33522799, 33522941
33523189, 33523393, 33523831, 33523982, 33524097, 33525014, 33525444
33525448, 33527359, 33527630, 33527663, 33527739, 33528779, 33531067
33531364, 33531929, 33532136, 33532470, 33532517, 33532755, 33533239
33533269, 33534589, 33534891, 33536140, 33536640, 33537225, 33537630
33537652, 33538009, 33538063, 33538767, 33538807, 33539504, 33540746
33541736, 33541865, 33542695, 33544375, 33544836, 33545633, 33545698
33546789, 33546839, 33547527, 33547840, 33548186, 33548709, 33548869
33549008, 33549281, 33550827, 33551931, 33553452, 33553902, 33555482
33555673, 33556254, 33556394, 33557278, 33557344, 33558058, 33558087
33558251, 33558317, 33558391, 33558960, 33559245, 33559316, 33559848
33560308, 33561671, 33561708, 33561845, 33562255, 33563137, 33563167
33563718, 33564109, 33564809, 33566322, 33566611, 33566851, 33566856
33567156, 33568223, 33568355, 33570800, 33571225, 33572061, 33573142
33574722, 33575022, 33575100, 33576132, 33577970, 33578015, 33580079
33580212, 33580595, 33580746, 33582466, 33583859, 33584585, 33584637
33585244, 33585591, 33585860, 33587171, 33589647, 33589667, 33590420
33590551, 33590607, 33591046, 33596056, 33596304, 33596361, 33596874
33598703, 33598728, 33598840, 33599665, 33599734, 33600479, 33600509
33601195, 33601538, 33601673, 33601849, 33603291, 33604939, 33605111
33606850, 33607081, 33607127, 33607613, 33607709, 33611438, 33613169
33613512, 33613829, 33613833, 33615198, 33615478, 33615505, 33616923
33617587, 33617685, 33618962, 33621739, 33621871, 33621893, 33621993
33622325, 33622506, 33622575, 33622927, 33622995, 33624052, 33624356
33625059, 33625559, 33625597, 33625822, 33626088, 33627207, 33627360
33627820, 33627879, 33628258, 33628304, 33628592, 33628693, 33630464
33631068, 33631337, 33631562, 33631820, 33631959, 33632051, 33632754
33633469, 33633875, 33633883, 33635094, 33635886, 33636280, 33636345
33637219, 33641403, 33641592, 33645932, 33646203, 33647498, 33647716
33647739, 33647820, 33648273, 33649128, 33649782, 33651003, 33651993
33652008, 33652234, 33652291, 33653008, 33653695, 33655399, 33656104
33656406, 33656608, 33656679, 33657553, 33658696, 33660093, 33660782
33660816, 33660838, 33661960, 33662079, 33662706, 33663113, 33663305
33663444, 33664388, 33664959, 33664976, 33666200, 33666228, 33666803
33667166, 33667505, 33667548, 33667790, 33668078, 33668496, 33670617
33670793, 33674035, 33674065, 33674755, 33674843, 33676061, 33676296
33676622, 33676842, 33677163, 33677196, 33677721, 33679665, 33679838
33681238, 33682799, 33684125, 33684377, 33684692, 33687039, 33689330
33689561, 33690169, 33690676, 33691101, 33692669, 33695048, 33695100
33696508, 33698504, 33698555, 33699798, 33702035, 33702922, 33703196
33704431, 33704635, 33705050, 33706074, 33706800, 33708795, 33708879

33708958, 33709660, 33710568, 33711151, 33711724, 33711938, 33713578
33714000, 33714495, 33715183, 33715322, 33718837, 33718848, 33719173
33720017, 33722251, 33723325, 33725523, 33726388, 33726590, 33726682
33726788, 33726841, 33727390, 33727406, 33727922, 33727983, 33729692
33729700, 33729789, 33730024, 33731488, 33733810, 33735478, 33735790
33736618, 33737627, 33738135, 33738702, 33741444, 33741730, 33742827
33743745, 33744512, 33745199, 33745318, 33746114, 33748852, 33749367
33749626, 33749984, 33750344, 33750791, 33751080, 33751431, 33754410
33754633, 33755161, 33755486, 33756794, 33757064, 33757884, 33758069
33758164, 33759204, 33760298, 33761198, 33761538, 33763570, 33763679
33764147, 33764761, 33765925, 33766130, 33766686, 33766937, 33767425
33768567, 33770079, 33770883, 33770960, 33771433, 33773883, 33774856
33775072, 33775544, 33775825, 33776598, 33777176, 33777718, 33779360
33779364, 33779494, 33779786, 33780182, 33780312, 33782200, 33783365
33783627, 33783710, 33784447, 33785175, 33786005, 33786208, 33786750
33787325, 33787804, 33787884, 33788643, 33789142, 33789305, 33790553
33792885, 33792937, 33794088, 33794281, 33794290, 33796040, 33797504
33797970, 33798328, 33799368, 33800450, 33800460, 33800471, 33800500
33801197, 33801237, 33803836, 33804758, 33805155, 33805836, 33807727
33808041, 33808204, 33808574, 33808955, 33809062, 33809642, 33810107
33810130, 33810360, 33811111, 33811601, 33811659, 33812475, 33813801
33813849, 33814415, 33815940, 33816129, 33816674, 33817457, 33817717
33817746, 33818252, 33819404, 33821129, 33821145, 33821234, 33821569
33822187, 33822881, 33823203, 33824185, 33824830, 33825303, 33826285
33827120, 33827138, 33827191, 33827202, 33828137, 33828243, 33828570
33828982, 33832499, 33832583, 33833554, 33833783, 33834239, 33835379
33835574, 33836203, 33837343, 33837484, 33838019, 33840343, 33840911
33840932, 33840940, 33841191, 33841610, 33841850, 33842024, 33842094
33842364, 33842953, 33843368, 33843512, 33845824, 33846103, 33846146
33846662, 33847898, 33848060, 33848148, 33848294, 33849209, 33849726
33850434, 33850437, 33850535, 33851855, 33852315, 33852881, 33853330
33856940, 33858183, 33858700, 33860280, 33860501, 33860895, 33860900
33860946, 33862262, 33862735, 33862860, 33863150, 33863597, 33863611
33864784, 33865116, 33865165, 33865495, 33865537, 33866472, 33866585
33867451, 33867491, 33868507, 33869422, 33870133, 33870373, 33870702
33870888, 33871591, 33871761, 33871795, 33872487, 33872610, 33874274
33874455, 33875167, 33876296, 33876730, 33876739, 33877868, 33878003
33878970, 33879044, 33879054, 33880474, 33882024, 33883017, 33883347
33884314, 33886297, 33886487, 33886786, 33886862, 33886871, 33888856
33888932, 33889459, 33890066, 33890586, 33891059, 33891752, 33893127
33895721, 33896341, 33896412, 33896418, 33896423, 33896760, 33897055
33897862, 33898064, 33898336, 33899027, 33899867, 33899902, 33900564
33900807, 33901118, 33901904, 33902235, 33902465, 33902539, 33902871
33904512, 33904798, 33904963, 33906515, 33906897, 33906975, 33907094

33907659, 33907663, 33907815, 33907942, 33909666, 33909729, 33909838
33909842, 33910272, 33912833, 33912872, 33913103, 33913336, 33913384
33915586, 33916081, 33916206, 33916249, 33916311, 33917203, 33918190
33919778, 33921410, 33921441, 33921860, 33922026, 33922061, 33925702
33926252, 33927256, 33927405, 33927483, 33928325, 33929317, 33931668
33932721, 33932921, 33933784, 33934979, 33935707, 33936939, 33937333
33937866, 33939477, 33940540, 33941905, 33941967, 33942062, 33943313
33945477, 33945728, 33945794, 33949153, 33950698, 33951799, 33952245
33952532, 33952588, 33952976, 33953054, 33953568, 33954999, 33955060
33955371, 33956182, 33956859, 33957025, 33957705, 33960379, 33960464
33960647, 33961800, 33963458, 33964258, 33964671, 33964867, 33964963
33965211, 33965842, 33967599, 33969303, 33969309, 33970659, 33970841
33972204, 33973155, 33973593, 33973695, 33973908, 33973922, 33974068
33974554, 33974560, 33974788, 33974835, 33975649, 33976016, 33976581
33976796, 33976856, 33980195, 33981298, 33982111, 33982392, 33982541
33983204, 33985986, 33986030, 33987063, 33987170, 33987911, 33987976
33988339, 33988388, 33988926, 33988974, 33989017, 33990166, 33990559
33992920, 33993028, 33993386, 33994084, 33994833, 33997092, 33997202
33997826, 33998060, 33998365, 33998441, 33998706, 34001147, 34001406
34001696, 34003077, 34003270, 34003643, 34004063, 34006614, 34006650
34007432, 34009154, 34009209, 34009751, 34010877, 34011029, 34011657
34012165, 34013753, 34013946, 34017363, 34018423, 34019478, 34020888
34020905, 34022133, 34022834, 34023045, 34023117, 34023644, 34024924
34027056, 34027199, 34027770, 34027791, 34027965, 34028486, 34031036
34033267, 34034279, 34034799, 34038365, 34039170, 34039802, 34039805
34042084, 34042088, 34042759, 34042949, 34043824, 34044661, 34044973
34045021, 34045081, 34045429, 34045719, 34048056, 34048076, 34048685
34049216, 34050156, 34051355, 34051770, 34052378, 34052471, 34052862
34052869, 34053296, 34053514, 34054814, 34055289, 34056235, 34056691
34056918, 34058858, 34058951, 34060122, 34060268, 34060829, 34061796
34062228, 34064415, 34064740, 34066286, 34066652, 34069804, 34070318
34070446, 34070561, 34071111, 34071627, 34072143, 34072411, 34072690
34075499, 34078255, 34078662, 34078687, 34079542, 34080081, 34080691
34083290, 34083697, 34085116, 34086300, 34088194, 34088299, 34088989
34089934, 34090927, 34091587, 34092979, 34094476, 34096200, 34096213
34097324, 34097491, 34098840, 34098862, 34099185, 34100909, 34100969
34101724, 34101781, 34101785, 34102850, 34103647, 34103857, 34104105
34104403, 34104747, 34105531, 34105578, 34105851, 34106199, 34106320
34106567, 34106830, 34107143, 34107171, 34110342, 34111239, 34111708
34113634, 34113754, 34115338, 34115490, 34115571, 34115674, 34115836
34116531, 34116534, 34117188, 34117618, 34118219, 34119621, 34119948
34120395, 34122000, 34123350, 34125814, 34126068, 34126600, 34127787
34128961, 34129587, 34129689, 34129964, 34130289, 34131435, 34131640
34132089, 34132182, 34132256, 34132318, 34133330, 34135867, 34136552

34136598, 34136651, 34137325, 34137360, 34137400, 34137513, 34137936
34139110, 34139217, 34141328, 34142034, 34142701, 34142725, 34142884
34144063, 34145178, 34145715, 34146833, 34146985, 34146987, 34147169
34148591, 34149263, 34149515, 34151061, 34153098, 34153238, 34153367
34154060, 34154847, 34155072, 34156864, 34157133, 34157543, 34158902
34159409, 34160874, 34161298, 34162108, 34162111, 34162325, 34162335
34162419, 34162936, 34163576, 34164486, 34164828, 34166857, 34167090
34167220, 34167286, 34168185, 34169034, 34171382, 34171631, 34171779
34172434, 34172559, 34172950, 34172951, 34173003, 34173450, 34173655
34174125, 34174543, 34175766, 34175987, 34176645, 34177012, 34177162
34177216, 34177554, 34179020, 34182054, 34182692, 34182809, 34183461
34183998, 34186437, 34186556, 34187150, 34188592, 34188859, 34189553
34191370, 34191733, 34191990, 34193022, 34194445, 34195569, 34195583
34196203, 34197142, 34198944, 34200295, 34201566, 34202065, 34202073
34202080, 34202091, 34202285, 34202297, 34203331, 34203704, 34203713
34204673, 34205962, 34207008, 34207506, 34207825, 34208572, 34208822
34210475, 34210478, 34211059, 34211843, 34212105, 34212743, 34214908
34215091, 34215118, 34215356, 34215503, 34216177, 34216873, 34219168
34219478, 34219756, 34219769, 34219922, 34220568, 34220609, 34220943
34220961, 34220991, 34221484, 34221568, 34221772, 34222165, 34224381
34224955, 34225479, 34226067, 34226553, 34226596, 34228868, 34228985
34229104, 34229250, 34229833, 34232017, 34233694, 34234394, 34235520
34236849, 34236850, 34236929, 34237240, 34237348, 34238259, 34238278
34238326, 34238452, 34239023, 34239253, 34239708, 34239739, 34240339
34241948, 34242857, 34243634, 34244123, 34244448, 34245547, 34248685
34248786, 34250357, 34250510, 34250712, 34256822, 34256867, 34257221
34257821, 34259077, 34259505, 34260401, 34260455, 34261031, 34261458
34261528, 34261536, 34261947, 34262719, 34262797, 34263456, 34264633
34269674, 34270419, 34271046, 34271144, 34271261, 34271831, 34272249
34272626, 34272942, 34276007, 34276035, 34276149, 34277248, 34278993
34279907, 34280456, 34281503, 34281636, 34281906, 34282948, 34284147
34284415, 34284480, 34286049, 34286361, 34286896, 34287615, 34287904
34288172, 34289040, 34289391, 34291104, 34291231, 34291862, 34292131
34296307, 34296882, 34299775, 34299927, 34300648, 34301118, 34303814
34305015, 34305086, 34305465, 34306996, 34308796, 34309486, 34309870
34310304, 34310878, 34314448, 34314510, 34315238, 34317656, 34318537
34320078, 34320104, 34320607, 34320707, 34322521, 34325454, 34328460
34329645, 34329853, 34330060, 34330202, 34330960, 34331370, 34333986
34339279, 34339332, 34339511, 34340047, 34340632, 34343228, 34346703
34346865, 34347024, 34348768, 34348856, 34349149, 34349276, 34349447
34349515, 34349594, 34349942, 34350364, 34351706, 34352389, 34352605
34356459, 34357461, 34358131, 34358718, 34358785, 34363214, 34363828
34364656, 34366429, 34366627, 34367505, 34368448, 34368509, 34369008
34369015, 34369457, 34370261, 34370607, 34371061, 34372875, 34373053

34373173, 34373784, 34376103, 34376468, 34376629, 34377917, 34379814
34381258, 34381597, 34382203, 34382212, 34383066, 34383726, 34384239
34385931, 34386462, 34386836, 34387392, 34387451, 34387852, 34392047
34394126, 34394707, 34394887, 34395591, 34396087, 34396210, 34396450
34396901, 34397170, 34398729, 34400193, 34400514, 34400786, 34401276
34401444, 34405224, 34405413, 34406030, 34406120, 34406370, 34408490
34410488, 34411019, 34411060, 34411587, 34413701, 34414246, 34414328
34415224, 34415933, 34416002, 34417794, 34420046, 34420448, 34420761
34421053, 34422617, 34423163, 34424661, 34424728, 34425846, 34426849
34428819, 34430514, 34430618, 34432402, 34436025, 34443644, 34444824
34444997, 34445568, 34445728, 34446152, 34446545, 34447012, 34448189
34448235, 34448302, 34449511, 34450366, 34450853, 34451554, 34452628
34453303, 34453468, 34453799, 34453970, 34454035, 34455245, 34455377
34456728, 34457911, 34458786, 34460187, 34460273, 34461154, 34461697
34462113, 34462893, 34464036, 34465619, 34465871, 34466767, 34467295
34468807, 34469934, 34470389, 34470542, 34470753, 34471029, 34472508
34473578, 34473730, 34475838, 34476155, 34477555, 34479812, 34481187
34481738, 34482043, 34484622, 34485054, 34485380, 34485525, 34485657
34485723, 34487506, 34487786, 34488853, 34489508, 34491503, 34491739
34492025, 34492379, 34494444, 34495234, 34496630, 34497838, 34498028
34499374, 34502032, 34504292, 34505752, 34509388, 34510828, 34511443
34511846, 34511870, 34512077, 34513107, 34517973, 34519783, 34520519
34521072, 34521241, 34523306, 34523596, 34524704, 34524915, 34525391
34525691, 34525806, 34528328, 34530272, 34530839, 34532111, 34532831
34533061, 34533150, 34533431, 34534178, 34534504, 34535189, 34535190
34536480, 34538232, 34539284, 34539633, 34539998, 34540541, 34542602
34542994, 34543854, 34543938, 34544486, 34544657, 34544909, 34545238
34545472, 34547607, 34547912, 34548830, 34549471, 34549588, 34549620
34550486, 34551005, 34551359, 34552065, 34552940, 34555251, 34556258
34557246, 34557307, 34557355, 34557500, 34557851, 34558559, 34558586
34559114, 34559432, 34559964, 34560327, 34561380, 34561402, 34562023
34562200, 34562346, 34562513, 34564274, 34567061, 34567240, 34567246
34567622, 34567785, 34569338, 34570620, 34572347, 34572899, 34574048
34574650, 34575765, 34575784, 34576656, 34577339, 34578857, 34580665
34580955, 34583967, 34585151, 34587326, 34588265, 34588515, 34588563
34588602, 34589443, 34589885, 34590147, 34591645, 34592878, 34593337
34594269, 34595033, 34595341, 34595682, 34595961, 34596388, 34596863
34598617, 34599377, 34599777, 34600007, 34600477, 34600734, 34600757
34601469, 34603342, 34604941, 34605269, 34605306, 34605643, 34606514
34609482, 34609701, 34609883, 34610498, 34611735, 34612360, 34612973
34613493, 34613710, 34614070, 34614081, 34614417, 34615359, 34617503
34619587, 34619921, 34624814, 34627724, 34627975, 34629086, 34630604
34631067, 34632426, 34633291, 34634012, 34634237, 34635564, 34636420
34636859, 34637351, 34638404, 34639116, 34641746, 34645516, 34645605

34647397, 34647902, 34648006, 34648786, 34649403, 34650488, 34651089
34651385, 34651785, 34653168, 34653621, 34655977, 34658262, 34658861
34659006, 34659326, 34663044, 34663333, 34664941, 34665508, 34667496
34669358, 34670162, 34670941, 34671488, 34671630, 34672044, 34672192
34673162, 34675360, 34677014, 34680126, 34680130, 34681314, 34681779
34682800, 34684300, 34684487, 34685428, 34685578, 34687204, 34687665
34688565, 34691455, 34691800, 34692403, 34695366, 34696015, 34696043
34696173, 34696612, 34697338, 34697861, 34698179, 34698924, 34699533
34699616, 34700228, 34700255, 34700643, 34700660, 34701323, 34704162
34704506, 34705215, 34706328, 34706379, 34706625, 34709158, 34710074
34710427, 34710569, 34711434, 34711897, 34712405, 34713413, 34713951
34714760, 34714968, 34715072, 34715158, 34715960, 34716391, 34716666
34718564, 34718643, 34719772, 34720677, 34720762, 34720854, 34721689
34724125, 34724331, 34724535, 34724582, 34724986, 34725039, 34726380
34726666, 34728554, 34729397, 34729408, 34729755, 34730231, 34730930
34731121, 34732383, 34733173, 34733192, 34733234, 34736787, 34737946
34738737, 34739733, 34740434, 34742578, 34742761, 34743170, 34743331
34743667, 34743869, 34744334, 34744459, 34744980, 34745335, 34747517
34748613, 34749799, 34752011, 34752186, 34752935, 34753612, 34754028
34759287, 34761284, 34761787, 34762290, 34763780, 34765046, 34765783
34767031, 34767159, 34767505, 34769588, 34769939, 34771499, 34773273
34773547, 34774426, 34774536, 34775460, 34775863, 34777391, 34778310
34782365, 34782556, 34783802, 34784422, 34785211, 34785971, 34786432
34787623, 34793099, 34793679, 34794246, 34794318, 34797143, 34797565
34797666, 34797733, 34798237, 34798577, 34800180, 34801889, 34802312
34803212, 34803323, 34804060, 34804845, 34806060, 34808536, 34809715
34810252, 34810435, 34810533, 34810987, 34811218, 34811942, 34813568
34814154, 34814694, 34816203, 34816271, 34816383, 34816423, 34816446
34820088, 34821386, 34822118, 34822216, 34822256, 34822847, 34825329
34827235, 34827391, 34828828, 34829425, 34830056, 34830523, 34831087
34831677, 34832629, 34832725, 34833503, 34835042, 34836063, 34837452
34837737, 34839105, 34839112, 34841743, 34844505, 34845369, 34845920
34846247, 34847038, 34848229, 34849809, 34850178, 34851191, 34851345
34852202, 34854676, 34855224, 34855355, 34855777, 34857301, 34858818
34859550, 34860551, 34861159, 34861493, 34862366, 34863611, 34864945
34865504, 34866621, 34867951, 34870095, 34871935, 34872784, 34873092
34873139, 34873713, 34874803, 34875355, 34875817, 34878842, 34879016
34879878, 34880992, 34884137, 34884270, 34884398, 34884598, 34885090
34885986, 34886534, 34887769, 34888945, 34891346, 34892381, 34894430
34894796, 34895703, 34896800, 34898313, 34898388, 34898860, 34899985
34901118, 34902561, 34903282, 34903294, 34904610, 34906779, 34907142
34908976, 34910877, 34911010, 34913418, 34919485, 34920116, 34921040
34921889, 34922162, 34922189, 34922278, 34922345, 34925412, 34927892
34928526, 34931856, 34933484, 34936446, 34936786, 34944713, 34944894

34945255, 34949129, 34951381, 34952481, 34953532, 34955145, 34956645
34957171, 34958012, 34958073, 34958263, 34961049, 34962223, 34962773
34963194, 34965881, 34968089, 34969675, 34969678, 34969920, 34974052
34975138, 34975490, 34977125, 34977892, 34978108, 34986710, 34987218
34987765, 34988484, 34990084, 34991821, 34993018, 34993116, 34993569
34993572, 34995066, 34996323, 34996911, 34998034, 34998152, 34999123
34999256, 35001214, 35001525, 35001642, 35001950, 35001966, 35002747
35004493, 35004974, 35007747, 35011038, 35011794, 35012562, 35012866
35013485, 35017301, 35018927, 35019861, 35020339, 35020474, 35020686
35021301, 35021834, 35022351, 35023651, 35024528, 35025129, 35028559
35030463, 35033677, 35033795, 35034061, 35034357, 35034419, 35037368
35037811, 35037877, 35038887, 35039202, 35042447, 35044035, 35045932
35046819, 35047664, 35047747, 35048031, 35050165, 35050895, 35054513
35059646, 35061730, 35062154, 35063106, 35064830, 35065501, 35066263
35067685, 35069202, 35072849, 35074697, 35075067, 35075794, 35079193
35079707, 35080170, 35080594, 35081595, 35085927, 35086125, 35089117
35090180, 35092748, 35095078, 35095186, 35095748, 35096413, 35096429
35098094, 35098441, 35099667, 35099674, 35100889, 35102957, 35108500
35108659, 35111235, 35111766, 35111914, 35112403, 35112961, 35114002
35116794, 35116995, 35117839, 35118870, 35119386, 35119957, 35120120
35122349, 35122377, 35123499, 35123829, 35126657, 35128327, 35132616
35133091, 35133360, 35135018, 35135099, 35136259, 35136608, 35136924
35137435, 35140566, 35141642, 35146117, 35146613, 35146774, 35150992
35151872, 35152252, 35152333, 35154281, 35154926, 35154960, 35156218
35156936, 35157812, 35160590, 35160800, 35161422, 35161640, 35161890
35162446, 35164681, 35167216, 35167687, 35169842, 35170600, 35172557
35175850, 35176667, 35176975, 35177450, 35181715, 35182029, 35185281
35185399, 35185582, 35186248, 35186915, 35192139, 35192392, 35192409
35194313, 35196032, 35196311, 35196454, 35196527, 35198120, 35200616
35201760, 35204046, 35204054, 35206006, 35209217, 35209359, 35209504
35209830, 35210547, 35214786, 35216660, 35217484, 35218016, 35219578
35220732, 35223138, 35223900, 35224455, 35224820, 35225526, 35227329
35229151, 35229318, 35231307, 35235919, 35236335, 35238243, 35239280
35240410, 35241186, 35241630, 35241785, 35242133, 35243199, 35246710
35248163, 35251084, 35252340, 35254297, 35255487, 35256214, 35256781
35256970, 35257945, 35259221, 35261641, 35264103, 35270475, 35271571
35276686, 35279084, 35279794, 35280309, 35280316, 35282519, 35284198
35285190, 35285519, 35285795, 35286006, 35286235, 35286643, 35286895
35287200, 35289426, 35292771, 35294128, 35297129, 35300684, 35305465
35308639, 35309432, 35310217, 35313797, 35314082, 35314366, 35314538
35314702, 35315609, 35318334, 35320424, 35321914, 35323379, 35325806
35325831, 35327636, 35328135, 35329690, 35330125, 35330506, 35331461
35335219, 35336174, 35336918, 35338859, 35339824, 35342306, 35343164
35343260, 35343657, 35344589, 35345911, 35346086, 35350522, 35350730

35352132, 35354098, 35355058, 35355841, 35356257, 35358495, 35358599
35358802, 35360571, 35360677, 35364655, 35364793, 35364812, 35367953
35368489, 35369902, 35371235, 35373245, 35374209, 35377740, 35378424
35378997, 35383562, 35383695, 35389856, 35391124, 35391953, 35392518
35393406, 35393540, 35394293, 35394301, 35395648, 35395990, 35396708
35397199, 35397368, 35397804, 35397949, 35399131, 35399652, 35401059
35401779, 35403044, 35403248, 35403506, 35406065, 35406883, 35407223
35407227, 35411248, 35412130, 35412492, 35412569, 35412607, 35413132
35413263, 35413559, 35413561, 35413641, 35413813, 35414664, 35415913
35416200, 35417351, 35422012, 35428646, 35429800, 35431523, 35431882
35432001, 35442453, 35442758, 35443703, 35448346, 35450698, 35450949
35451412, 35454504, 35455538, 35456197, 35456565, 35460119, 35461252
35462024, 35462026, 35462093, 35464320, 35464439, 35464935, 35465301
35465471, 35468895, 35469192, 35471762, 35471995, 35474047, 35474719
35475118, 35480672, 35480864, 35481088, 35481333, 35481836, 35486570
35490676, 35491283, 35491431, 35493767, 35496065, 35499173, 35499335
35500783, 35501373, 35501516, 35505353, 35506375, 35507017, 35508205
35509815, 35510133, 35510595, 35511113, 35513164, 35516861, 35518158
35518161, 35519977, 35524416, 35525140, 35525149, 35527573, 35528568
35532736, 35532862, 35533077, 35534472, 35536839, 35538113, 35546332
35548235, 35548986, 35550354, 35550831, 35554061, 35554249, 35555753
35562836, 35562961, 35564178, 35566791, 35567384, 35571480, 35572071
35575926, 35578393, 35581572, 35582398, 35585131, 35585502, 35587006
35587715, 35587953, 35591921, 35597299, 35597308, 35597425, 35598272
35598540, 35598911, 35600146, 35600358, 35605661, 35607840, 35608957
35609936, 35612086, 35614342, 35617421, 35617844, 35618472, 35621725
35622388, 35623675, 35627067, 35627364, 35629576, 35631176, 35635081
35636459, 35637915, 35638318, 35639791, 35642726, 35642876, 35646719
35649519, 35650950, 35653725, 35657726, 35662517, 35663859, 35665871
35666536, 35668941, 35669282, 35670670, 35674309, 35675516, 35676115
35677162, 35680047, 35683569, 35685102, 35688371, 35689185, 35689562
35692792, 35692839, 35698030, 35700030, 35700342, 35702932, 35703393
35708364, 35717077, 35720222, 35720276, 35724523, 35729579, 35734485
35737047, 35737853, 35747733, 35748468, 35752989, 35754528, 35757416
35757515, 35757524, 35758002, 35759174, 35759666, 35761923, 35763448
35766554, 35770294, 35771475, 35771774, 35782231, 35784008, 35784551
35784927, 35786885, 35787436, 35793120, 35800115, 35800344, 35806962
35808133, 35809755, 35813895, 35815596, 35816237, 35818242, 35825074
35827574, 35828713, 35833399, 35833987, 35834182, 35836860, 35837578
35837907, 35839225, 35843249, 35843788, 35845206, 35846241, 35848837
35852104, 35853413, 35853518, 35857557, 35861995, 35868496, 35872313
35875088, 35877651, 35891265, 35891754, 35893962, 35898465, 35901710
35905809, 35905938, 35912136, 35914430, 35920369, 35921533, 35929123
35939518, 35941676, 35945976, 35949090, 35949725, 35955905, 35957640

35963250, 35967943, 35970686, 35974414, 35974697, 35977447, 35978451
35979315, 35982455, 35983268, 35985645, 35986911, 35989407, 35990296
35997913, 35998116, 35998456, 35999726, 36004410, 36004586, 36006082
36013758, 36016273, 36021678, 36033399, 36036877, 36040822, 36059461
36059486, 36061212, 36078081, 36084230, 36088457, 36092458, 36102295
36104560, 36117381, 36119583, 36123091, 36135987, 36138120, 36138616
36150242, 36152805, 36167644, 36172662, 36178988, 36187019, 36189308
36193601, 36210227, 36213178, 36223861, 36228325, 36230174, 36238271
36244242, 36260493, 36260537, 36261409, 36335956, 36347973, 36349541
36366069, 36368005, 36385563, 36386686, 36405353, 36413096, 36414025
36453582, 36479823

Version 19.0.0.0.ru-2024-01.rur-2024-01.r1

Version 19.0.0.0.ru-2024-01.rur-2024-01.r1 includes the following:

- Patch [35239280](#): DSTV42 UPDATE - TZDATA2023C - NEED OJVM FIX
- Patch [33125873](#): MAKE CACHE GLOBAL OBJECT INVALIDATION CIC NON-SERIALIZE FOR BETTER PERFORMANCE
- Patch [29213893](#): DBMS_STATS FAILING WITH ERROR ORA-01422 WHEN GATHERING STATS FOR USER\$ TABLE
- Patch [28730253](#): SUPPORT NEW ERA REIWA FOR JAPANESE IMPERIAL CALENDAR
- Patch [35926646](#): OJVM RELEASE UPDATE: 19.22.0.0.240116 (35926646)
- Patch [35943157](#): Database Release Update : 19.22.0.0.240116 (35943157)
- Patch [29585399](#): OCW RELEASE UPDATE 19.3.0.0.0 (29585399)

Combined Patches for Version 19.0.0.0.ru-2024-01.rur-2024-01.r1, Released January 2024

Bugs fixed:

1297945, 7391838, 8460502, 8476681, 9002767, 10121473, 10123661
12565410, 12949919, 14112098, 14570574, 14735102, 15897884, 15931756
15959416, 16662822, 16664572, 16750494, 16799766, 17275499, 17395507
17428816, 17443054, 17468475, 17562236, 17777718, 18534283, 18697534
18759260, 18943905, 19080742, 19138896, 19147630, 19226753, 19397646
19630878, 19697993, 19884953, 19958239, 20007421, 20044584, 20083476
20289608, 20313356, 20319830, 20479545, 20661314, 20721183, 20867658

20875943, 20922160, 21119541, 21217621, 21232786, 21245711, 21374587
21528318, 21533734, 21629064, 21639146, 21888352, 21965541, 22037067
22066547, 22252368, 22325312, 22387320, 22553815, 22580355, 22599382
22725871, 22729345, 22748979, 22813401, 22873666, 23020668, 23066463
23094775, 23125587, 23220873, 23294761, 23296836, 23311885, 23606241
23614160, 23645975, 23734075, 23734111, 23763462, 24336782, 24356932
24559425, 24561942, 24596874, 24597536, 24669730, 24687075, 24701882
24833686, 24916492, 24957575, 24971456, 25030027, 25033515, 25092651
25093917, 25148135, 25153902, 25173172, 25195515, 25404117, 25415139
25416731, 25467237, 25541233, 25560538, 25562258, 25607406, 25607716
25632308, 25634827, 25642769, 25655012, 25661172, 25675134, 25677036
25756945, 25792962, 25804387, 25804908, 25806201, 25809128, 25869323
25881271, 25883179, 25905368, 25913778, 25933030, 25979242, 25986062
25997810, 26001677, 26003708, 26108369, 26127355, 26139817, 26173091
26203132, 26247450, 26256280, 26280704, 26284288, 26352569, 26352615
26440142, 26476244, 26476323, 26497655, 26499997, 26500553, 26516556
26528202, 26577716, 26587659, 26611353, 26621826, 26668264, 26716835
26739322, 26758837, 26777814, 26785852, 26789742, 26800890, 26819036
26860844, 26872233, 26897528, 26925969, 26951566, 26957541, 26960568
26963540, 26978857, 27004798, 27004828, 27015468, 27019512, 27036163
27044169, 27044246, 27063461, 27086374, 27091809, 27096103, 27101798
27126122, 27126938, 27130348, 27131416, 27155644, 27162036, 27166935
27175854, 27195575, 27195935, 27207214, 27207959, 27221350, 27222128
27243840, 27244999, 27254335, 27260704, 27261477, 27275126, 27277677
27302372, 27329690, 27359766, 27359770, 27362994, 27369515, 27378053
27381279, 27392968, 27406105, 27411022, 27423500, 27428898, 27439716
27453490, 27458357, 27458493, 27460010, 27489107, 27497101, 27525303
27572040, 27582210, 27589260, 27595082, 27597359, 27604329, 27614573
27622946, 27627811, 27629928, 27636387, 27639208, 27654410, 27658166
27661222, 27666312, 27684864, 27691701, 27692173, 27697886, 27700413
27710072, 27722357, 27729678, 27742354, 27745728, 27751111, 27751518
27760043, 27764052, 27768096, 27782078, 27785931, 27786168, 27801144
27825962, 27828892, 27829722, 27841399, 27846298, 27860754, 27873364
27877830, 27880025, 27897090, 27899093, 27907898, 27908460, 27917890
27929509, 27933036, 27934711, 27935464, 27941110, 27950978, 27951757
27957203, 27957963, 27962025, 27967484, 27979632, 27989365, 27998559
28001632, 28007516, 28023467, 28031385, 28044739, 28052648, 28064977
28072567, 28078186, 28089605, 28092783, 28104176, 28109326, 28112563
28125947, 28127287, 28127569, 28129791, 28133903, 28138566, 28138847
28144569, 28145995, 28156781, 28163768, 28167557, 28173612, 28181021
28185286, 28187837, 28189466, 28193268, 28198802, 28201045, 28204104
28204262, 28205555, 28209601, 28209985, 28210681, 28215483, 28227204
28234255, 28248841, 28263142, 28267957, 28271258, 28271693, 28276054
28279176, 28279456, 28279612, 28294439, 28294563, 28298401, 28302580

28303692, 28308789, 28313275, 28319114, 28322973, 28326928, 28337860
28338211, 28350595, 28351919, 28362187, 28364580, 28370061, 28371123
28373960, 28375383, 28379065, 28381939, 28383667, 28386259, 28387185
28387574, 28390177, 28390273, 28392179, 28395302, 28397317, 28402823
28403019, 28406374, 28410431, 28412163, 28414968, 28430240, 28431445
28432345, 28435333, 28436173, 28436414, 28442896, 28451312, 28452123
28454215, 28461031, 28461789, 28463226, 28470673, 28475242, 28479352
28482048, 28482049, 28484299, 28487818, 28489419, 28492006, 28498976
28499269, 28502773, 28503081, 28504631, 28505321, 28513129, 28513333
28521330, 28522750, 28523644, 28526715, 28530171, 28530697, 28534475
28534493, 28535127, 28537481, 28538439, 28541606, 28542455, 28544270
28545395, 28546290, 28547068, 28547926, 28553649, 28553981, 28558489
28558645, 28561704, 28564479, 28565296, 28567417, 28567819, 28569897
28570589, 28572165, 28572407, 28572533, 28572544, 28572667, 28572834
28577943, 28578945, 28587723, 28589194, 28589509, 28589644, 28591817
28592647, 28593127, 28593682, 28594086, 28597221, 28598022, 28600107
28601957, 28602253, 28604647, 28605066, 28606598, 28607316, 28607632
28608211, 28612239, 28618343, 28620697, 28621543, 28621781, 28622202
28625580, 28625862, 28625873, 28627033, 28628592, 28630381, 28632796
28632799, 28636532, 28639299, 28640772, 28642469, 28642551, 28642899
28643583, 28643654, 28643718, 28644549, 28645570, 28646200, 28646939
28647544, 28649388, 28651078, 28651637, 28652776, 28655209, 28657026
28658263, 28659098, 28661333, 28661362, 28663289, 28663782, 28670402
28672124, 28672457, 28673945, 28674263, 28676706, 28681153, 28682182
28682796, 28689483, 28690694, 28692103, 28692275, 28692282, 28693954
28694526, 28694639, 28694872, 28694877, 28696373, 28697526, 28698087
28699321, 28700945, 28703812, 28704412, 28705231, 28707931, 28708400
28708585, 28709063, 28709412, 28710385, 28710469, 28710663, 28710734
28714461, 28714720, 28715655, 28715727, 28717406, 28718302, 28718469
28719348, 28720204, 28720418, 28721497, 28722229, 28729900, 28730079
28730253, 28734355, 28734910, 28740708, 28740799, 28740863, 28741374
28742555, 28745367, 28747846, 28749853, 28751498, 28752923, 28755011
28755084, 28755309, 28755846, 28757960, 28758722, 28760206, 28760662
28763291, 28765983, 28767240, 28769456, 28770865, 28771022, 28771947
28772390, 28772816, 28774416, 28776431, 28776811, 28777073, 28777214
28777478, 28778754, 28781599, 28781754, 28785273, 28785321, 28785531
28788272, 28789531, 28789533, 28791576, 28791852, 28793062, 28794230
28795452, 28795551, 28795563, 28795734, 28800508, 28802066, 28802734
28804517, 28805242, 28806517, 28807247, 28808314, 28808652, 28808656
28810381, 28811560, 28811592, 28813317, 28813931, 28815123, 28815355
28815557, 28816871, 28817449, 28818063, 28819640, 28820669, 28821847
28824482, 28826113, 28827682, 28828390, 28831971, 28833912, 28835937
28836716, 28837979, 28838385, 28839869, 28842408, 28844656, 28844738
28845346, 28846759, 28847541, 28847572, 28849494, 28849776, 28850084

28851458, 28851467, 28852325, 28852334, 28854004, 28854212, 28854733
28855520, 28855922, 28857364, 28857552, 28861861, 28862532, 28863263
28863432, 28863487, 28865544, 28865569, 28867698, 28867992, 28869215
28870496, 28871040, 28872645, 28872829, 28873575, 28874416, 28875089
28876253, 28876639, 28876926, 28877252, 28878865, 28880218, 28880864
28881191, 28881848, 28882146, 28882751, 28882784, 28884931, 28887305
28888083, 28888327, 28889389, 28889730, 28891867, 28891941, 28892794
28896556, 28897123, 28897512, 28898967, 28899663, 28900506, 28901126
28902135, 28904380, 28905312, 28905390, 28905457, 28905615, 28907196
28909769, 28909992, 28910498, 28910586, 28911140, 28912691, 28914144
28915561, 28917080, 28918429, 28919145, 28921844, 28922227, 28922456
28922485, 28922532, 28922608, 28922767, 28925250, 28925460, 28925634
28925880, 28927452, 28928462, 28930944, 28932914, 28933079, 28933158
28935293, 28935956, 28936114, 28937717, 28938167, 28938422, 28938698
28940179, 28940281, 28940472, 28941901, 28942118, 28942455, 28942694
28945421, 28945994, 28946233, 28946574, 28948554, 28949888, 28950868
28951332, 28951493, 28951533, 28952168, 28954762, 28955606, 28955883
28956145, 28956908, 28957260, 28957292, 28957723, 28958088, 28958094
28958590, 28959493, 28960863, 28962271, 28962775, 28963036, 28965084
28965095, 28965231, 28965376, 28966444, 28968211, 28968779, 28970122
28971177, 28974083, 28974902, 28974999, 28977322, 28978664, 28979289
28980448, 28980910, 28981871, 28983095, 28983486, 28984313, 28985114
28985272, 28985362, 28985478, 28986207, 28986231, 28986257, 28986326
28986481, 28986696, 28988482, 28988864, 28989306, 28990681, 28993295
28993353, 28994307, 28994542, 28994721, 28994783, 28995287, 28996376
28998369, 28999046, 29000000, 29001305, 29001888, 29002273, 29002488
29002784, 29002927, 29003207, 29003407, 29003617, 29003738, 29004934
29005748, 29006318, 29006621, 29007321, 29007353, 29007775, 29008035
29008669, 29009513, 29010126, 29010517, 29011936, 29012609, 29013475
29013832, 29014076, 29014385, 29015118, 29015273, 29016294, 29017265
29018655, 29018680, 29019121, 29020147, 29020271, 29020423, 29021063
29021352, 29022986, 29024028, 29024054, 29024448, 29024552, 29024732
29024795, 29024876, 29026154, 29026582, 29026606, 29027456, 29027694
29027914, 29027933, 29027940, 29030184, 29030927, 29031575, 29031600
29032234, 29032276, 29032457, 29032607, 29033052, 29033145, 29033164
29033200, 29033280, 29033655, 29034331, 29034587, 29036278, 29037290
29038528, 29038728, 29038730, 29039089, 29039510, 29040032, 29040739
29041739, 29041775, 29043554, 29043651, 29043725, 29044086, 29044763
29044954, 29046482, 29047127, 29047850, 29048178, 29048289, 29048498
29048605, 29048728, 29048792, 29048858, 29049014, 29049673, 29050357
29050560, 29050765, 29050886, 29051263, 29051702, 29051953, 29052726
29052850, 29053783, 29053902, 29055644, 29056024, 29056270, 29056560
29056767, 29056894, 29058476, 29059011, 29060216, 29061016, 29061959
29062692, 29062848, 29062860, 29062868, 29110526, 29110783, 29110790

29110797, 29110802, 29110805, 29111598, 29111631, 29112455, 29113282
29113305, 29115794, 29115857, 29116779, 29117337, 29117526, 29117642
29118543, 29119077, 29119733, 29120223, 29122224, 29122254, 29122367
29123297, 29123324, 29123432, 29123444, 29123482, 29124104, 29124368
29125036, 29125374, 29125380, 29125708, 29125786, 29126345, 29127957
29128693, 29128935, 29129450, 29129476, 29129497, 29129691, 29129712
29130219, 29131539, 29131772, 29132456, 29132869, 29132938, 29133470
29134447, 29135383, 29135649, 29136111, 29138641, 29139070, 29139727
29139761, 29139780, 29139956, 29141316, 29141341, 29141685, 29141886
29142609, 29142667, 29143516, 29144995, 29145214, 29145730, 29146077
29146157, 29146810, 29147849, 29148799, 29149170, 29149829, 29150338
29151520, 29152357, 29152603, 29152752, 29154057, 29154631, 29154636
29154725, 29154829, 29155099, 29155208, 29157051, 29157389, 29158139
29158680, 29158899, 29158990, 29159216, 29159661, 29159909, 29159936
29160174, 29160462, 29160824, 29161597, 29161923, 29162095, 29162749
29163073, 29163156, 29163415, 29163437, 29163524, 29163567, 29164376
29164446, 29165682, 29167111, 29167342, 29167374, 29167940, 29168137
29168219, 29168433, 29169073, 29169215, 29169540, 29169739, 29170232
29170717, 29171683, 29171942, 29172618, 29172826, 29173140, 29173373
29173618, 29173817, 29174004, 29174753, 29175638, 29175765, 29175829
29176318, 29177466, 29177543, 29177886, 29178385, 29179097, 29180313
29180455, 29180559, 29180721, 29180893, 29181078, 29181153, 29181231
29181568, 29181620, 29181743, 29181923, 29182019, 29182517, 29182535
29182901, 29182920, 29183298, 29183912, 29184297, 29184666, 29185193
29186091, 29186456, 29186605, 29188255, 29189302, 29189307, 29189889
29190235, 29190474, 29190663, 29190740, 29191541, 29191827, 29192419
29192468, 29192685, 29193207, 29193681, 29194205, 29194367, 29194493
29194827, 29194981, 29195279, 29195337, 29195758, 29196151, 29196725
29198092, 29198913, 29199163, 29199635, 29199733, 29200316, 29200700
29201143, 29201494, 29201539, 29201695, 29201787, 29202104, 29202461
29202850, 29203041, 29203122, 29203166, 29203227, 29203425, 29203443
29203604, 29205281, 29205323, 29205419, 29205463, 29205767, 29205918
29206109, 29206605, 29206631, 29207073, 29208260, 29208732, 29209545
29210455, 29210577, 29210610, 29210624, 29210683, 29211457, 29211724
29211895, 29212012, 29212433, 29212611, 29213320, 29213351, 29213613
29213641, 29213775, 29213850, 29213879, 29213893, 29214561, 29214960
29215658, 29216312, 29216723, 29216746, 29216984, 29217294, 29217472
29217828, 29217848, 29217856, 29218570, 29219205, 29219273, 29219627
29220079, 29221248, 29221745, 29221891, 29221942, 29222031, 29222534
29222784, 29222892, 29223110, 29223833, 29223859, 29223967, 29224065
29224294, 29224605, 29224710, 29225076, 29225168, 29225758, 29225861
29227602, 29228869, 29229164, 29229754, 29229839, 29229844, 29229955
29230252, 29230565, 29231133, 29232117, 29232154, 29232449, 29232533
29232653, 29233415, 29233810, 29233953, 29234123, 29235934, 29236573

29237538, 29237575, 29237744, 29240307, 29240668, 29240759, 29241345
29241651, 29241856, 29242017, 29242561, 29242884, 29242906, 29243749
29243958, 29244495, 29244766, 29244968, 29245063, 29245137, 29245160
29246163, 29246337, 29247183, 29247415, 29247712, 29247906, 29248012
29248495, 29248552, 29248723, 29248835, 29248858, 29249289, 29249412
29249583, 29249991, 29250059, 29250317, 29251259, 29251564, 29252218
29252510, 29252790, 29253184, 29253871, 29254031, 29254177, 29254623
29254930, 29255178, 29255273, 29255431, 29255435, 29255616, 29255705
29255718, 29255973, 29256279, 29256426, 29259119, 29259320, 29260224
29260407, 29260452, 29260956, 29261547, 29261548, 29261695, 29261906
29262143, 29262512, 29262887, 29265446, 29265448, 29265780, 29266248
29266899, 29267292, 29268412, 29269171, 29269228, 29269825, 29270585
29271019, 29273168, 29273360, 29273539, 29273570, 29273735, 29273812
29273847, 29274428, 29274564, 29274623, 29274627, 29275461, 29276272
29277317, 29278218, 29278684, 29279658, 29279751, 29279854, 29281112
29281527, 29281691, 29281796, 29282090, 29282233, 29282666, 29282898
29285197, 29285453, 29285503, 29285621, 29285788, 29285956, 29286037
29286220, 29286229, 29287130, 29287705, 29290110, 29290235, 29292232
29292253, 29292378, 29292837, 29293072, 29293574, 29293806, 29294382
29294753, 29296257, 29297863, 29297915, 29298220, 29299049, 29299082
29299830, 29299844, 29301139, 29301463, 29301566, 29302565, 29302614
29302963, 29303712, 29303918, 29304314, 29304640, 29304692, 29304781
29304853, 29305093, 29306226, 29306478, 29306713, 29306790, 29307090
29307109, 29307638, 29309698, 29311336, 29311528, 29311588, 29311927
29312310, 29312672, 29312734, 29312753, 29312889, 29313347, 29313417
29313525, 29314539, 29314636, 29314867, 29314949, 29317756, 29318410
29319441, 29319558, 29320900, 29321489, 29321689, 29323946, 29323999
29324568, 29324735, 29325087, 29325105, 29325257, 29325347, 29325356
29325497, 29325765, 29325993, 29326233, 29327044, 29327892, 29327972
29328305, 29329042, 29329087, 29329675, 29329807, 29329848, 29330361
29330791, 29331066, 29331209, 29331380, 29331493, 29332292, 29332395
29332763, 29332771, 29332966, 29333500, 29336843, 29336899, 29337294
29337310, 29337742, 29338315, 29338348, 29338453, 29338780, 29338913
29339101, 29339155, 29339299, 29339452, 29340333, 29341209, 29341782
29342099, 29343086, 29343156, 29343861, 29344541, 29345382, 29345937
29346057, 29346138, 29346211, 29346943, 29347620, 29348176, 29348358
29350052, 29350712, 29350762, 29350868, 29351044, 29351386, 29351662
29351708, 29351716, 29351735, 29351749, 29351771, 29351786, 29352298
29352724, 29352867, 29352947, 29353271, 29353389, 29353432, 29353718
29353821, 29353960, 29355654, 29355913, 29356547, 29356634, 29356698
29356704, 29356711, 29356752, 29356782, 29357424, 29357821, 29358509
29358828, 29360252, 29360285, 29360467, 29360672, 29360775, 29360911
29360950, 29361319, 29361472, 29361801, 29362596, 29363090, 29363151
29364171, 29364177, 29366406, 29366818, 29366940, 29367019, 29367561

29367971, 29368253, 29368310, 29368725, 29372069, 29372541, 29372562
29373418, 29373588, 29374179, 29374604, 29374627, 29375355, 29375941
29375984, 29376346, 29377804, 29377986, 29378029, 29378287, 29378834
29378913, 29379299, 29379381, 29379552, 29379750, 29379978, 29380527
29381000, 29382296, 29382641, 29382784, 29382815, 29383695, 29384740
29384781, 29384854, 29384864, 29384960, 29385339, 29385429, 29385652
29385774, 29386125, 29386502, 29386557, 29386635, 29386660, 29386835
29387073, 29387274, 29387310, 29387329, 29387337, 29388020, 29388072
29388094, 29388524, 29388830, 29389408, 29389889, 29390011, 29390435
29390501, 29390785, 29391030, 29391237, 29391301, 29391438, 29391849
29391925, 29392554, 29392966, 29393291, 29393649, 29394014, 29394140
29394749, 29394761, 29395657, 29396481, 29397841, 29397954, 29397996
29398192, 29398488, 29398863, 29399046, 29399100, 29399121, 29399336
29399938, 29399959, 29402110, 29402131, 29403307, 29404425, 29404483
29405012, 29405462, 29405651, 29405996, 29407488, 29407637, 29407804
29407932, 29408853, 29409149, 29409455, 29410311, 29410834, 29411037
29411427, 29411469, 29411931, 29412066, 29412269, 29413205, 29413360
29413382, 29413517, 29413544, 29413634, 29413956, 29415493, 29415774
29416339, 29416688, 29416700, 29417084, 29417113, 29417173, 29417719
29417884, 29418165, 29418341, 29420254, 29420834, 29421059, 29423003
29423016, 29423156, 29423227, 29423491, 29423826, 29424094, 29424999
29426241, 29426320, 29426521, 29428230, 29429017, 29429087, 29429264
29429336, 29429466, 29429566, 29429895, 29430524, 29430866, 29431192
29431402, 29431485, 29431985, 29432176, 29434301, 29434777, 29434869
29435474, 29435652, 29435966, 29436454, 29436514, 29436522, 29436727
29437029, 29437379, 29437594, 29437702, 29437712, 29438150, 29438277
29438736, 29439522, 29440651, 29441196, 29442400, 29442936, 29443187
29443250, 29443559, 29444072, 29444275, 29444282, 29444524, 29444583
29444602, 29444906, 29445548, 29445707, 29446319, 29446669, 29447460
29448498, 29449477, 29449845, 29449852, 29450162, 29450193, 29450273
29450421, 29450812, 29450936, 29451085, 29451224, 29451386, 29451660
29452251, 29452576, 29452736, 29452739, 29452809, 29452813, 29452864
29452936, 29452953, 29452973, 29452977, 29453104, 29453105, 29453109
29453681, 29453682, 29454450, 29454467, 29454468, 29454469, 29454470
29454471, 29454978, 29455424, 29455773, 29456538, 29456714, 29457312
29457319, 29457370, 29457502, 29457807, 29457978, 29458132, 29460252
29461420, 29461791, 29461971, 29462594, 29462767, 29462957, 29463047
29463528, 29463553, 29463798, 29464616, 29464779, 29465047, 29465177
29466674, 29466707, 29467622, 29469563, 29469565, 29470059, 29470205
29470291, 29470636, 29470729, 29470814, 29470880, 29471633, 29471832
29471857, 29471860, 29472170, 29472172, 29472176, 29472204, 29472235
29472319, 29472402, 29472404, 29472405, 29472408, 29472411, 29472446
29472618, 29473708, 29474348, 29475386, 29476473, 29476702, 29477015
29481584, 29482021, 29483452, 29483532, 29483626, 29483672, 29483685

29483712, 29483723, 29483771, 29485099, 29485731, 29485785, 29485877
29486181, 29486848, 29487150, 29487189, 29487407, 29488091, 29488894
29488996, 29489436, 29489546, 29490032, 29490256, 29491784, 29492127
29492939, 29493122, 29493821, 29494101, 29494245, 29494788, 29494934
29495057, 29495146, 29495171, 29495684, 29496977, 29497053, 29497311
29497588, 29497696, 29497778, 29498198, 29499077, 29500257, 29500826
29500963, 29501218, 29502561, 29503543, 29503631, 29503827, 29504103
29504492, 29504682, 29505225, 29505589, 29505668, 29506942, 29507270
29507616, 29508681, 29508751, 29508998, 29509777, 29509975, 29510278
29511064, 29511611, 29511771, 29511980, 29512125, 29512773, 29512890
29514284, 29514479, 29515134, 29515240, 29515476, 29515534, 29515766
29515834, 29516300, 29516452, 29516727, 29516766, 29516943, 29517168
29517443, 29517883, 29518604, 29518767, 29519131, 29521187, 29521688
29521748, 29521862, 29522358, 29522561, 29522662, 29523055, 29523216
29523511, 29524043, 29524599, 29524985, 29525366, 29525467, 29525886
29526966, 29527595, 29527610, 29528184, 29528368, 29529147, 29529436
29530414, 29530440, 29530515, 29530812, 29530909, 29531654, 29531836
29532112, 29532532, 29534218, 29536342, 29536445, 29536794, 29537829
29538631, 29539027, 29539413, 29540327, 29540831, 29540862, 29541517
29541742, 29541769, 29541973, 29542084, 29542449, 29542474, 29542580
29542643, 29543034, 29543956, 29544552, 29546817, 29547010, 29547867
29548413, 29548427, 29548592, 29548687, 29548722, 29549040, 29549071
29549104, 29549154, 29549730, 29550530, 29552402, 29552773, 29553141
29554092, 29554351, 29554554, 29554997, 29555105, 29555239, 29557144
29557261, 29557336, 29557556, 29558238, 29558452, 29558926, 29558975
29559187, 29559395, 29559446, 29559908, 29559981, 29560019, 29564592
29564593, 29565611, 29579919, 29580394, 29580983, 29581460, 29581771
29583018, 29584261, 29584693, 29586143, 29587299, 29587488, 29587720
29587765, 29588580, 29588732, 29589544, 29590666, 29591311, 29591343
29591641, 29591661, 29592011, 29592215, 29592433, 29592595, 29592946
29593820, 29597158, 29597536, 29597716, 29597754, 29598039, 29598040
29598046, 29598226, 29598233, 29598338, 29598873, 29598981, 29599008
29599243, 29599300, 29599552, 29601461, 29602831, 29603460, 29603884
29604002, 29604257, 29606261, 29607136, 29607797, 29608000, 29608023
29608888, 29609434, 29609468, 29609603, 29610506, 29611020, 29611991
29613733, 29614206, 29614931, 29614987, 29615824, 29616244, 29616414
29617414, 29618074, 29618190, 29620042, 29620564, 29622936, 29623323
29623592, 29624124, 29624408, 29625065, 29625804, 29625827, 29625876
29626154, 29626732, 29628200, 29628647, 29629430, 29629650, 29629681
29629745, 29630221, 29631749, 29632095, 29632265, 29632611, 29632751
29633697, 29633753, 29633936, 29634643, 29635427, 29635717, 29635990
29637362, 29637526, 29637560, 29638285, 29638928, 29641373, 29641736
29642451, 29643721, 29644426, 29644464, 29645167, 29645349, 29646315
29647176, 29647770, 29648928, 29649694, 29651183, 29651517, 29651520

29652809, 29653132, 29653246, 29655164, 29655416, 29655668, 29655855
29655895, 29656400, 29656819, 29656843, 29657399, 29657422, 29657744
29657960, 29657973, 29658056, 29661028, 29661065, 29661722, 29663191
29663368, 29663494, 29663601, 29663813, 29664087, 29664161, 29665168
29665940, 29666451, 29667527, 29667994, 29668005, 29668253, 29669241
29669413, 29670713, 29670782, 29671363, 29672507, 29675446, 29676089
29676921, 29677051, 29677173, 29677733, 29677927, 29678217, 29679856
29680700, 29681987, 29683039, 29683189, 29683211, 29683643, 29684518
29685137, 29685276, 29687214, 29687220, 29687459, 29687718, 29687727
29687763, 29688867, 29689145, 29689255, 29690795, 29690806, 29692115
29692694, 29693847, 29694869, 29695425, 29695821, 29695841, 29695964
29695987, 29696242, 29696310, 29697928, 29700125, 29700460, 29700770
29701425, 29701720, 29701755, 29701937, 29703932, 29704426, 29705793
29705928, 29706141, 29706160, 29707099, 29707493, 29707582, 29707896
29708324, 29708353, 29708876, 29708915, 29710188, 29710858, 29713810
29715220, 29715647, 29715703, 29716029, 29716194, 29716227, 29716491
29716602, 29716871, 29717659, 29717901, 29718198, 29719146, 29720133
29720373, 29721418, 29721576, 29722026, 29722092, 29722167, 29722389
29723113, 29724497, 29724658, 29725115, 29725421, 29725425, 29725476
29725781, 29726695, 29737941, 29738374, 29738400, 29739576, 29741319
29741976, 29742223, 29742926, 29743448, 29744225, 29744400, 29744637
29745288, 29745624, 29746003, 29746962, 29747493, 29747648, 29747653
29748285, 29748325, 29748336, 29748513, 29749469, 29749471, 29750673
29751094, 29753244, 29754196, 29754640, 29754951, 29755821, 29756274
29756444, 29757099, 29757264, 29757651, 29757687, 29757814, 29758203
29758217, 29758350, 29758661, 29761678, 29761837, 29761911, 29763158
29764644, 29765035, 29765219, 29765347, 29765393, 29765493, 29766207
29766435, 29766503, 29766679, 29768487, 29768899, 29769549, 29769695
29769901, 29770750, 29771032, 29771242, 29772514, 29772761, 29773185
29773197, 29773205, 29773459, 29773633, 29773842, 29774362, 29775393
29775473, 29779196, 29779368, 29779793, 29779901, 29780140, 29780459
29780507, 29780633, 29782211, 29782284, 29782501, 29782823, 29782866
29783142, 29784106, 29785169, 29785239, 29785251, 29785311, 29785544
29785550, 29785831, 29787292, 29787766, 29788820, 29789911, 29791152
29791880, 29791916, 29792213, 29792433, 29793141, 29793151, 29793318
29794174, 29794462, 29795712, 29795957, 29796335, 29796378, 29796916
29797209, 29797726, 29801164, 29802382, 29802695, 29803593, 29803638
29803948, 29804875, 29805368, 29805772, 29806390, 29806964, 29807964
29809792, 29809837, 29809997, 29810012, 29810013, 29811616, 29811720
29812084, 29812166, 29812489, 29813503, 29813650, 29813671, 29814455
29814995, 29815341, 29815713, 29816887, 29817278, 29817547, 29817784
29818794, 29819753, 29820341, 29821130, 29821582, 29822714, 29825525
29827647, 29827792, 29827852, 29828644, 29829339, 29829453, 29830374
29831196, 29831404, 29831567, 29833406, 29833984, 29834506, 29836096

29836424, 29838337, 29838485, 29838740, 29838773, 29839481, 29839715
29840619, 29841267, 29841687, 29842369, 29843238, 29843277, 29843692
29843831, 29844131, 29844226, 29844275, 29845449, 29845530, 29845691
29846126, 29846525, 29846645, 29846688, 29847627, 29848084, 29848849
29848986, 29849100, 29849139, 29850083, 29850552, 29850566, 29850930
29851020, 29851308, 29851401, 29851474, 29851733, 29853201, 29853485
29856420, 29856506, 29856859, 29856890, 29858121, 29858376, 29858420
29858929, 29859068, 29860022, 29860028, 29860994, 29861075, 29864203
29864261, 29865188, 29865590, 29865658, 29867728, 29868639, 29868736
29869052, 29869086, 29869149, 29869404, 29869857, 29869877, 29869887
29869906, 29870065, 29870533, 29871098, 29871312, 29871360, 29872401
29872720, 29872937, 29872983, 29873206, 29873665, 29873751, 29874090
29874761, 29875200, 29875459, 29875565, 29875919, 29876358, 29876989
29877608, 29878076, 29879723, 29881050, 29881478, 29881575, 29881643
29881839, 29882427, 29882454, 29882729, 29883836, 29884958, 29885182
29885781, 29885890, 29886809, 29887045, 29887111, 29887840, 29888621
29889184, 29889358, 29890740, 29891075, 29891383, 29891533, 29891853
29891857, 29891916, 29892388, 29892604, 29892634, 29892973, 29892982
29893132, 29893197, 29893287, 29894021, 29894511, 29896510, 29897418
29897720, 29897863, 29899384, 29900186, 29900203, 29900824, 29901021
29901025, 29901419, 29901961, 29902299, 29902327, 29902330, 29902659
29903190, 29903299, 29903357, 29903454, 29904002, 29906678, 29907870
29907942, 29908389, 29908639, 29908777, 29909658, 29910218, 29910402
29912135, 29912286, 29913805, 29913934, 29913966, 29914449, 29914544
29915182, 29915217, 29915848, 29916198, 29916975, 29919782, 29919789
29920025, 29920376, 29920804, 29921214, 29921318, 29921559, 29922225
29922435, 29922461, 29923452, 29924147, 29924181, 29924479, 29925177
29926466, 29927360, 29927756, 29928040, 29928210, 29928340, 29928427
29928564, 29930457, 29931230, 29931956, 29932202, 29932310, 29932430
29932780, 29932953, 29933718, 29934048, 29934052, 29934158, 29934557
29935685, 29936841, 29937565, 29937655, 29937956, 29938063, 29938225
29939075, 29939400, 29939795, 29940373, 29941062, 29942096, 29942275
29942554, 29943670, 29943879, 29944035, 29944159, 29944660, 29944963
29945645, 29946101, 29946388, 29947145, 29947242, 29947428, 29948154
29948165, 29950018, 29950220, 29951620, 29951759, 29952700, 29955625
29956016, 29956222, 29957412, 29957493, 29958078, 29958925, 29960325
29960884, 29961080, 29961353, 29961360, 29961609, 29961847, 29962160
29962248, 29962590, 29962834, 29962927, 29962939, 29965052, 29965207
29965603, 29965888, 29966768, 29966778, 29967223, 29967386, 29967911
29967980, 29968085, 29968703, 29969557, 29969985, 29970081, 29970261
29970273, 29970298, 29970587, 29970861, 29971027, 29971481, 29971888
29971936, 29971951, 29972134, 29972176, 29973012, 29989783, 29989845
29990779, 29991257, 29992299, 29993717, 29997326, 29997553, 29997937
29997959, 30000518, 30000664, 30001105, 30001331, 30003187, 30003356

30004660, 30004856, 30006123, 30006159, 30006280, 30006411, 30006472
30006705, 30006985, 30007450, 30007536, 30007797, 30008035, 30008125
30008198, 30008214, 30008456, 30009528, 30009710, 30010995, 30012181
30012235, 30012737, 30013243, 30013535, 30014200, 30015070, 30017836
30018017, 30018126, 30018903, 30019864, 30021830, 30024618, 30025814
30026016, 30026572, 30026596, 30027614, 30027638, 30027649, 30028182
30028599, 30028649, 30029519, 30029806, 30031027, 30031613, 30032233
30032376, 30032484, 30033040, 30033547, 30034456, 30035444, 30035598
30036258, 30038392, 30038576, 30039796, 30039800, 30039959, 30040157
30040511, 30041501, 30041514, 30042490, 30043398, 30043610, 30043930
30044108, 30044507, 30045242, 30045273, 30045389, 30045484, 30045983
30046497, 30047510, 30047531, 30047702, 30047765, 30047931, 30048688
30049966, 30051176, 30051783, 30051804, 30052740, 30052928, 30053036
30053501, 30053748, 30054980, 30055640, 30056058, 30057718, 30057799
30058149, 30058453, 30059106, 30059109, 30059821, 30060267, 30060330
30062364, 30062429, 30062736, 30062819, 30064268, 30066352, 30067565
30068101, 30068384, 30068792, 30068871, 30070064, 30070506, 30071446
30072018, 30072038, 30072905, 30073314, 30073422, 30073744, 30074250
30074296, 30074349, 30074469, 30074472, 30074820, 30075037, 30076058
30076197, 30076253, 30076604, 30078586, 30078675, 30078934, 30079495
30079949, 30080111, 30080266, 30080297, 30080988, 30081055, 30081546
30081580, 30082145, 30082402, 30083100, 30083216, 30083488, 30083807
30084458, 30084606, 30084971, 30085897, 30086596, 30086992, 30087165
30087509, 30088229, 30088421, 30090568, 30092254, 30092280, 30092859
30094929, 30094948, 30095499, 30095591, 30095952, 30096138, 30096570
30097092, 30097115, 30098251, 30098719, 30099302, 30099420, 30099454
30099852, 30100354, 30101090, 30101186, 30101541, 30101847, 30102774
30103551, 30103553, 30104348, 30104378, 30104555, 30104722, 30104850
30105458, 30106748, 30106901, 30108012, 30109365, 30109839, 30110224
30110370, 30110518, 30114477, 30114489, 30114534, 30116085, 30116203
30116753, 30116854, 30117209, 30117220, 30117335, 30117469, 30117593
30118261, 30118279, 30120608, 30121009, 30122523, 30122583, 30123138
30124026, 30125765, 30126145, 30126470, 30127145, 30127522, 30127805
30127904, 30128047, 30128231, 30130240, 30131253, 30131286, 30131645
30132708, 30132989, 30133841, 30134103, 30134746, 30135396, 30135731
30135899, 30135942, 30136102, 30136346, 30137792, 30138600, 30138948
30139392, 30140411, 30140425, 30141240, 30142527, 30142802, 30142812
30142815, 30142907, 30143470, 30143593, 30145712, 30146593, 30146969
30147195, 30147307, 30147308, 30147473, 30147928, 30148343, 30148929
30148966, 30148999, 30149035, 30149658, 30150606, 30150710, 30151636
30153533, 30153552, 30153885, 30154633, 30155241, 30155320, 30155388
30155489, 30155814, 30155837, 30155999, 30156569, 30157526, 30158313
30159329, 30159488, 30159511, 30159536, 30159690, 30159752, 30159760
30160025, 30160625, 30161094, 30163243, 30164238, 30164714, 30165493

30165503, 30165876, 30165892, 30165897, 30166257, 30166352, 30166591
30167787, 30169254, 30169841, 30170104, 30172925, 30173113, 30173370
30173556, 30174102, 30174394, 30174401, 30175180, 30175291, 30175478
30175587, 30177597, 30178250, 30178839, 30178990, 30179012, 30179038
30179644, 30179894, 30180195, 30180208, 30180643, 30181756, 30182498
30183367, 30183696, 30183715, 30183920, 30184102, 30185852, 30186319
30186476, 30186706, 30187627, 30187866, 30188215, 30188631, 30189516
30189535, 30190090, 30191274, 30192691, 30192729, 30192853, 30193165
30193262, 30193505, 30193506, 30193584, 30193736, 30194612, 30194710
30194972, 30195667, 30195668, 30195684, 30195773, 30196195, 30196358
30196629, 30198239, 30198598, 30198861, 30198905, 30199890, 30200034
30200132, 30200237, 30200680, 30200758, 30202349, 30202388, 30202407
30203929, 30204042, 30204542, 30206220, 30206493, 30206675, 30207473
30207519, 30208327, 30208690, 30208723, 30209222, 30209736, 30210027
30210429, 30210753, 30210884, 30211567, 30213031, 30213540, 30213590
30214769, 30214826, 30215130, 30215302, 30215351, 30217206, 30217562
30217982, 30218044, 30218317, 30218956, 30219222, 30220932, 30221115
30221237, 30221298, 30222187, 30222512, 30222669, 30222975, 30223712
30223847, 30223990, 30224544, 30224650, 30224725, 30224868, 30224950
30225265, 30225439, 30225443, 30225718, 30225837, 30225844, 30226244
30227400, 30228422, 30228567, 30229030, 30229126, 30229683, 30230183
30232638, 30233105, 30233536, 30233934, 30234132, 30234227, 30235878
30235919, 30235979, 30236092, 30236399, 30236554, 30236746, 30236883
30236964, 30237477, 30237640, 30238211, 30238715, 30239480, 30240010
30240547, 30240858, 30240930, 30240972, 30241567, 30241807, 30241829
30241920, 30242120, 30242724, 30243216, 30243720, 30244340, 30244831
30246053, 30246179, 30247305, 30248520, 30248531, 30248564, 30249432
30249738, 30249927, 30251003, 30251130, 30251627, 30252005, 30252098
30252156, 30252458, 30252977, 30253035, 30253090, 30253608, 30253705
30253761, 30253835, 30254206, 30254525, 30254576, 30254726, 30255143
30255528, 30256542, 30257412, 30257908, 30259120, 30259469, 30260523
30260595, 30261244, 30262248, 30263013, 30263377, 30264405, 30265523
30265608, 30265615, 30265703, 30266791, 30267155, 30269428, 30269748
30270647, 30270744, 30271114, 30272329, 30273212, 30274090, 30274188
30274324, 30274662, 30275434, 30275548, 30275569, 30275578, 30275784
30276144, 30276243, 30277120, 30277451, 30277589, 30277648, 30277733
30277884, 30277887, 30278402, 30281428, 30281615, 30282501, 30282591
30282918, 30283296, 30283577, 30283579, 30283581, 30283832, 30283932
30284219, 30284369, 30284751, 30285026, 30285166, 30285251, 30285341
30285457, 30285540, 30285843, 30286961, 30288343, 30288491, 30289074
30289458, 30290185, 30290700, 30291536, 30292305, 30293345, 30293935
30294267, 30294465, 30294671, 30294865, 30295110, 30295137, 30295549
30295790, 30295808, 30297905, 30299367, 30299817, 30299934, 30300030
30300342, 30300363, 30300523, 30300538, 30304037, 30305163, 30305264

30305395, 30305568, 30305603, 30305880, 30306407, 30307814, 30307883
30308368, 30308578, 30308624, 30308772, 30308947, 30309098, 30309566
30309798, 30310195, 30311826, 30312094, 30312546, 30313749, 30313848
30313989, 30314079, 30314198, 30314837, 30316667, 30316897, 30317005
30317209, 30317386, 30317397, 30318638, 30318943, 30319080, 30319099
30320029, 30321076, 30321398, 30322980, 30323219, 30323658, 30323820
30323849, 30324059, 30324180, 30324466, 30324649, 30325407, 30325786
30326115, 30326882, 30327149, 30327581, 30327678, 30327810, 30328168
30328209, 30328690, 30329209, 30329737, 30329751, 30330123, 30331254
30331356, 30331759, 30332505, 30332893, 30333443, 30334484, 30334563
30335127, 30335832, 30335987, 30336032, 30336383, 30336530, 30336742
30336996, 30337245, 30338434, 30338591, 30339049, 30339103, 30339605
30340540, 30341713, 30342371, 30342878, 30343370, 30343750, 30344614
30345201, 30345432, 30345593, 30345809, 30345926, 30345950, 30346330
30346729, 30346847, 30346867, 30347215, 30347410, 30349714, 30350177
30350543, 30351059, 30352278, 30352532, 30352581, 30352623, 30352715
30353841, 30354034, 30355490, 30356060, 30356461, 30357463, 30357698
30357897, 30358416, 30359614, 30360383, 30360653, 30361070, 30361635
30362003, 30362850, 30363088, 30363193, 30363311, 30363658, 30363716
30364329, 30364481, 30364613, 30364835, 30365265, 30365745, 30367193
30368048, 30368482, 30368534, 30368668, 30368917, 30371264, 30371623
30371909, 30372081, 30372782, 30373419, 30373541, 30373550, 30374345
30374570, 30374739, 30375109, 30376986, 30377347, 30377692, 30377729
30379468, 30379537, 30380511, 30380907, 30381207, 30381525, 30381614
30382364, 30382646, 30382982, 30383286, 30384121, 30384152, 30387628
30387666, 30388341, 30388853, 30389229, 30389414, 30389507, 30389821
30390279, 30390382, 30390635, 30391272, 30391794, 30392011, 30392870
30392987, 30393110, 30393317, 30393653, 30393944, 30394509, 30394738
30394974, 30395132, 30396120, 30396328, 30396946, 30396974, 30397100
30398099, 30398251, 30398257, 30398422, 30398770, 30399906, 30402386
30403210, 30403284, 30403412, 30403763, 30403877, 30403881, 30403902
30403989, 30404117, 30404153, 30404357, 30404639, 30406227, 30406709
30408128, 30408443, 30408515, 30408808, 30408872, 30409207, 30409339
30409469, 30409472, 30409590, 30412188, 30412772, 30412863, 30412885
30412921, 30413137, 30413294, 30414491, 30414679, 30414714, 30414725
30416034, 30416603, 30417648, 30417732, 30418926, 30419024, 30419196
30419450, 30420105, 30420452, 30421009, 30421026, 30421204, 30421439
30421476, 30421706, 30422487, 30423135, 30423218, 30424347, 30430921
30431235, 30431274, 30431500, 30431504, 30431582, 30431698, 30431703
30431717, 30431867, 30432101, 30432470, 30433177, 30434793, 30436326
30436399, 30436406, 30437003, 30437149, 30438224, 30439985, 30440651
30440712, 30441277, 30441687, 30441959, 30442266, 30442749, 30442805
30442874, 30442884, 30443393, 30446436, 30446583, 30446820, 30447060
30447498, 30447589, 30447994, 30448182, 30448348, 30448355, 30448917

30449194, 30449837, 30450787, 30453442, 30454090, 30455427, 30457633
30457697, 30458080, 30458233, 30458568, 30458593, 30460095, 30460558
30460842, 30460922, 30461123, 30461458, 30462439, 30463938, 30464250
30464655, 30464667, 30466081, 30466214, 30469579, 30469777, 30470402
30470495, 30470947, 30472891, 30473634, 30474167, 30474386, 30474497
30474774, 30475041, 30475115, 30475813, 30476768, 30477588, 30477685
30477691, 30477767, 30479252, 30479647, 30479715, 30480591, 30480872
30481004, 30483065, 30483140, 30483217, 30483521, 30484042, 30484623
30484801, 30485255, 30486436, 30486896, 30487387, 30487697, 30489582
30490014, 30490578, 30490671, 30491456, 30492380, 30492786, 30493331
30493518, 30493656, 30494087, 30494259, 30494900, 30495035, 30495078
30495133, 30495483, 30496957, 30497057, 30497120, 30497765, 30498824
30500224, 30500297, 30500344, 30500582, 30501574, 30502029, 30502415
30503943, 30505029, 30505497, 30506794, 30506991, 30506996, 30507032
30507313, 30507505, 30508100, 30509112, 30509277, 30510347, 30510527
30510718, 30512690, 30513285, 30513353, 30513480, 30513848, 30515886
30516868, 30517214, 30517516, 30517635, 30518114, 30518349, 30518447
30518923, 30519188, 30520662, 30521788, 30522285, 30522998, 30523137
30523526, 30523538, 30523601, 30523750, 30524736, 30527198, 30527275
30528547, 30528637, 30528687, 30528704, 30528731, 30528935, 30529790
30529915, 30529940, 30530585, 30532811, 30533132, 30533472, 30533580
30534351, 30534549, 30534662, 30534827, 30535905, 30536237, 30537403
30537405, 30537533, 30537584, 30538141, 30538818, 30539519, 30539866
30540109, 30540407, 30544247, 30544595, 30544629, 30544752, 30545040
30545281, 30545556, 30549223, 30549255, 30549368, 30549637, 30549789
30549881, 30549883, 30551000, 30551123, 30554178, 30556326, 30556523
30556581, 30556807, 30557386, 30557803, 30558561, 30559129, 30559218
30559252, 30560365, 30560513, 30561404, 30561590, 30561737, 30564139
30564343, 30564898, 30565004, 30565595, 30565699, 30565805, 30566054
30567372, 30568514, 30568896, 30570083, 30571095, 30571306, 30572816
30573236, 30573703, 30575243, 30575697, 30576112, 30576393, 30576853
30577071, 30577591, 30578221, 30579051, 30580813, 30580887, 30581448
30582035, 30582221, 30582500, 30584767, 30585141, 30585407, 30586493
30587001, 30587089, 30588738, 30589914, 30591028, 30591475, 30592859
30593046, 30593104, 30593863, 30593899, 30594167, 30595114, 30595408
30595860, 30596024, 30596270, 30596320, 30596488, 30596694, 30598682
30598746, 30598919, 30599377, 30599405, 30599407, 30600173, 30600184
30600230, 30602230, 30602828, 30603211, 30605215, 30605676, 30606345
30606451, 30608583, 30609737, 30609799, 30610052, 30610097, 30610406
30610667, 30611527, 30611603, 30612199, 30613035, 30613937, 30613971
30614411, 30614497, 30615851, 30616406, 30616738, 30616776, 30617002
30617626, 30618056, 30618230, 30618406, 30619112, 30619138, 30619182
30619383, 30619414, 30619436, 30619525, 30619665, 30619728, 30619787
30620805, 30621255, 30621910, 30622393, 30622528, 30622755, 30623138

30623142, 30624243, 30624792, 30624864, 30624874, 30625121, 30626046
30628834, 30628899, 30629139, 30629643, 30629799, 30630172, 30630391
30630829, 30630930, 30631393, 30631523, 30633259, 30633395, 30633938
30634026, 30634548, 30634559, 30635183, 30635302, 30635326, 30635360
30637270, 30637319, 30637841, 30638712, 30639996, 30640436, 30641541
30641755, 30641900, 30642046, 30642124, 30644358, 30644403, 30644530
30644766, 30644889, 30645590, 30645896, 30645938, 30646077, 30647133
30649310, 30649360, 30649766, 30650297, 30650404, 30651231, 30651570
30651621, 30651674, 30652515, 30652595, 30652813, 30652853, 30654131
30654558, 30655504, 30655906, 30656839, 30657196, 30657365, 30657566
30657624, 30657706, 30657875, 30657906, 30657940, 30658421, 30658533
30658555, 30658702, 30659940, 30660412, 30661000, 30661939, 30662634
30662651, 30662668, 30662736, 30662803, 30663591, 30663646, 30664266
30665036, 30665399, 30665720, 30666902, 30668407, 30668754, 30669938
30670096, 30670328, 30670369, 30670584, 30671606, 30671720, 30671813
30671958, 30674373, 30674959, 30675651, 30676209, 30677633, 30679595
30679707, 30679771, 30679804, 30681085, 30681222, 30681462, 30681516
30681521, 30681697, 30681727, 30682289, 30684902, 30685163, 30686017
30686131, 30686736, 30686809, 30687047, 30689557, 30689988, 30690686
30691604, 30691731, 30691857, 30692462, 30692473, 30692760, 30693791
30694947, 30695670, 30696566, 30696821, 30698289, 30698310, 30699770
30702732, 30703610, 30704826, 30705448, 30706073, 30707740, 30708735
30710088, 30710506, 30710783, 30710807, 30710917, 30711370, 30711386
30712670, 30713133, 30714151, 30714715, 30716001, 30716863, 30718769
30718841, 30718862, 30719327, 30719419, 30720736, 30720844, 30722105
30722705, 30723671, 30724679, 30724881, 30726204, 30727629, 30727701
30727759, 30728196, 30729278, 30729604, 30729839, 30730026, 30732711
30733270, 30733563, 30734242, 30734362, 30734707, 30735091, 30735153
30735624, 30735736, 30736348, 30736718, 30737970, 30739013, 30739876
30740115, 30740250, 30740440, 30740444, 30740669, 30740997, 30741263
30747820, 30748411, 30748707, 30749181, 30749644, 30749722, 30750219
30750991, 30751171, 30751521, 30751527, 30751639, 30751968, 30753432
30755348, 30758836, 30758854, 30758943, 30759573, 30759585, 30760739
30761871, 30761878, 30763272, 30763305, 30763639, 30763754, 30763970
30764405, 30764663, 30764706, 30764976, 30765486, 30765995, 30767277
30767654, 30768636, 30769312, 30769454, 30770717, 30771009, 30772069
30773164, 30773696, 30773797, 30776416, 30776676, 30776929, 30777519
30777759, 30778855, 30779240, 30781032, 30781041, 30781461, 30781970
30782266, 30782300, 30782414, 30783395, 30783551, 30785101, 30786237
30786641, 30786655, 30787365, 30788973, 30789427, 30789904, 30789973
30790047, 30790441, 30796980, 30801050, 30801296, 30801510, 30803210
30804646, 30806757, 30806984, 30807723, 30807888, 30808109, 30808364
30808869, 30809087, 30809226, 30809267, 30810418, 30810680, 30810765
30812574, 30814266, 30814285, 30815204, 30815269, 30815495, 30815852

30815994, 30816760, 30816938, 30817822, 30819340, 30819629, 30819756
30820155, 30821297, 30822207, 30822502, 30822919, 30823744, 30825391
30825419, 30825656, 30826474, 30827849, 30828205, 30828350, 30829779
30829844, 30830555, 30832466, 30832775, 30833454, 30834068, 30834110
30834705, 30835184, 30835219, 30835853, 30836129, 30838605, 30839253
30839315, 30839451, 30839836, 30839961, 30840150, 30840791, 30840793
30841241, 30842277, 30843271, 30844395, 30844839, 30845806, 30846063
30846159, 30846263, 30846782, 30847442, 30847871, 30848028, 30848097
30848773, 30849278, 30851448, 30851951, 30852945, 30852954, 30855101
30856358, 30856923, 30857501, 30857721, 30858444, 30858810, 30858877
30858919, 30860741, 30860768, 30860803, 30861988, 30862285, 30863115
30864607, 30865346, 30865805, 30866141, 30866988, 30867685, 30868010
30868186, 30869131, 30870043, 30870248, 30870439, 30870513, 30871716
30871792, 30873527, 30874084, 30874270, 30874337, 30874660, 30876062
30876666, 30878110, 30879169, 30879708, 30880774, 30880913, 30881161
30881407, 30883715, 30883785, 30883877, 30886188, 30887199, 30887435
30887501, 30887777, 30887976, 30887989, 30889443, 30889607, 30889723
30890720, 30890752, 30890971, 30891760, 30891792, 30892319, 30893601
30894306, 30894554, 30895426, 30895577, 30896615, 30896620, 30896685
30898131, 30898366, 30898381, 30898748, 30898939, 30901889, 30902655
30903129, 30904672, 30905604, 30906274, 30906407, 30909329, 30909596
30909907, 30909918, 30910255, 30910264, 30910267, 30913399, 30914272
30914411, 30914674, 30915781, 30917976, 30919403, 30919587, 30919691
30919804, 30920082, 30920427, 30921136, 30921259, 30922450, 30922936
30922996, 30923514, 30923517, 30923597, 30923732, 30923940, 30924599
30925316, 30925419, 30925828, 30927440, 30927821, 30929206, 30930149
30930339, 30931068, 30931311, 30931981, 30932330, 30932674, 30932923
30933117, 30936251, 30936831, 30936942, 30937340, 30937391, 30937410
30938413, 30939307, 30939317, 30939934, 30940259, 30940382, 30940868
30940869, 30941056, 30942353, 30944643, 30945005, 30945772, 30946072
30946141, 30946595, 30946768, 30946843, 30946876, 30946896, 30947294
30948278, 30950326, 30950786, 30952104, 30952191, 30953157, 30953266
30953836, 30954062, 30954071, 30955702, 30956374, 30956571, 30956647
30957739, 30958493, 30960314, 30960356, 30960590, 30960736, 30961566
30961824, 30962322, 30963567, 30964068, 30964194, 30965111, 30965554
30965649, 30966205, 30966496, 30967084, 30968737, 30968781, 30970518
30972817, 30972841, 30972887, 30972947, 30972951, 30972959, 30972966
30973085, 30973113, 30973127, 30973137, 30973143, 30973197, 30973698
30973715, 30973877, 30974207, 30974512, 30974813, 30976603, 30977294
30977411, 30978313, 30978554, 30978747, 30978868, 30979701, 30980023
30980115, 30980280, 30980317, 30980733, 30981182, 30981240, 30983064
30985027, 30985906, 30986176, 30986423, 30987088, 30987105, 30987243
30987717, 30987724, 30988444, 30989951, 30990034, 30992120, 30992330
30992477, 30992597, 30992670, 30993198, 30993518, 30993604, 30994996

30996945, 30996991, 30997375, 30997584, 30997960, 30998035, 30998475
30998662, 30998759, 30998847, 30999219, 31000312, 31001017, 31001455
31001490, 31001859, 31002223, 31002346, 31002923, 31003137, 31003659
31003759, 31004077, 31004717, 31004719, 31004844, 31004871, 31005003
31006011, 31006259, 31006792, 31006953, 31008240, 31008858, 31008907
31009032, 31009271, 31009545, 31009590, 31009680, 31010218, 31010554
31010976, 31011361, 31011690, 31013127, 31013531, 31014323, 31015330
31016413, 31018218, 31019249, 31019407, 31021068, 31021109, 31021157
31021324, 31021542, 31021780, 31022858, 31025267, 31025520, 31025531
31025859, 31026220, 31026591, 31026860, 31026870, 31027747, 31028883
31028986, 31029936, 31030898, 31031240, 31031955, 31032463, 31032725
31032904, 31032913, 31034794, 31035287, 31035916, 31037421, 31038220
31038447, 31038817, 31039337, 31039618, 31039627, 31039928, 31040847
31041540, 31042208, 31042337, 31043483, 31043630, 31043695, 31043747
31043942, 31044145, 31044460, 31044504, 31044951, 31045929, 31046188
31046619, 31046830, 31047022, 31047169, 31047333, 31047697, 31047740
31048025, 31048741, 31049215, 31049995, 31050103, 31050433, 31050557
31051056, 31051075, 31052735, 31052809, 31053669, 31054031, 31054177
31054874, 31055142, 31056909, 31057402, 31058548, 31061482, 31061504
31062010, 31062645, 31063315, 31063380, 31063769, 31064025, 31065701
31065838, 31066082, 31066250, 31066265, 31066554, 31067456, 31067483
31067892, 31067913, 31069059, 31069872, 31070528, 31071080, 31073424
31073440, 31073586, 31074032, 31074875, 31075323, 31075960, 31077117
31077365, 31078391, 31078757, 31079204, 31080474, 31081558, 31082719
31082726, 31084650, 31084778, 31084921, 31086467, 31086869, 31086954
31087361, 31087679, 31088115, 31088341, 31089259, 31089270, 31090262
31091402, 31091469, 31091868, 31092129, 31092233, 31092581, 31092921
31093712, 31094183, 31094228, 31094249, 31094374, 31094625, 31094688
31095972, 31096846, 31097760, 31097961, 31098661, 31098870, 31099312
31099926, 31099981, 31100172, 31101386, 31101840, 31103065, 31103804
31104809, 31105225, 31105733, 31105896, 31106140, 31106577, 31107577
31108603, 31108644, 31109506, 31109924, 31110021, 31110225, 31110887
31112088, 31112209, 31112530, 31112972, 31113089, 31113177, 31113249
31113426, 31113682, 31114116, 31114265, 31114671, 31115201, 31115502
31115653, 31117282, 31118486, 31118702, 31118809, 31118844, 31119057
31119368, 31119467, 31119846, 31120361, 31121222, 31122876, 31123976
31124213, 31124363, 31124821, 31124914, 31125773, 31125849, 31125918
31126053, 31126058, 31126362, 31127043, 31127457, 31127961, 31127968
31127969, 31128086, 31129851, 31130156, 31132732, 31133839, 31134430
31137765, 31138106, 31138371, 31139643, 31140940, 31141792, 31142377
31142749, 31142815, 31143146, 31143415, 31143870, 31145389, 31145403
31145525, 31145688, 31145804, 31146338, 31146727, 31151483, 31153120
31153485, 31154794, 31155085, 31155305, 31155634, 31156301, 31156383
31156767, 31156898, 31158151, 31158341, 31158380, 31159382, 31161861

31162457, 31162711, 31162915, 31163379, 31163498, 31163534, 31165038
31165577, 31165722, 31166083, 31166801, 31168440, 31169366, 31170082
31171096, 31171147, 31171631, 31171828, 31172207, 31172233, 31172642
31173887, 31174836, 31175365, 31176451, 31176502, 31177193, 31177204
31177221, 31178051, 31178058, 31178103, 31180519, 31181375, 31181380
31181989, 31182159, 31182451, 31182756, 31182793, 31183413, 31184230
31184370, 31185224, 31188038, 31188398, 31189749, 31190624, 31191224
31192039, 31192261, 31192739, 31193292, 31193511, 31193695, 31193745
31193936, 31194015, 31194049, 31194264, 31195090, 31195430, 31195441
31195600, 31195838, 31196164, 31196272, 31196310, 31196395, 31196812
31197969, 31200057, 31200845, 31201001, 31201366, 31201611, 31202536
31204002, 31204412, 31204878, 31205834, 31206070, 31206201, 31207446
31208287, 31209735, 31211220, 31212282, 31213034, 31214119, 31214928
31215422, 31215438, 31215548, 31215854, 31216823, 31216995, 31217946
31218837, 31218904, 31219047, 31219975, 31220188, 31220549, 31220837
31220850, 31220881, 31220912, 31221251, 31221454, 31222103, 31222780
31223382, 31224819, 31225538, 31226448, 31226534, 31228670, 31230250
31230775, 31233170, 31233235, 31234765, 31234790, 31234983, 31235797
31236624, 31240626, 31240864, 31241124, 31242319, 31242976, 31243859
31244165, 31244968, 31245856, 31246583, 31247532, 31247838, 31248496
31249008, 31249406, 31249689, 31249696, 31250120, 31250152, 31250221
31251325, 31251489, 31252659, 31253451, 31254243, 31254297, 31254535
31254929, 31255369, 31255869, 31256383, 31257740, 31257826, 31258101
31258344, 31258697, 31258995, 31260155, 31260692, 31261467, 31261641
31262275, 31262388, 31263980, 31265651, 31265773, 31266236, 31266779
31266843, 31268326, 31268557, 31270711, 31270847, 31271032, 31274074
31279605, 31279670, 31281708, 31282037, 31283557, 31287091, 31287296
31287741, 31287871, 31289115, 31289698, 31290017, 31290300, 31290427
31291986, 31292298, 31293484, 31293791, 31293867, 31298871, 31301460
31303032, 31303249, 31304573, 31304945, 31304975, 31305114, 31305309
31305624, 31306248, 31306261, 31306470, 31306867, 31306927, 31307715
31309379, 31309867, 31310564, 31310624, 31311732, 31311830, 31312450
31312976, 31313117, 31313177, 31313214, 31313444, 31313812, 31314323
31314885, 31315441, 31315495, 31315876, 31315923, 31316250, 31317032
31321092, 31322720, 31323383, 31323484, 31324442, 31324507, 31325584
31326320, 31326608, 31326977, 31326998, 31327046, 31327259, 31327278
31327349, 31327391, 31327896, 31331265, 31331354, 31331372, 31333105
31333156, 31334338, 31334606, 31334961, 31335037, 31335142, 31336298
31336371, 31338249, 31338673, 31338686, 31338769, 31339457, 31339643
31339744, 31341138, 31341421, 31341746, 31342885, 31343110, 31344046
31344097, 31346493, 31347878, 31348711, 31348922, 31349426, 31350348
31352517, 31353098, 31353610, 31354026, 31355339, 31356601, 31356954
31357581, 31357737, 31358308, 31358474, 31358511, 31359215, 31359366
31360146, 31360155, 31360214, 31360282, 31360314, 31360323, 31360469

31360529, 31362408, 31362692, 31364001, 31364383, 31366716, 31367188
31367364, 31368027, 31369444, 31370500, 31371071, 31372498, 31373825
31373837, 31373843, 31374283, 31374449, 31374738, 31375772, 31375865
31376011, 31376708, 31377129, 31377206, 31377487, 31377701, 31377808
31377936, 31380443, 31381174, 31381389, 31381701, 31382518, 31383049
31383396, 31383464, 31383814, 31384324, 31385668, 31386394, 31386696
31387033, 31387123, 31387426, 31387443, 31388201, 31388288, 31389006
31390936, 31390955, 31391991, 31393208, 31393600, 31393991, 31394341
31394347, 31394365, 31394544, 31395222, 31395247, 31395708, 31396027
31396609, 31396695, 31396980, 31398505, 31398617, 31398663, 31398721
31398761, 31399131, 31399883, 31400754, 31401831, 31401919, 31402078
31402598, 31403177, 31403565, 31404014, 31404130, 31404263, 31404487
31404550, 31405300, 31405751, 31408636, 31408732, 31409483, 31409912
31409964, 31410289, 31410607, 31411163, 31412209, 31414023, 31414524
31415324, 31416193, 31416213, 31416250, 31417007, 31417192, 31417242
31417336, 31417844, 31417990, 31418442, 31419363, 31420295, 31420316
31420320, 31420337, 31421316, 31421471, 31422440, 31422620, 31423645
31424838, 31425167, 31425761, 31425800, 31427345, 31429020, 31429501
31429590, 31429692, 31429770, 31429784, 31429809, 31429844, 31429971
31430722, 31430735, 31430910, 31431005, 31431326, 31431771, 31431964
31431969, 31431971, 31431973, 31431975, 31431986, 31432906, 31433092
31433579, 31433749, 31434421, 31434805, 31434870, 31434915, 31435163
31435308, 31435400, 31435735, 31437030, 31437448, 31437886, 31439905
31440252, 31440426, 31440813, 31441916, 31441920, 31442332, 31442714
31443030, 31444353, 31444516, 31445356, 31446431, 31447733, 31448642
31448680, 31448818, 31449354, 31450392, 31450653, 31450942, 31451019
31453375, 31453585, 31454428, 31454972, 31454988, 31455051, 31455597
31456383, 31456857, 31457334, 31458049, 31458537, 31458634, 31458739
31459231, 31459242, 31459369, 31461990, 31462082, 31462940, 31462969
31463613, 31464165, 31465389, 31466433, 31468060, 31468705, 31469001
31469418, 31471119, 31471441, 31471589, 31471856, 31472077, 31473148
31474315, 31475085, 31475378, 31475635, 31476093, 31476603, 31476701
31476736, 31477424, 31477695, 31479072, 31479075, 31479106, 31479272
31479772, 31481750, 31481893, 31483466, 31483949, 31484385, 31484603
31485340, 31485386, 31485507, 31486061, 31486557, 31487441, 31487491
31487775, 31487826, 31487844, 31488085, 31488464, 31489032, 31489137
31489481, 31489590, 31489672, 31489731, 31489936, 31490604, 31491634
31492171, 31492191, 31492386, 31492588, 31492655, 31492856, 31493153
31493840, 31494095, 31494132, 31494264, 31494420, 31494794, 31495254
31495297, 31495564, 31496174, 31497550, 31498559, 31499370, 31499700
31500699, 31500719, 31500971, 31501139, 31502301, 31503349, 31503674
31503688, 31503934, 31504723, 31505088, 31506095, 31507107, 31507129
31508229, 31508460, 31508712, 31509279, 31510891, 31510910, 31511142
31511519, 31511771, 31511940, 31512044, 31512262, 31513011, 31515163

31515869, 31515879, 31515911, 31515929, 31516164, 31516184, 31516255
31516265, 31517395, 31517417, 31517502, 31517652, 31518068, 31518371
31521504, 31521701, 31522560, 31522708, 31522866, 31523548, 31523578
31523585, 31523620, 31523646, 31523728, 31523736, 31523836, 31525310
31525463, 31525609, 31525783, 31526250, 31526903, 31527103, 31527199
31527381, 31527726, 31528544, 31528724, 31528738, 31528962, 31529594
31529967, 31530985, 31530995, 31531079, 31532084, 31532176, 31532308
31532339, 31533050, 31533113, 31533274, 31533799, 31533817, 31533833
31534841, 31535073, 31535516, 31535782, 31535870, 31535955, 31536401
31536703, 31536731, 31537521, 31537599, 31537736, 31538274, 31538363
31538891, 31539566, 31541805, 31541864, 31541895, 31541905, 31542347
31542356, 31542851, 31542956, 31543810, 31544097, 31545109, 31545400
31545477, 31546864, 31547220, 31547445, 31547480, 31548675, 31549221
31549468, 31551142, 31552433, 31552563, 31552615, 31552738, 31552755
31553178, 31553289, 31553674, 31553813, 31553968, 31554610, 31555126
31555173, 31555346, 31555539, 31555800, 31556044, 31556139, 31556950
31557160, 31557518, 31557663, 31558194, 31559079, 31559085, 31559415
31559563, 31560323, 31560348, 31560592, 31561886, 31562484, 31563138
31564060, 31564760, 31564795, 31567124, 31567403, 31567441, 31567719
31568423, 31569057, 31569867, 31570054, 31570161, 31571415, 31571688
31571742, 31572006, 31572046, 31572267, 31573269, 31573457, 31574122
31574150, 31574244, 31574267, 31575529, 31575649, 31575665, 31576738
31577569, 31578202, 31578994, 31580079, 31580122, 31580374, 31580437
31581627, 31582179, 31582244, 31583865, 31584056, 31584555, 31584853
31585040, 31585319, 31585351, 31585491, 31585789, 31586381, 31586862
31587966, 31588631, 31588933, 31589785, 31590099, 31590826, 31591087
31591384, 31591400, 31591409, 31591421, 31592707, 31594725, 31595025
31595632, 31597104, 31597668, 31597727, 31598146, 31599215, 31599363
31599990, 31600023, 31600291, 31600894, 31601385, 31602782, 31603199
31603380, 31603625, 31605119, 31605370, 31605737, 31606474, 31607937
31608753, 31609974, 31610024, 31611125, 31612535, 31613275, 31613838
31615078, 31615736, 31616101, 31616104, 31617492, 31617523, 31619276
31620252, 31620748, 31620829, 31620944, 31621569, 31622250, 31623413
31623463, 31625579, 31625618, 31625959, 31626438, 31626493, 31626528
31626572, 31627587, 31627856, 31628155, 31628311, 31628753, 31628975
31629056, 31630551, 31630794, 31630946, 31631985, 31632273, 31632534
31632548, 31632605, 31632663, 31633224, 31634510, 31634805, 31635875
31635963, 31635980, 31637094, 31637607, 31637680, 31638398, 31638733
31638943, 31639082, 31640139, 31640197, 31640240, 31642462, 31642556
31642639, 31643308, 31644542, 31644775, 31645288, 31647304, 31647789
31648120, 31648157, 31649223, 31649447, 31649818, 31649819, 31649958
31649962, 31650046, 31650112, 31650202, 31652641, 31652763, 31653080
31653167, 31653634, 31653647, 31653758, 31653913, 31653916, 31653917
31654116, 31654119, 31654122, 31654125, 31654133, 31655807, 31656263

31656601, 31657084, 31657211, 31657324, 31657462, 31657483, 31657681
31658464, 31658819, 31658943, 31659065, 31660283, 31661369, 31661586
31661865, 31661879, 31662131, 31662143, 31662504, 31662625, 31662925
31663189, 31663788, 31664203, 31664399, 31665107, 31666449, 31666684
31667096, 31667180, 31667940, 31668033, 31668061, 31668065, 31668312
31668694, 31668768, 31668872, 31669064, 31670014, 31670263, 31670353
31671512, 31671568, 31671836, 31672507, 31672605, 31673406, 31674380
31674801, 31674947, 31675568, 31675852, 31675860, 31676324, 31676927
31676941, 31677345, 31677460, 31677479, 31677587, 31678629, 31679900
31680306, 31680709, 31680713, 31680985, 31682766, 31683044, 31683260
31683311, 31683337, 31683373, 31683708, 31684080, 31684494, 31685612
31685882, 31685989, 31686545, 31686979, 31688127, 31688241, 31688978
31691030, 31691089, 31691480, 31694070, 31695062, 31695693, 31696043
31696577, 31696853, 31697741, 31699090, 31699230, 31700234, 31700640
31701239, 31701429, 31701517, 31701910, 31703614, 31705178, 31705265
31705356, 31705704, 31706000, 31706595, 31706758, 31706956, 31707190
31707557, 31708133, 31708175, 31708529, 31709647, 31709739, 31709777
31710272, 31710587, 31711155, 31711720, 31711889, 31711997, 31712260
31714645, 31715935, 31716510, 31716873, 31717010, 31718000, 31718134
31718346, 31718842, 31719167, 31720344, 31720377, 31720839, 31720942
31721557, 31721577, 31721863, 31721880, 31722558, 31722646, 31723226
31723323, 31723651, 31725154, 31727229, 31727231, 31727233, 31727560
31728149, 31728160, 31728440, 31728444, 31728447, 31728477, 31728486
31728858, 31729557, 31730485, 31730766, 31731076, 31731407, 31732095
31732311, 31732672, 31734007, 31734012, 31734017, 31734583, 31735662
31736095, 31737059, 31737603, 31739198, 31739891, 31740252, 31741359
31741938, 31743771, 31744832, 31745130, 31745233, 31745528, 31746054
31747706, 31747806, 31747818, 31747935, 31747989, 31748000, 31748182
31748233, 31748944, 31750577, 31750581, 31750889, 31752492, 31752502
31752633, 31753202, 31753425, 31753478, 31753582, 31753692, 31754240
31754546, 31754887, 31754980, 31755245, 31755451, 31756415, 31756465
31756568, 31756650, 31757357, 31757775, 31757824, 31758083, 31758344
31758846, 31758939, 31758960, 31759565, 31760278, 31760592, 31760721
31760738, 31761510, 31762819, 31763030, 31763356, 31763707, 31763905
31764089, 31764239, 31764866, 31764913, 31765068, 31765246, 31765257
31765296, 31766462, 31766499, 31766534, 31766675, 31766696, 31767204
31767237, 31767598, 31767852, 31768490, 31768497, 31768505, 31768866
31769267, 31769373, 31769511, 31769530, 31770289, 31771302, 31771370
31771410, 31771468, 31771745, 31771836, 31772002, 31772070, 31773582
31773909, 31774019, 31774132, 31775101, 31776121, 31776659, 31776785
31776994, 31777410, 31777489, 31779833, 31780567, 31781758, 31781897
31781944, 31783422, 31783451, 31783782, 31783872, 31783985, 31783991
31784352, 31785445, 31785572, 31786282, 31786697, 31786838, 31787057
31787236, 31787655, 31788104, 31788594, 31788704, 31788761, 31788785

31789167, 31789178, 31789335, 31790500, 31790757, 31792397, 31792465
31792615, 31793126, 31793691, 31793713, 31794336, 31794631, 31794882
31795231, 31795696, 31796208, 31796277, 31796882, 31798001, 31798323
31798669, 31798702, 31798742, 31799858, 31800053, 31800059, 31800139
31800757, 31804838, 31805303, 31805812, 31807179, 31807431, 31807516
31808296, 31809510, 31809729, 31810213, 31812352, 31812824, 31813214
31813662, 31815099, 31815227, 31816158, 31816343, 31816631, 31817206
31817634, 31818080, 31820632, 31820662, 31820842, 31820859, 31820926
31821129, 31821701, 31821835, 31822026, 31822951, 31823051, 31823327
31823716, 31824504, 31824792, 31824934, 31825151, 31825324, 31825410
31827339, 31827605, 31827912, 31828378, 31828999, 31829366, 31829617
31829639, 31831950, 31832785, 31832901, 31833172, 31833585, 31833896
31833948, 31834191, 31834214, 31834611, 31834677, 31834871, 31835300
31835805, 31835854, 31836113, 31836454, 31839038, 31839779, 31839888
31840180, 31840490, 31840516, 31840992, 31841147, 31841210, 31841696
31842545, 31843028, 31843462, 31843476, 31843716, 31843842, 31843845
31844137, 31844357, 31844557, 31844560, 31845092, 31845403, 31845549
31845803, 31845955, 31846318, 31846454, 31847489, 31847541, 31848331
31848365, 31848391, 31848903, 31849859, 31850132, 31850227, 31851383
31851449, 31852482, 31852506, 31852574, 31854285, 31854692, 31855307
31855484, 31855526, 31855996, 31857143, 31857475, 31858580, 31858621
31858833, 31859067, 31859143, 31860193, 31860406, 31860760, 31862359
31862593, 31862611, 31863118, 31863250, 31863537, 31863890, 31864818
31864947, 31865822, 31866141, 31866159, 31866388, 31867037, 31867331
31867351, 31869348, 31869601, 31869944, 31869954, 31869966, 31870010
31870150, 31870164, 31870190, 31870196, 31871384, 31871692, 31872230
31872320, 31873155, 31875140, 31876138, 31876192, 31876368, 31876867
31878256, 31878314, 31878605, 31880154, 31881527, 31883124, 31883343
31883739, 31883845, 31886547, 31886695, 31886745, 31886848, 31887130
31887709, 31888148, 31888731, 31888964, 31889222, 31890230, 31890240
31890516, 31892029, 31892120, 31892856, 31895670, 31897023, 31897178
31897786, 31897854, 31898193, 31898257, 31898326, 31900476, 31900585
31902517, 31902662, 31903523, 31903713, 31903786, 31903962, 31904739
31904933, 31904960, 31905033, 31905839, 31905861, 31907042, 31907137
31907510, 31907565, 31907792, 31907962, 31908308, 31908345, 31908482
31908571, 31908750, 31909295, 31909807, 31911290, 31912638, 31912834
31913650, 31913828, 31913839, 31914003, 31914943, 31915444, 31915968
31916096, 31916644, 31917378, 31917494, 31917856, 31917967, 31918462
31919563, 31919952, 31921267, 31922161, 31922580, 31923463, 31923622
31925162, 31925462, 31925765, 31926203, 31926811, 31926848, 31927078
31927510, 31927930, 31928046, 31930204, 31930635, 31932042, 31932196
31933451, 31933837, 31933842, 31933846, 31933914, 31934254, 31934301
31935336, 31935672, 31935717, 31935970, 31936588, 31936983, 31938116
31938288, 31939263, 31939461, 31939486, 31939494, 31939767, 31940176

31940458, 31941148, 31941948, 31942136, 31942144, 31942258, 31942274
31942473, 31943497, 31943691, 31944980, 31945038, 31945407, 31945659
31945701, 31945827, 31945928, 31946936, 31947385, 31947732, 31947861
31949490, 31949573, 31950145, 31950244, 31950577, 31951599, 31951628
31952046, 31952052, 31953394, 31953449, 31953989, 31954223, 31956113
31956435, 31956920, 31957152, 31957564, 31957674, 31957683, 31958038
31958958, 31959140, 31959253, 31960124, 31960389, 31960603, 31961214
31961578, 31961940, 31963193, 31964519, 31964610, 31965012, 31965391
31965542, 31965574, 31966094, 31968431, 31969646, 31970188, 31971792
31972615, 31972671, 31973203, 31974187, 31974424, 31974597, 31974693
31976303, 31977024, 31977257, 31980125, 31980216, 31980296, 31981745
31981751, 31982390, 31982879, 31983029, 31985032, 31985494, 31985738
31985820, 31985961, 31986808, 31986836, 31986905, 31986909, 31987278
31987922, 31988079, 31988833, 31990386, 31991705, 31992242, 31992270
31992428, 31992615, 31992953, 31993051, 31993795, 31994145, 31994206
31994298, 31995577, 31995937, 31996264, 31996331, 31997107, 31997457
31997611, 31997658, 31997660, 31998181, 31998189, 31998861, 31999024
31999453, 32000837, 32001851, 32002411, 32003551, 32003908, 32004148
32004299, 32004977, 32005046, 32005048, 32005053, 32005215, 32005394
32006467, 32006703, 32006824, 32006883, 32007076, 32007698, 32008408
32008586, 32008716, 32008819, 32009197, 32009334, 32009754, 32010275
32010593, 32010707, 32011107, 32011888, 32012137, 32012400, 32012788
32012891, 32012975, 32013253, 32013403, 32014520, 32015642, 32015820
32016340, 32016884, 32017215, 32017301, 32017422, 32017570, 32017635
32017671, 32018632, 32018953, 32020701, 32021877, 32022223, 32022711
32022814, 32022867, 32023471, 32025328, 32028155, 32028269, 32032653
32032733, 32032887, 32033795, 32034085, 32034137, 32034318, 32034766
32035268, 32035483, 32035536, 32035893, 32035899, 32035902, 32036045
32037237, 32037962, 32038054, 32038780, 32038812, 32038844, 32038996
32039059, 32040940, 32040971, 32041003, 32041799, 32042256, 32042352
32042706, 32042926, 32043743, 32044533, 32044767, 32044903, 32045377
32046125, 32046412, 32046587, 32047226, 32047444, 32048412, 32048616
32048921, 32049479, 32050048, 32051896, 32052587, 32052992, 32053746
32054806, 32055692, 32055733, 32056529, 32057291, 32057333, 32057565
32057639, 32057755, 32058260, 32060164, 32060577, 32061018, 32061146
32061173, 32061648, 32062227, 32064239, 32064593, 32064682, 32064826
32066061, 32066579, 32067130, 32067356, 32067675, 32067937, 32068110
32068187, 32068190, 32068709, 32069160, 32069508, 32069696, 32069834
32070206, 32071183, 32071457, 32071582, 32072747, 32072944, 32073027
32073710, 32074450, 32074708, 32074728, 32075009, 32075020, 32075130
32075580, 32076305, 32076561, 32076599, 32077318, 32078078, 32079097
32079573, 32079739, 32080081, 32080655, 32081074, 32081381, 32082098
32084068, 32087287, 32087331, 32087597, 32087956, 32088132, 32088478
32089051, 32089820, 32090518, 32090725, 32092312, 32092797, 32093558

32094825, 32095097, 32095380, 32095610, 32095658, 32096252, 32096397
32097125, 32097387, 32097589, 32097604, 32097767, 32097882, 32097962
32098224, 32098237, 32098535, 32099153, 32099539, 32099580, 32101305
32101419, 32101499, 32102542, 32102722, 32102854, 32103383, 32103427
32103628, 32104324, 32104402, 32104578, 32104610, 32105135, 32105239
32105412, 32105468, 32107505, 32107621, 32107664, 32108094, 32108115
32108566, 32108576, 32109384, 32109796, 32111046, 32112798, 32112822
32113113, 32113530, 32113791, 32114541, 32114561, 32114572, 32114746
32115403, 32115642, 32116952, 32117115, 32117253, 32117490, 32118543
32118727, 32119144, 32119339, 32119565, 32120283, 32120453, 32121014
32121326, 32121673, 32121803, 32121885, 32121887, 32122197, 32122574
32123331, 32123673, 32124176, 32124334, 32124570, 32124594, 32124607
32124611, 32125142, 32125160, 32125845, 32127227, 32127448, 32127911
32128142, 32129659, 32130083, 32130485, 32130504, 32131010, 32131401
32131774, 32132464, 32132504, 32133039, 32133898, 32138257, 32138478
32138782, 32139064, 32139432, 32139659, 32139728, 32140616, 32140800
32142788, 32143492, 32143562, 32143669, 32144917, 32147340, 32148419
32148651, 32148662, 32149848, 32150818, 32150854, 32151098, 32152341
32153396, 32153619, 32153909, 32156194, 32157050, 32157075, 32157078
32158561, 32159343, 32161260, 32161381, 32162391, 32164053, 32164112
32164218, 32165367, 32165759, 32165814, 32165887, 32166950, 32167592
32167923, 32168026, 32169151, 32170162, 32170190, 32171622, 32171791
32172050, 32172773, 32172777, 32172783, 32173142, 32173376, 32173543
32174321, 32174405, 32174492, 32174571, 32175329, 32175780, 32176303
32176922, 32177701, 32177869, 32178217, 32178966, 32179209, 32179306
32180918, 32181149, 32182097, 32182783, 32183102, 32183756, 32183809
32184235, 32184577, 32184844, 32184855, 32185163, 32185296, 32186186
32186983, 32187775, 32189400, 32189869, 32189952, 32190132, 32190190
32190284, 32190419, 32190573, 32191427, 32191451, 32193431, 32195333
32195815, 32195946, 32196265, 32196492, 32196738, 32196943, 32197147
32198292, 32198368, 32198396, 32199681, 32200524, 32201743, 32201903
32201936, 32202976, 32203068, 32203354, 32205455, 32205514, 32205825
32207088, 32207920, 32208144, 32208326, 32208346, 32208691, 32209784
32210660, 32211423, 32212041, 32212062, 32212635, 32212916, 32213376
32213696, 32214021, 32214080, 32214195, 32214238, 32214654, 32214743
32214782, 32215240, 32215991, 32216027, 32216223, 32216841, 32216930
32218369, 32218395, 32218498, 32218552, 32219179, 32219318, 32219835
32219988, 32220017, 32220364, 32220709, 32221141, 32222473, 32223045
32223654, 32223669, 32224140, 32224583, 32225117, 32225353, 32225742
32225899, 32227352, 32228188, 32228677, 32229431, 32229625, 32229919
32230213, 32230775, 32230787, 32230953, 32231049, 32231356, 32233406
32234148, 32234161, 32234845, 32235513, 32236601, 32236685, 32236798
32237489, 32237778, 32238935, 32239137, 32239730, 32240272, 32241889
32242601, 32243007, 32243148, 32243814, 32243882, 32243985, 32244187

32245711, 32245850, 32246090, 32246756, 32247141, 32247420, 32248131
32248405, 32248649, 32248747, 32249207, 32249371, 32249509, 32249640
32249674, 32250232, 32250238, 32251364, 32251671, 32252036, 32252213
32252262, 32252294, 32253703, 32253937, 32254063, 32254399, 32254686
32255029, 32255073, 32255529, 32255753, 32255762, 32257449, 32258021
32258136, 32258388, 32258423, 32259063, 32259322, 32259535, 32259785
32260010, 32260290, 32263923, 32264556, 32266406, 32266906, 32267171
32267610, 32268669, 32268800, 32269481, 32269499, 32274403, 32277643
32277793, 32279351, 32280901, 32281066, 32283798, 32284241, 32284325
32284485, 32284608, 32284725, 32285086, 32285563, 32285717, 32285789
32287797, 32287989, 32289552, 32289858, 32290227, 32290313, 32290399
32290754, 32290812, 32290949, 32290990, 32291114, 32291139, 32292180
32292805, 32293615, 32294031, 32294566, 32294851, 32295794, 32296259
32296941, 32297373, 32297469, 32297849, 32298004, 32298173, 32298782
32300098, 32300822, 32300849, 32301856, 32302470, 32302561, 32303160
32303657, 32304293, 32304712, 32305034, 32305792, 32306556, 32307046
32307586, 32307983, 32309046, 32309488, 32309723, 32310880, 32311019
32312131, 32312412, 32312586, 32312771, 32315173, 32316070, 32316252
32316326, 32317012, 32317306, 32318528, 32318820, 32318914, 32319410
32320789, 32321317, 32321319, 32321765, 32322629, 32322738, 32323277
32323488, 32323600, 32323816, 32324219, 32325525, 32325574, 32325611
32327201, 32327208, 32327690, 32328231, 32328658, 32329914, 32330269
32330540, 32331889, 32332107, 32334745, 32335257, 32335769, 32336990
32338220, 32338476, 32338579, 32338736, 32338897, 32338919, 32338953
32339801, 32340392, 32340885, 32341217, 32341260, 32341820, 32342172
32342345, 32342750, 32342824, 32343092, 32343678, 32344099, 32344168
32344199, 32345001, 32345050, 32345178, 32345272, 32345785, 32346649
32346733, 32347957, 32350182, 32351767, 32352695, 32353343, 32355765
32355912, 32356340, 32356545, 32356609, 32356628, 32357412, 32357665
32358760, 32359044, 32361175, 32361677, 32362016, 32362066, 32362072
32362698, 32363212, 32363549, 32363711, 32363981, 32364147, 32366154
32366303, 32366461, 32366536, 32367151, 32368161, 32368480, 32368789
32368792, 32369041, 32371828, 32372725, 32374050, 32374431, 32374566
32374616, 32375438, 32375493, 32376603, 32376614, 32376774, 32376872
32376922, 32377901, 32378953, 32379001, 32379140, 32379303, 32379775
32380591, 32380842, 32381403, 32381605, 32382021, 32382207, 32382667
32385068, 32385141, 32385832, 32386482, 32386683, 32386720, 32386877
32387555, 32387818, 32388247, 32389047, 32389416, 32389497, 32390629
32390855, 32391021, 32392724, 32393137, 32393612, 32394623, 32394660
32394986, 32396085, 32396154, 32396326, 32397113, 32397350, 32398714
32400076, 32401086, 32401333, 32402243, 32402292, 32403509, 32403748
32404638, 32404933, 32405239, 32406222, 32406479, 32407783, 32408640
32409009, 32409344, 32409942, 32410175, 32412340, 32413042, 32413512
32414944, 32414996, 32415846, 32415989, 32416652, 32416655, 32417227

32417242, 32417274, 32417301, 32417438, 32417632, 32417766, 32417870
32419774, 32421958, 32422965, 32423100, 32423678, 32423985, 32424465
32425097, 32425124, 32425194, 32425205, 32425778, 32425862, 32426213
32426315, 32426900, 32427158, 32427173, 32427226, 32427583, 32427953
32428097, 32428189, 32428330, 32428919, 32430745, 32431049, 32431067
32431251, 32431290, 32431413, 32432078, 32432245, 32433627, 32433687
32434131, 32435493, 32435911, 32436342, 32436460, 32436721, 32436757
32437538, 32439726, 32440067, 32440681, 32441128, 32441671, 32441834
32442229, 32442404, 32443087, 32443531, 32443744, 32443935, 32444159
32446565, 32446740, 32447655, 32449622, 32449909, 32450344, 32453583
32453611, 32453888, 32455219, 32455516, 32455650, 32455742, 32455961
32456625, 32457252, 32457974, 32459153, 32459632, 32460136, 32460145
32461726, 32462153, 32464021, 32464584, 32465193, 32465209, 32465466
32465495, 32465853, 32465894, 32466474, 32467812, 32468643, 32468791
32469004, 32469225, 32471100, 32471251, 32471346, 32471642, 32471770
32472561, 32472589, 32473465, 32474686, 32474827, 32474926, 32474997
32475694, 32476437, 32477479, 32478452, 32480419, 32480510, 32480528
32480541, 32480873, 32481807, 32482131, 32483115, 32483966, 32484945
32485859, 32485961, 32486528, 32486955, 32489206, 32490128, 32490416
32490804, 32491443, 32492075, 32492343, 32492382, 32492422, 32492452
32495545, 32495572, 32497756, 32498459, 32498569, 32498602, 32498752
32498783, 32499155, 32500117, 32501930, 32502414, 32503790, 32504340
32504786, 32505009, 32505439, 32505557, 32505634, 32506166, 32506309
32506473, 32506809, 32507542, 32508585, 32509271, 32509318, 32509584
32509606, 32509814, 32510116, 32512048, 32512145, 32512438, 32512918
32514516, 32515708, 32515850, 32516220, 32516336, 32517405, 32517797
32518029, 32518679, 32519995, 32520525, 32520645, 32520691, 32520994
32522300, 32522472, 32523206, 32523613, 32523750, 32524841, 32525039
32526118, 32526703, 32527621, 32529396, 32529483, 32530202, 32531259
32531627, 32531647, 32533019, 32533184, 32533225, 32533461, 32534925
32535106, 32535156, 32535159, 32535520, 32536006, 32536900, 32538436
32538824, 32539300, 32539322, 32539914, 32539936, 32540706, 32540995
32541049, 32542063, 32542641, 32544124, 32544464, 32544740, 32544784
32545415, 32546408, 32546937, 32547361, 32548580, 32548704, 32549168
32549277, 32549351, 32550051, 32550281, 32550589, 32550751, 32550894
32551177, 32551246, 32552043, 32552602, 32553241, 32555120, 32555592
32556165, 32556311, 32556891, 32557354, 32559543, 32561759, 32561791
32561841, 32562587, 32563106, 32563114, 32563151, 32563940, 32565722
32565870, 32567750, 32567788, 32568124, 32568163, 32568259, 32569603
32569745, 32573197, 32573703, 32573942, 32574796, 32576097, 32576508
32576534, 32577408, 32578113, 32578616, 32578792, 32579075, 32579371
32579529, 32580082, 32580378, 32580852, 32583315, 32583355, 32583375
32583692, 32584347, 32584375, 32584505, 32585832, 32586534, 32587305
32587472, 32587567, 32587721, 32587793, 32587994, 32588298, 32588656

32588691, 32589147, 32589819, 32589990, 32593590, 32593845, 32593877
32593886, 32593955, 32594965, 32595551, 32596355, 32596705, 32597099
32597637, 32598380, 32598406, 32601769, 32601882, 32602194, 32602344
32602599, 32602735, 32602871, 32602990, 32603092, 32603152, 32603319
32603564, 32603619, 32605116, 32605919, 32606093, 32606489, 32606531
32607812, 32607991, 32608297, 32608821, 32609394, 32609512, 32609730
32609886, 32610185, 32610271, 32613788, 32614157, 32614583, 32615310
32615776, 32616678, 32618819, 32619195, 32619298, 32619327, 32620859
32620919, 32621140, 32621309, 32622507, 32622612, 32625160, 32625356
32625619, 32626384, 32626756, 32627140, 32627280, 32628131, 32628221
32628237, 32629028, 32629772, 32629859, 32630060, 32631551, 32631787
32633251, 32634049, 32634996, 32635881, 32635931, 32636938, 32638991
32639432, 32639663, 32639860, 32639950, 32641593, 32641748, 32642587
32642994, 32643533, 32644392, 32645139, 32646025, 32646044, 32647170
32648248, 32649737, 32649749, 32651063, 32651304, 32651769, 32651773
32652143, 32652573, 32652605, 32653470, 32653669, 32654172, 32654962
32655446, 32655691, 32656130, 32656231, 32656275, 32657251, 32658076
32658481, 32659438, 32659574, 32659772, 32659930, 32659983, 32660528
32661293, 32662037, 32662165, 32663019, 32664665, 32665550, 32665836
32666862, 32668900, 32668907, 32669149, 32670769, 32671437, 32671481
32672057, 32674819, 32675095, 32675227, 32675756, 32676084, 32676350
32676659, 32677000, 32677702, 32678737, 32682430, 32682586, 32682703
32684009, 32684387, 32685743, 32685989, 32686338, 32686551, 32686850
32689123, 32690400, 32690423, 32690581, 32692372, 32693242, 32695999
32697157, 32697431, 32697781, 32697859, 32698508, 32698569, 32700396
32700455, 32700548, 32700675, 32700989, 32701048, 32702005, 32703155
32704013, 32704119, 32704231, 32704765, 32705734, 32705800, 32706821
32707007, 32707211, 32710053, 32710165, 32710534, 32710750, 32711099
32711741, 32712220, 32712791, 32712916, 32715346, 32715845, 32715945
32716529, 32716726, 32718204, 32718316, 32718510, 32718547, 32718721
32719288, 32719310, 32720344, 32720458, 32722118, 32724505, 32724654
32725484, 32726772, 32727143, 32728216, 32728984, 32730701, 32731498
32732179, 32733671, 32733845, 32734021, 32734171, 32734299, 32734800
32735915, 32735980, 32736370, 32737774, 32737827, 32737969, 32738356
32739966, 32740421, 32740503, 32740506, 32740515, 32740694, 32740987
32743290, 32743511, 32746508, 32746515, 32746831, 32747680, 32747738
32748974, 32749028, 32750264, 32750940, 32751438, 32752229, 32753371
32753472, 32753946, 32754044, 32754574, 32754845, 32755356, 32755493
32755517, 32755731, 32756125, 32756914, 32757219, 32758096, 32758260
32759503, 32760504, 32760795, 32760868, 32760906, 32761229, 32761294
32761932, 32762155, 32762231, 32763283, 32763544, 32763599, 32764690
32765738, 32766252, 32766397, 32766407, 32766916, 32768752, 32769786
32769880, 32770812, 32771735, 32775512, 32775526, 32776891, 32778725
32780676, 32781826, 32782851, 32783456, 32784393, 32784403, 32786308

32786309, 32788660, 32789228, 32790012, 32790255, 32793286, 32794120
32794261, 32795016, 32795712, 32797115, 32797486, 32800137, 32800539
32801192, 32801303, 32801337, 32802926, 32803416, 32803807, 32803850
32804604, 32804609, 32804760, 32806069, 32806112, 32806856, 32806915
32807517, 32809152, 32809234, 32810125, 32810668, 32811069, 32811131
32813351, 32813767, 32816003, 32817950, 32818019, 32818230, 32818242
32818436, 32818545, 32821107, 32822436, 32822684, 32822847, 32823545
32823692, 32827206, 32828093, 32828636, 32828738, 32829060, 32829563
32829937, 32830405, 32831451, 32831855, 32831901, 32832521, 32833378
32833812, 32834168, 32834394, 32834426, 32835524, 32837435, 32837741
32838028, 32838533, 32838574, 32841689, 32841994, 32842415, 32842823
32843576, 32843672, 32843754, 32844640, 32846272, 32846876, 32847962
32847975, 32848060, 32848531, 32848816, 32850174, 32850514, 32851615
32851841, 32852484, 32852504, 32853080, 32855257, 32855878, 32856375
32856546, 32856640, 32857370, 32857881, 32857908, 32858358, 32858446
32863689, 32863795, 32864241, 32864736, 32866089, 32867469, 32868116
32868344, 32868369, 32869560, 32870681, 32871988, 32872266, 32872839
32873969, 32874571, 32874995, 32875003, 32875118, 32875482, 32875931
32877550, 32878039, 32879447, 32879655, 32879990, 32880225, 32880390
32880490, 32881057, 32881462, 32881853, 32883252, 32883853, 32886951
32887649, 32888458, 32888472, 32889096, 32889434, 32890532, 32891500
32892883, 32893686, 32893951, 32894842, 32895105, 32897184, 32897679
32898672, 32898678, 32898971, 32899387, 32900165, 32900208, 32902635
32903472, 32903625, 32905994, 32906999, 32907741, 32907975, 32908241
32908249, 32908946, 32909255, 32909292, 32909936, 32910846, 32912726
32912828, 32913527, 32913610, 32913791, 32914508, 32914711, 32914795
32915110, 32915747, 32915760, 32915847, 32915909, 32916025, 32916080
32917969, 32918041, 32918394, 32920489, 32920547, 32921786, 32922090
32922635, 32924796, 32925421, 32925703, 32926513, 32926653, 32930360
32930423, 32930665, 32931078, 32931941, 32932487, 32933936, 32935932
32936005, 32936402, 32936424, 32936537, 32936859, 32936950, 32936961
32936988, 32937167, 32937338, 32939376, 32939883, 32940440, 32940714
32940955, 32941096, 32941509, 32941792, 32943694, 32945404, 32946347
32946711, 32947264, 32947268, 32951181, 32951258, 32952285, 32953258
32955962, 32956092, 32956896, 32957606, 32958616, 32959929, 32961142
32961939, 32962162, 32965460, 32966389, 32966688, 32967871, 32968221
32968634, 32969024, 32969466, 32969863, 32970478, 32972633, 32972716
32973035, 32973406, 32973518, 32976022, 32977489, 32980826, 32982562
32983419, 32983750, 32983871, 32984625, 32984679, 32985908, 32986577
32987004, 32987206, 32987308, 32988028, 32991289, 32991527, 32992004
32993522, 32993998, 32994080, 32995072, 32995206, 32995242, 32995863
32996071, 32996974, 32998659, 32999086, 32999329, 32999541, 32999836
33000440, 33000516, 33000980, 33001094, 33001615, 33003575, 33003817
33004172, 33004888, 33005241, 33007394, 33008265, 33009224, 33009321

33009351, 33010173, 33010444, 33011078, 33011198, 33012307, 33012903
33013379, 33015716, 33016007, 33018951, 33019726, 33020016, 33020510
33021036, 33021100, 33021642, 33022043, 33022140, 33022563, 33022926
33023671, 33025005, 33026533, 33026796, 33026949, 33027087, 33027377
33027525, 33027539, 33027553, 33028013, 33028286, 33028462, 33028480
33030293, 33031619, 33032299, 33032400, 33032579, 33033425, 33034103
33034619, 33034642, 33034846, 33035201, 33035710, 33035954, 33036321
33037136, 33037150, 33037531, 33037895, 33038120, 33038422, 33038479
33038537, 33039277, 33040335, 33043590, 33043854, 33044062, 33045137
33046179, 33047645, 33047827, 33048074, 33048277, 33048591, 33049012
33049866, 33049915, 33049925, 33050205, 33050587, 33050622, 33050626
33052585, 33053538, 33055560, 33055827, 33056383, 33056579, 33058363
33059891, 33059924, 33060161, 33060212, 33060935, 33061152, 33061339
33061595, 33062419, 33063919, 33064324, 33064565, 33065089, 33065343
33065415, 33065437, 33065526, 33065979, 33066892, 33068672, 33069366
33069583, 33069889, 33069936, 33071321, 33072392, 33072854, 33075133
33075246, 33075452, 33076129, 33080651, 33082407, 33084064, 33084323
33085296, 33085361, 33088535, 33088863, 33089096, 33089130, 33089192
33090110, 33090127, 33090781, 33090848, 33092087, 33093144, 33093807
33095358, 33096609, 33097276, 33097433, 33099666, 33099872, 33100195
33100352, 33101055, 33101058, 33101334, 33102477, 33105276, 33105354
33105656, 33106822, 33106897, 33107872, 33108317, 33109335, 33109981
33110192, 33110642, 33110992, 33111729, 33112046, 33113848, 33114640
33115438, 33115892, 33116125, 33116131, 33116481, 33117641, 33120284
33120682, 33120828, 33120920, 33121866, 33121880, 33121934, 33123402
33123404, 33123985, 33125873, 33126216, 33126290, 33127032, 33127141
33127312, 33129473, 33131149, 33131335, 33131526, 33131742, 33132050
33135083, 33136016, 33136252, 33136601, 33137328, 33137554, 33139230
33139277, 33140218, 33141420, 33141890, 33142123, 33142479, 33142533
33142739, 33142764, 33144001, 33145153, 33145583, 33146001, 33146055
33147065, 33148063, 33149578, 33149850, 33150236, 33150645, 33151063
33151089, 33151731, 33152388, 33152652, 33152838, 33153797, 33155914
33156093, 33157157, 33157547, 33159956, 33161035, 33161424, 33161535
33161726, 33163159, 33163187, 33164865, 33165183, 33165391, 33166116
33166242, 33167315, 33169254, 33172549, 33172631, 33172679, 33174203
33176523, 33176672, 33177660, 33178223, 33178248, 33179718, 33180354
33181281, 33181349, 33181881, 33182152, 33182737, 33184467, 33185231
33185773, 33186578, 33186650, 33187513, 33188597, 33189199, 33190454
33190694, 33190761, 33191073, 33191584, 33192462, 33192939, 33193293
33194363, 33195096, 33195330, 33195897, 33196009, 33196035, 33196475
33197296, 33198902, 33199431, 33201415, 33203951, 33205229, 33205781
33206160, 33206701, 33207143, 33207240, 33207247, 33207342, 33208644
33211160, 33211334, 33211942, 33212112, 33214493, 33214554, 33214707
33215225, 33216590, 33216667, 33218194, 33218259, 33218392, 33218518

33218694, 33219840, 33220466, 33221061, 33221340, 33223248, 33224375
33225584, 33225678, 33227044, 33227337, 33228119, 33229327, 33230882
33230975, 33232128, 33233560, 33234302, 33235620, 33236729, 33237523
33239083, 33239267, 33239946, 33239980, 33240195, 33240921, 33241118
33241359, 33241692, 33242408, 33242622, 33243077, 33244297, 33245879
33245940, 33246099, 33246700, 33247240, 33247372, 33247795, 33247862
33251111, 33251188, 33251482, 33252648, 33252911, 33253370, 33253466
33253504, 33254019, 33261707, 33261786, 33263108, 33266449, 33268162
33270427, 33270914, 33271941, 33273598, 33273638, 33273682, 33274012
33275564, 33275880, 33276748, 33278133, 33278440, 33278509, 33279339
33279489, 33279810, 33280121, 33281287, 33281785, 33282110, 33282129
33282502, 33282504, 33282605, 33282871, 33282971, 33283122, 33284571
33287418, 33288427, 33289442, 33289604, 33289734, 33290765, 33291305
33292174, 33292175, 33292429, 33292896, 33292950, 33294123, 33294139
33294845, 33295267, 33297275, 33299877, 33301277, 33301919, 33303419
33303486, 33303555, 33303725, 33304435, 33304775, 33304830, 33305150
33305175, 33305254, 33305995, 33306161, 33306852, 33307945, 33308107
33308199, 33308244, 33308736, 33309178, 33309324, 33311488, 33312823
33312932, 33313374, 33314115, 33314122, 33314422, 33314523, 33315230
33315432, 33315590, 33315801, 33315835, 33316711, 33316815, 33317279
33317740, 33317752, 33318311, 33318949, 33319065, 33319353, 33319802
33320455, 33322672, 33323634, 33323903, 33324226, 33325981, 33327118
33329027, 33329192, 33329493, 33329960, 33330508, 33331329, 33332612
33332891, 33333026, 33333179, 33333616, 33334218, 33334340, 33334404
33334945, 33334957, 33334972, 33335941, 33337231, 33337385, 33337620
33337799, 33337807, 33338247, 33338891, 33339868, 33340595, 33343993
33344767, 33345269, 33346851, 33347947, 33349744, 33349880, 33350643
33351136, 33351978, 33352629, 33352740, 33352794, 33353474, 33354011
33354275, 33354662, 33354933, 33354968, 33355007, 33355136, 33355766
33356602, 33356612, 33357029, 33357655, 33358233, 33358968, 33359279
33359773, 33359963, 33360117, 33360246, 33362391, 33362597, 33364012
33364820, 33366942, 33367076, 33367184, 33367909, 33369166, 33370332
33371121, 33371641, 33373644, 33373693, 33375194, 33376694, 33378856
33379172, 33379714, 33380058, 33380472, 33380871, 33381652, 33381775
33381839, 33382108, 33382224, 33382529, 33382620, 33382859, 33384092
33384505, 33387120, 33387654, 33387767, 33388473, 33388715, 33388927
33389651, 33390561, 33390695, 33390717, 33390917, 33390925, 33392926
33392996, 33393503, 33393671, 33394330, 33395219, 33397350, 33397495
33397605, 33398383, 33398674, 33401519, 33402361, 33402406, 33402456
33402847, 33403040, 33403843, 33404069, 33406991, 33407135, 33407139
33408858, 33409163, 33409376, 33409759, 33409841, 33410321, 33415279
33416041, 33416405, 33417145, 33417828, 33417987, 33418439, 33418443
33420096, 33420249, 33420490, 33421125, 33421339, 33421440, 33421721
33421972, 33422596, 33422675, 33422877, 33423728, 33423815, 33424192

33425046, 33425127, 33426135, 33427786, 33427823, 33427991, 33428191
33429020, 33431382, 33433265, 33433944, 33434256, 33434602, 33434897
33435012, 33435454, 33437800, 33437802, 33440178, 33440442, 33440899
33441073, 33441786, 33443834, 33444647, 33446226, 33446788, 33447015
33447602, 33447957, 33448908, 33450599, 33450736, 33451134, 33452091
33454288, 33454299, 33454753, 33455225, 33455471, 33456516, 33456703
33456848, 33457235, 33457584, 33457842, 33458082, 33458732, 33459161
33459348, 33460265, 33460450, 33460521, 33460870, 33462514, 33462620
33463044, 33464061, 33464358, 33464378, 33464843, 33466822, 33467243
33467715, 33469785, 33470077, 33470092, 33470254, 33471858, 33473564
33473583, 33473795, 33473815, 33473989, 33474080, 33474386, 33474769
33474916, 33476482, 33476928, 33479415, 33479703, 33480124, 33480392
33480765, 33481667, 33482137, 33482590, 33483222, 33484230, 33484387
33485134, 33485207, 33488913, 33489699, 33490023, 33490031, 33490293
33491676, 33492066, 33492136, 33493957, 33495024, 33495575, 33495588
33496433, 33497160, 33498037, 33499125, 33499867, 33500486, 33501425
33503732, 33504158, 33504432, 33504626, 33504902, 33505158, 33505495
33507610, 33507953, 33510062, 33510077, 33510171, 33510735, 33511329
33511523, 33512062, 33513037, 33513434, 33513447, 33513526, 33513906
33514038, 33514172, 33514179, 33514440, 33514881, 33515115, 33516571
33517445, 33517703, 33520658, 33521864, 33522170, 33522372, 33522799
33522941, 33523189, 33523393, 33523831, 33523982, 33524097, 33525014
33525448, 33527359, 33527630, 33527663, 33527739, 33528779, 33531067
33531364, 33531929, 33532136, 33532470, 33532517, 33532755, 33533239
33533269, 33534589, 33534891, 33536140, 33536640, 33537225, 33537630
33537652, 33538009, 33538063, 33538767, 33538807, 33539504, 33540746
33541736, 33541865, 33542695, 33544375, 33544836, 33545633, 33545698
33546789, 33546839, 33547527, 33547840, 33548186, 33548709, 33548869
33549008, 33549281, 33550827, 33551931, 33553452, 33553902, 33555482
33555673, 33556254, 33556394, 33557278, 33557344, 33558058, 33558087
33558251, 33558317, 33558391, 33558960, 33559245, 33559316, 33559848
33560308, 33561671, 33561708, 33561845, 33562255, 33563137, 33563167
33563718, 33564109, 33564809, 33566611, 33566851, 33566856, 33567156
33568223, 33568355, 33570800, 33571225, 33572061, 33573142, 33574722
33575022, 33575100, 33576132, 33577970, 33578015, 33580079, 33580212
33580595, 33580746, 33582466, 33583859, 33584585, 33584637, 33585244
33585591, 33585860, 33587171, 33589647, 33589667, 33590420, 33590551
33590607, 33591046, 33596056, 33596304, 33596361, 33596874, 33598703
33598728, 33598840, 33599665, 33599734, 33600479, 33600509, 33601195
33601538, 33601673, 33601849, 33603291, 33604939, 33606850, 33607081
33607127, 33607613, 33607709, 33611438, 33613169, 33613512, 33613829
33613833, 33615198, 33615478, 33615505, 33616923, 33617587, 33617685
33618962, 33621739, 33621871, 33621893, 33621993, 33622325, 33622506
33622575, 33622927, 33622995, 33624052, 33624356, 33625059, 33625559

33625597, 33625822, 33626088, 33627360, 33627820, 33627879, 33628258
33628304, 33628592, 33628693, 33630464, 33631068, 33631337, 33631562
33631820, 33631959, 33632051, 33632754, 33633469, 33633875, 33633883
33635094, 33635886, 33636280, 33636345, 33637219, 33641403, 33641592
33645932, 33646203, 33647498, 33647716, 33647739, 33647820, 33648273
33649782, 33651003, 33651993, 33652008, 33652234, 33652291, 33653008
33653695, 33655399, 33656104, 33656406, 33656608, 33656679, 33657553
33658696, 33660093, 33660782, 33660816, 33660838, 33661960, 33662079
33662706, 33663113, 33663305, 33663444, 33664388, 33664959, 33664976
33666228, 33666803, 33667166, 33667505, 33667548, 33667790, 33668078
33668496, 33670617, 33670793, 33674035, 33674065, 33674755, 33674843
33676061, 33676296, 33676622, 33676842, 33677163, 33677196, 33677721
33679665, 33679838, 33681238, 33682799, 33684125, 33684377, 33684692
33687039, 33689330, 33689561, 33690169, 33690676, 33692669, 33695048
33695100, 33696508, 33698504, 33698555, 33699798, 33702035, 33702922
33703196, 33704431, 33704635, 33705050, 33706074, 33706800, 33708795
33708879, 33708958, 33709660, 33710568, 33711151, 33711724, 33711938
33713578, 33714000, 33714495, 33715183, 33715322, 33718837, 33718848
33719173, 33720017, 33722251, 33723325, 33725523, 33726388, 33726590
33726682, 33726788, 33726841, 33727390, 33727406, 33727922, 33727983
33729692, 33729700, 33729789, 33730024, 33731488, 33733810, 33735478
33735790, 33736618, 33737627, 33738135, 33738702, 33741444, 33741730
33742827, 33743745, 33744512, 33745199, 33745318, 33746114, 33748852
33749367, 33749626, 33749984, 33750344, 33750791, 33751080, 33751431
33754410, 33754633, 33755161, 33755486, 33756794, 33757064, 33757884
33758069, 33758164, 33759204, 33760298, 33761198, 33761538, 33763570
33763679, 33764147, 33764761, 33765925, 33766130, 33766686, 33766937
33767425, 33768567, 33770079, 33770883, 33770960, 33771433, 33773883
33774856, 33775072, 33775544, 33775825, 33776598, 33777176, 33777718
33779360, 33779364, 33779494, 33779786, 33780182, 33780312, 33782200
33783365, 33783627, 33783710, 33784447, 33785175, 33786005, 33786208
33787325, 33787804, 33787884, 33788643, 33789142, 33790553, 33792885
33792937, 33794088, 33794281, 33794290, 33796040, 33797504, 33797970
33798328, 33799368, 33800450, 33800460, 33800471, 33800500, 33801197
33801237, 33803836, 33804758, 33805155, 33805836, 33807727, 33808041
33808204, 33808574, 33808955, 33809062, 33809642, 33810107, 33810130
33810360, 33811111, 33811601, 33811659, 33812475, 33813801, 33813849
33814415, 33815940, 33816129, 33816674, 33817457, 33817717, 33817746
33818252, 33819404, 33821129, 33821145, 33821234, 33821569, 33822187
33822881, 33823203, 33824185, 33824830, 33825303, 33826285, 33827120
33827138, 33827191, 33827202, 33828137, 33828243, 33828570, 33828982
33832499, 33832583, 33833554, 33833783, 33834239, 33835379, 33835574
33836203, 33837343, 33837484, 33838019, 33840343, 33840911, 33840932
33840940, 33841610, 33841850, 33842024, 33842364, 33842953, 33843368

33843512, 33845824, 33846103, 33846146, 33846662, 33847898, 33848060
33848148, 33848294, 33849209, 33849726, 33850434, 33850437, 33850535
33851855, 33852315, 33852881, 33853330, 33858183, 33858700, 33860280
33860501, 33860895, 33860900, 33860946, 33862262, 33862735, 33862860
33863150, 33863597, 33863611, 33864784, 33865116, 33865165, 33865495
33865537, 33866472, 33866585, 33867451, 33867491, 33868507, 33870133
33870373, 33870702, 33870888, 33871591, 33871761, 33871795, 33872487
33872610, 33874274, 33874455, 33875167, 33876296, 33876730, 33876739
33877868, 33878003, 33878970, 33879044, 33879054, 33880474, 33882024
33883017, 33883347, 33884314, 33886297, 33886487, 33886786, 33886862
33886871, 33888856, 33888932, 33889459, 33890066, 33890586, 33891059
33891752, 33893127, 33895721, 33896341, 33896412, 33896418, 33896423
33896760, 33897055, 33898064, 33898336, 33899027, 33899867, 33899902
33900564, 33900807, 33901118, 33901904, 33902235, 33902465, 33902539
33904512, 33904798, 33904963, 33906515, 33906897, 33906975, 33907094
33907659, 33907663, 33907815, 33907942, 33909666, 33909729, 33909838
33909842, 33910272, 33912833, 33912872, 33913103, 33913336, 33913384
33915586, 33916081, 33916206, 33916249, 33916311, 33917203, 33918190
33919778, 33921410, 33921441, 33921860, 33922026, 33922061, 33925702
33926252, 33927256, 33927405, 33927483, 33928325, 33929317, 33931668
33932721, 33932921, 33933784, 33934979, 33935707, 33936939, 33937333
33937866, 33939477, 33940540, 33941905, 33941967, 33942062, 33943313
33945728, 33945794, 33949153, 33950698, 33951799, 33952245, 33952532
33952588, 33952976, 33953054, 33953568, 33954999, 33955060, 33955371
33956182, 33957025, 33957705, 33960379, 33960464, 33960647, 33961800
33963458, 33964258, 33964671, 33964867, 33964963, 33965211, 33967599
33969303, 33969309, 33970659, 33970841, 33972204, 33973155, 33973593
33973695, 33973908, 33973922, 33974068, 33974554, 33974560, 33974788
33974835, 33975649, 33976016, 33976581, 33976796, 33976856, 33980195
33981298, 33982111, 33982392, 33982541, 33983204, 33985986, 33986030
33987063, 33987170, 33987911, 33987976, 33988339, 33988388, 33988926
33988974, 33989017, 33990166, 33990559, 33992920, 33993028, 33993386
33994084, 33994833, 33997092, 33997202, 33997826, 33998060, 33998365
33998441, 33998706, 34001147, 34001406, 34001696, 34003077, 34003270
34003643, 34004063, 34006614, 34006650, 34007432, 34009154, 34009209
34009751, 34010877, 34011029, 34011657, 34012165, 34013753, 34013946
34017363, 34018423, 34019478, 34020888, 34020905, 34022133, 34022834
34023045, 34023117, 34023644, 34024924, 34027056, 34027199, 34027770
34027791, 34027965, 34028486, 34031036, 34033267, 34034279, 34034799
34038365, 34039170, 34039802, 34039805, 34042084, 34042088, 34042759
34042949, 34043824, 34044661, 34044973, 34045021, 34045081, 34045429
34045719, 34048056, 34048076, 34048685, 34049216, 34050156, 34051355
34051770, 34052378, 34052471, 34052862, 34052869, 34053296, 34053514
34054814, 34055289, 34056235, 34056691, 34056918, 34058858, 34058951

34060122, 34060268, 34060829, 34061796, 34062228, 34064415, 34066286
34066652, 34069804, 34070318, 34070446, 34070561, 34071111, 34071627
34072143, 34072411, 34072690, 34075499, 34078255, 34078662, 34078687
34079542, 34080081, 34080691, 34083290, 34083697, 34085116, 34086300
34088194, 34088299, 34088989, 34089934, 34090927, 34091587, 34092979
34094476, 34096200, 34096213, 34097324, 34097491, 34098840, 34098862
34099185, 34100909, 34100969, 34101724, 34101781, 34101785, 34102850
34103647, 34103857, 34104105, 34104403, 34104747, 34105531, 34105578
34105851, 34106199, 34106320, 34106567, 34106830, 34107143, 34107171
34110342, 34111239, 34111708, 34113634, 34113754, 34115338, 34115490
34115571, 34115674, 34115836, 34116531, 34116534, 34117188, 34117618
34118219, 34119621, 34119948, 34120395, 34122000, 34123350, 34125814
34126068, 34126600, 34127787, 34128961, 34129587, 34129689, 34129964
34130289, 34131435, 34131640, 34132089, 34132182, 34132256, 34132318
34133330, 34135867, 34136552, 34136598, 34136651, 34137325, 34137360
34137400, 34137513, 34137936, 34139110, 34139217, 34141328, 34142034
34142701, 34142725, 34142884, 34144063, 34145178, 34145715, 34146833
34146985, 34146987, 34147169, 34148591, 34149263, 34149515, 34151061
34153098, 34153238, 34153367, 34154060, 34154847, 34155072, 34156864
34157133, 34157543, 34158902, 34159409, 34160874, 34161298, 34162108
34162111, 34162325, 34162335, 34162419, 34162936, 34163576, 34164486
34164828, 34166857, 34167090, 34167220, 34167286, 34168185, 34171382
34171631, 34171779, 34172434, 34172950, 34172951, 34173003, 34173450
34173655, 34174125, 34174543, 34175766, 34175987, 34176645, 34177012
34177162, 34177216, 34177554, 34182054, 34182692, 34183461, 34183998
34186437, 34186556, 34187150, 34188592, 34188859, 34189553, 34191370
34191733, 34191990, 34193022, 34194445, 34195569, 34195583, 34196203
34197142, 34198944, 34200295, 34201566, 34202065, 34202285, 34202297
34203331, 34203704, 34203713, 34204673, 34205962, 34207008, 34207506
34207825, 34208572, 34208822, 34210475, 34210478, 34211059, 34211843
34212105, 34212743, 34214908, 34215091, 34215118, 34215356, 34215503
34216177, 34216873, 34219168, 34219478, 34219756, 34219769, 34219922
34220568, 34220609, 34220943, 34220961, 34220991, 34221484, 34221568
34221772, 34222165, 34224381, 34224955, 34225479, 34226067, 34226553
34226596, 34228868, 34229104, 34229250, 34229833, 34232017, 34233694
34234394, 34235520, 34236849, 34236850, 34236929, 34237240, 34237348
34238278, 34238326, 34238452, 34239023, 34239253, 34239708, 34239739
34240339, 34241948, 34242857, 34243634, 34244123, 34244448, 34245547
34248685, 34248786, 34250357, 34250510, 34250712, 34256822, 34256867
34257221, 34257821, 34259077, 34259505, 34260401, 34260455, 34261458
34261528, 34261536, 34261947, 34262719, 34262797, 34263456, 34264633
34269674, 34270419, 34271046, 34271144, 34271261, 34271831, 34272249
34272626, 34272942, 34276007, 34276035, 34276149, 34277248, 34278993
34279907, 34280456, 34281503, 34281636, 34281906, 34282948, 34284147

34284415, 34284480, 34286049, 34286361, 34286896, 34287615, 34287904
34288172, 34289040, 34289391, 34291104, 34291231, 34292131, 34296307
34296882, 34299775, 34299927, 34300648, 34301118, 34303814, 34305015
34305086, 34305465, 34306996, 34308796, 34309486, 34309870, 34310304
34310878, 34314448, 34314510, 34315238, 34317656, 34318537, 34320078
34320104, 34320607, 34322521, 34325454, 34328460, 34329645, 34329853
34330060, 34330202, 34330960, 34331370, 34333986, 34339279, 34339332
34339511, 34340632, 34343228, 34346703, 34346865, 34347024, 34348768
34348856, 34349149, 34349276, 34349447, 34349515, 34349594, 34349942
34350364, 34351706, 34352389, 34352605, 34356459, 34357461, 34358131
34358718, 34358785, 34363214, 34363828, 34364656, 34366429, 34366627
34367505, 34368448, 34368509, 34369008, 34369015, 34369457, 34370261
34370607, 34371061, 34372875, 34373053, 34373173, 34373784, 34376103
34376468, 34376629, 34377917, 34379814, 34381597, 34382203, 34382212
34383066, 34383726, 34384239, 34385931, 34386836, 34387392, 34387451
34387852, 34392047, 34394126, 34394707, 34394887, 34395591, 34396087
34396210, 34396450, 34397170, 34398729, 34400193, 34400514, 34400786
34401276, 34401444, 34405224, 34405413, 34406030, 34406120, 34406370
34408490, 34410488, 34411019, 34411060, 34411587, 34413701, 34414246
34414328, 34415224, 34415933, 34416002, 34417794, 34420046, 34420448
34420761, 34421053, 34422617, 34423163, 34424661, 34424728, 34425846
34426849, 34428819, 34430514, 34430618, 34432402, 34436025, 34443644
34444824, 34444997, 34445568, 34445728, 34446152, 34446545, 34447012
34448189, 34448235, 34448302, 34449511, 34450366, 34450853, 34451554
34452628, 34453303, 34453468, 34453799, 34453970, 34454035, 34455245
34455377, 34456728, 34457911, 34458786, 34460187, 34460273, 34461154
34461697, 34462113, 34462893, 34464036, 34465619, 34465871, 34466767
34467295, 34468807, 34469934, 34470389, 34470542, 34470753, 34471029
34472508, 34473578, 34473730, 34475838, 34476155, 34477555, 34479812
34481187, 34481738, 34482043, 34484622, 34485054, 34485380, 34485525
34485657, 34485723, 34487506, 34487786, 34488853, 34489508, 34491503
34491739, 34492025, 34492379, 34494444, 34495234, 34496630, 34497838
34498028, 34499374, 34502032, 34504292, 34505752, 34509388, 34510828
34511443, 34511846, 34511870, 34512077, 34513107, 34517973, 34519783
34520519, 34521072, 34521241, 34523306, 34523596, 34524704, 34524915
34525391, 34525691, 34525806, 34530272, 34530839, 34532111, 34532831
34533061, 34533150, 34533431, 34534178, 34534504, 34535189, 34535190
34536480, 34538232, 34539284, 34539633, 34539998, 34542602, 34542994
34543854, 34543938, 34544486, 34544657, 34544909, 34545238, 34545472
34547912, 34548830, 34549471, 34549588, 34549620, 34550486, 34551005
34551359, 34552065, 34552940, 34555251, 34556258, 34557246, 34557307
34557355, 34557500, 34557851, 34558559, 34558586, 34559114, 34559432
34559964, 34560327, 34561380, 34561402, 34562023, 34562200, 34562346
34562513, 34564274, 34567061, 34567240, 34567246, 34567785, 34569338

34570620, 34572347, 34572899, 34574048, 34574650, 34575765, 34575784
34576656, 34577339, 34578857, 34580665, 34580955, 34583967, 34585151
34587326, 34588265, 34588515, 34588563, 34588602, 34589443, 34589885
34590147, 34591645, 34592878, 34595033, 34595341, 34595682, 34596388
34596863, 34598617, 34599377, 34599777, 34600007, 34600477, 34600757
34601469, 34603342, 34604941, 34605269, 34605306, 34605643, 34606514
34609482, 34609701, 34609883, 34610498, 34611735, 34612360, 34614070
34614081, 34614417, 34615359, 34617503, 34619587, 34619921, 34624814
34627724, 34627975, 34629086, 34630604, 34632426, 34633291, 34634012
34634237, 34635564, 34637351, 34638404, 34639116, 34641746, 34645516
34645605, 34647902, 34648006, 34648786, 34649403, 34650488, 34651089
34651385, 34651785, 34653168, 34653621, 34655977, 34658262, 34658861
34659006, 34659326, 34663044, 34663333, 34664941, 34667496, 34670162
34670941, 34671488, 34671630, 34672044, 34672192, 34673162, 34675360
34677014, 34680126, 34680130, 34681314, 34681779, 34682800, 34684300
34684487, 34685578, 34687204, 34687665, 34688565, 34691455, 34691800
34692403, 34695366, 34696015, 34696043, 34696612, 34697338, 34697861
34698179, 34698924, 34699533, 34699616, 34700228, 34700255, 34700643
34700660, 34701323, 34704162, 34704506, 34705215, 34706328, 34706625
34709158, 34710074, 34710427, 34710569, 34711434, 34711897, 34712405
34713413, 34713951, 34714760, 34714968, 34715072, 34715158, 34715960
34716391, 34718564, 34718643, 34719772, 34720677, 34720762, 34720854
34721689, 34724125, 34724331, 34724535, 34724582, 34724986, 34725039
34726380, 34726666, 34729397, 34729755, 34730231, 34730930, 34731121
34732383, 34733173, 34733192, 34733234, 34736787, 34737946, 34738737
34739733, 34740434, 34742578, 34742761, 34743170, 34743331, 34743667
34743869, 34744334, 34744980, 34745335, 34747517, 34748613, 34749799
34752011, 34752186, 34752935, 34754028, 34759287, 34761284, 34761787
34762290, 34763780, 34765046, 34765783, 34767031, 34767159, 34769588
34769939, 34771499, 34773273, 34773547, 34774426, 34774536, 34775460
34775863, 34777391, 34778310, 34782365, 34782556, 34783802, 34784422
34785211, 34785971, 34786432, 34787623, 34793099, 34793679, 34794246
34794318, 34797143, 34797565, 34797666, 34797733, 34798577, 34800180
34801889, 34802312, 34803323, 34804060, 34804845, 34806060, 34808536
34809715, 34810252, 34810435, 34810533, 34810987, 34811218, 34811942
34813568, 34814154, 34814694, 34816203, 34816271, 34816383, 34816423
34816446, 34820088, 34821386, 34822118, 34822216, 34822847, 34825329
34827391, 34828828, 34829425, 34830056, 34830523, 34831087, 34831677
34832629, 34832725, 34833503, 34835042, 34836063, 34837452, 34837737
34839112, 34841743, 34844505, 34845369, 34845920, 34846247, 34847038
34848229, 34849809, 34850178, 34851191, 34851345, 34852202, 34854676
34855224, 34855355, 34855777, 34857301, 34858818, 34859550, 34860551
34861159, 34861493, 34862366, 34863611, 34864945, 34865504, 34866621
34867951, 34870095, 34871935, 34872784, 34873092, 34873139, 34873713

34874803, 34875355, 34875817, 34878842, 34879016, 34879878, 34880992
34884137, 34884270, 34884398, 34884598, 34885090, 34885986, 34886534
34888945, 34891346, 34892381, 34894430, 34894796, 34895703, 34896800
34898313, 34898860, 34899985, 34901118, 34903294, 34904610, 34906779
34907142, 34908976, 34910877, 34911010, 34913418, 34919485, 34921040
34922162, 34922189, 34922278, 34922345, 34925412, 34927892, 34931856
34933484, 34936446, 34936786, 34944713, 34944894, 34945255, 34949129
34951381, 34953532, 34955145, 34956645, 34957171, 34958012, 34958073
34961049, 34962223, 34962773, 34963194, 34965881, 34968089, 34969675
34969678, 34969920, 34974052, 34975490, 34977125, 34977892, 34978108
34986710, 34987218, 34987765, 34988484, 34991821, 34993018, 34993116
34993572, 34995066, 34996911, 34998034, 34998152, 34999123, 34999256
35001214, 35001525, 35001642, 35001950, 35001966, 35004974, 35007747
35011038, 35011794, 35012562, 35012866, 35013485, 35017301, 35019861
35020339, 35020474, 35020686, 35021301, 35021834, 35022351, 35023651
35024528, 35028559, 35030463, 35033677, 35033795, 35034357, 35034419
35037368, 35037811, 35037877, 35038887, 35039202, 35042447, 35045932
35046819, 35047664, 35047747, 35048031, 35050895, 35054513, 35061730
35063106, 35064830, 35065501, 35066263, 35067685, 35069202, 35072849
35074697, 35075067, 35075794, 35079707, 35080170, 35081595, 35085927
35089117, 35090180, 35092748, 35095078, 35095186, 35095748, 35096413
35096429, 35098094, 35099667, 35099674, 35100889, 35102957, 35108500
35108659, 35111235, 35111766, 35111914, 35114002, 35116794, 35116995
35117839, 35118870, 35119386, 35119957, 35120120, 35122349, 35123499
35123829, 35126657, 35128327, 35133091, 35133360, 35135018, 35135099
35136259, 35136608, 35137435, 35141642, 35146117, 35146613, 35146774
35150992, 35151872, 35152252, 35154281, 35154926, 35154960, 35156218
35156936, 35157812, 35160590, 35160800, 35161640, 35161890, 35162446
35167216, 35167687, 35169842, 35170600, 35172557, 35175850, 35176667
35176975, 35177450, 35181715, 35182029, 35185281, 35185582, 35186248
35192139, 35192392, 35192409, 35194313, 35196311, 35196454, 35196527
35200616, 35201760, 35204046, 35204054, 35206006, 35209217, 35209359
35209504, 35209830, 35214786, 35216660, 35217484, 35220732, 35223138
35224455, 35224820, 35225526, 35227329, 35229151, 35229318, 35231307
35235919, 35236335, 35238243, 35239280, 35240410, 35241630, 35241785
35242133, 35243199, 35246710, 35251084, 35252340, 35254297, 35255487
35256214, 35256781, 35256970, 35257945, 35261641, 35264103, 35271571
35276686, 35279084, 35279794, 35280309, 35282519, 35284198, 35285190
35285519, 35285795, 35286006, 35286235, 35286643, 35287200, 35289426
35297129, 35300684, 35305465, 35308639, 35309432, 35310217, 35313797
35314082, 35314366, 35314538, 35318334, 35320424, 35321914, 35323379
35325806, 35325831, 35327636, 35328135, 35329690, 35330125, 35330506
35331461, 35335219, 35336174, 35336918, 35338859, 35339824, 35342306
35343164, 35343260, 35344589, 35345911, 35346086, 35350522, 35350730

35352132, 35354098, 35355841, 35358495, 35358599, 35358802, 35360571
35364812, 35367953, 35368489, 35369902, 35371235, 35373245, 35378997
35383562, 35383695, 35389856, 35391953, 35392518, 35393406, 35393540
35394293, 35394301, 35395648, 35395990, 35396708, 35397199, 35397368
35397804, 35399131, 35399652, 35401059, 35401779, 35403044, 35403248
35403506, 35406065, 35406883, 35407223, 35411248, 35412130, 35412492
35412607, 35413559, 35413561, 35413641, 35413813, 35414664, 35415913
35416200, 35428646, 35429800, 35431523, 35431882, 35432001, 35442758
35450698, 35450949, 35451412, 35454504, 35455538, 35456197, 35460119
35461252, 35462026, 35464320, 35464439, 35464935, 35465471, 35471762
35471995, 35474719, 35475118, 35480672, 35480864, 35481088, 35481836
35486570, 35490676, 35491283, 35491431, 35496065, 35499173, 35500783
35501373, 35501516, 35505353, 35506375, 35507017, 35508205, 35509815
35510133, 35510595, 35511113, 35513164, 35516861, 35518158, 35518161
35519977, 35524416, 35525140, 35525149, 35527573, 35528568, 35532862
35533077, 35534472, 35536839, 35546332, 35550354, 35550831, 35555753
35562836, 35562961, 35564178, 35566791, 35567384, 35571480, 35572071
35575926, 35578393, 35581572, 35585131, 35585502, 35587006, 35587715
35587953, 35591921, 35597299, 35597308, 35598272, 35598911, 35600358
35608957, 35612086, 35617844, 35618472, 35621725, 35622388, 35623675
35627067, 35627364, 35635081, 35636459, 35637915, 35638318, 35639791
35646719, 35649519, 35653725, 35657726, 35662517, 35663859, 35665871
35666536, 35668941, 35669282, 35676115, 35677162, 35683569, 35685102
35688371, 35689185, 35689562, 35692792, 35698030, 35700030, 35700342
35702932, 35708364, 35717077, 35720222, 35720276, 35724523, 35734485
35737047, 35747733, 35748468, 35752989, 35754528, 35757416, 35757515
35757524, 35759174, 35759666, 35761923, 35763448, 35770294, 35771475
35782231, 35784008, 35784551, 35784927, 35786885, 35800115, 35806962
35813895, 35815596, 35816237, 35828713, 35833399, 35833987, 35834182
35836860, 35837578, 35843249, 35843788, 35848837, 35861995, 35868496
35891265, 35914430, 35920369, 35921533, 35949725, 35957640, 35963250
35970686, 35974414, 35977447, 35979315, 35983268, 35986911, 35990296
35997913, 36016273, 36021678, 36036877, 36040822, 36104560, 36117381
36138120

Version 19.0.0.0.ru-2023-10.rur-2023-10.r1

Version 19.0.0.0.ru-2023-10.rur-2023-10.r1 includes the following:

- Patch [35239280](#): DSTV42 UPDATE - TZDATA2023C - NEED OJVM FIX
- Patch [33125873](#): MAKE CACHE GLOBAL OBJECT INVALIDATION CIC NON-SERIALIZE FOR BETTER PERFORMANCE

- Patch [29213893](#): DBMS_STATS FAILING WITH ERROR ORA-01422 WHEN GATHERING STATS FOR USER\$ TABLE
- Patch [28730253](#): SUPPORT NEW ERA REIWA FOR JAPANESE IMPERIAL CALENDAR
- Patch [35648110](#): OJVM RELEASE UPDATE: 19.21.0.0.231017 (35648110)
- Patch [35643107](#): Database Release Update : 19.21.0.0.231017 (35643107)
- Patch [29585399](#): OCW RELEASE UPDATE 19.3.0.0.0 (29585399)
- PreUpgrade Jar: preupgrade_19_cbuild_13_lf.zip

Combined Patches for Version 19.0.0.0.ru-2023-10.rur-2023-10.r1, released October 2023

Bugs fixed:

1297945, 7391838, 8460502, 8476681, 9002767, 10121473, 10123661
12565410, 12949919, 14112098, 14570574, 14735102, 15897884, 15931756
15959416, 16662822, 16664572, 16750494, 16799766, 17275499, 17395507
17428816, 17443054, 17468475, 17562236, 17777718, 18534283, 18697534
18759260, 18943905, 19080742, 19138896, 19147630, 19397646, 19630878
19697993, 19884953, 19958239, 20007421, 20044584, 20083476, 20289608
20313356, 20319830, 20479545, 20661314, 20721183, 20867658, 20875943
20922160, 21119541, 21217621, 21232786, 21245711, 21374587, 21528318
21533734, 21629064, 21639146, 21888352, 21965541, 22037067, 22066547
22252368, 22325312, 22387320, 22553815, 22580355, 22725871, 22729345
22748979, 22813401, 22873666, 23020668, 23066463, 23094775, 23125587
23220873, 23294761, 23296836, 23311885, 23606241, 23614160, 23645975
23734075, 23734111, 23763462, 24336782, 24356932, 24559425, 24561942
24596874, 24597536, 24669730, 24687075, 24701882, 24833686, 24916492
24957575, 24971456, 25030027, 25033515, 25092651, 25093917, 25148135
25153902, 25173172, 25195515, 25404117, 25415139, 25416731, 25467237
25541233, 25560538, 25562258, 25607406, 25607716, 25632308, 25642769
25655012, 25661172, 25675134, 25677036, 25756945, 25792962, 25804387
25804908, 25806201, 25809128, 25869323, 25881271, 25883179, 25905368
25913778, 25933030, 25979242, 25986062, 25997810, 26001677, 26003708
26108369, 26127355, 26139817, 26173091, 26203132, 26247450, 26256280
26280704, 26284288, 26352569, 26352615, 26440142, 26476244, 26476323
26497655, 26499997, 26500553, 26516556, 26528202, 26577716, 26587659
26611353, 26621826, 26668264, 26716835, 26739322, 26758837, 26777814
26785852, 26789742, 26800890, 26819036, 26860844, 26872233, 26897528
26925969, 26951566, 26957541, 26960568, 26963540, 26978857, 27004798
27004828, 27015468, 27019512, 27036163, 27044169, 27044246, 27063461

27086374, 27091809, 27096103, 27101798, 27126122, 27126938, 27130348
27131416, 27155644, 27162036, 27166935, 27175854, 27195575, 27195935
27207214, 27207959, 27221350, 27222128, 27243840, 27244999, 27254335
27260704, 27261477, 27275126, 27277677, 27302372, 27329690, 27359766
27359770, 27362994, 27369515, 27378053, 27381279, 27392968, 27406105
27411022, 27423500, 27428898, 27439716, 27453490, 27458357, 27458493
27460010, 27489107, 27497101, 27525303, 27572040, 27582210, 27589260
27595082, 27597359, 27604329, 27614573, 27622946, 27627811, 27629928
27636387, 27639208, 27654410, 27658166, 27661222, 27666312, 27684864
27691701, 27692173, 27697886, 27700413, 27710072, 27722357, 27729678
27742354, 27745728, 27751111, 27751518, 27760043, 27764052, 27768096
27782078, 27785931, 27786168, 27801144, 27825962, 27828892, 27829722
27841399, 27846298, 27860754, 27873364, 27877830, 27880025, 27897090
27899093, 27907898, 27908460, 27917890, 27929509, 27933036, 27934711
27935464, 27941110, 27950978, 27951757, 27957203, 27957963, 27962025
27967484, 27979632, 27989365, 27998559, 28001632, 28007516, 28023467
28031385, 28044739, 28052648, 28064977, 28072567, 28078186, 28089605
28092783, 28104176, 28109326, 28112563, 28125947, 28127287, 28127569
28129791, 28133903, 28138566, 28138847, 28144569, 28145995, 28156781
28163768, 28167557, 28173612, 28181021, 28185286, 28187837, 28189466
28193268, 28198802, 28201045, 28204104, 28204262, 28205555, 28209601
28209985, 28210681, 28215483, 28227204, 28234255, 28248841, 28263142
28267957, 28271258, 28271693, 28276054, 28279176, 28279456, 28279612
28294439, 28294563, 28298401, 28302580, 28303692, 28313275, 28319114
28322973, 28326928, 28337860, 28338211, 28350595, 28351919, 28362187
28364580, 28370061, 28371123, 28373960, 28375383, 28379065, 28381939
28383667, 28386259, 28387185, 28387574, 28390177, 28390273, 28392179
28395302, 28397317, 28402823, 28403019, 28406374, 28410431, 28412163
28414968, 28430240, 28431445, 28432345, 28435333, 28436173, 28436414
28442896, 28451312, 28452123, 28454215, 28461031, 28461789, 28463226
28470673, 28475242, 28479352, 28482048, 28482049, 28484299, 28487818
28489419, 28492006, 28498976, 28499269, 28502773, 28503081, 28504631
28505321, 28513129, 28513333, 28521330, 28522750, 28523644, 28526715
28530171, 28530697, 28534475, 28534493, 28535127, 28537481, 28538439
28541606, 28542455, 28544270, 28545395, 28546290, 28547068, 28547926
28553649, 28553981, 28558489, 28558645, 28561704, 28564479, 28565296
28567417, 28567819, 28569897, 28570589, 28572165, 28572407, 28572533
28572544, 28572667, 28572834, 28577943, 28578945, 28587723, 28589194
28589509, 28589644, 28591817, 28592647, 28593127, 28593682, 28594086
28597221, 28598022, 28600107, 28601957, 28602253, 28604647, 28605066
28606598, 28607316, 28607632, 28608211, 28612239, 28618343, 28620697
28621543, 28621781, 28622202, 28625580, 28625862, 28625873, 28627033
28628592, 28630381, 28632796, 28632799, 28636532, 28639299, 28640772
28642469, 28642551, 28642899, 28643583, 28643654, 28643718, 28644549

28645570, 28646200, 28646939, 28647544, 28649388, 28651078, 28651637
28652776, 28655209, 28657026, 28658263, 28659098, 28661333, 28661362
28663289, 28663782, 28670402, 28672124, 28672457, 28673945, 28674263
28676706, 28681153, 28682182, 28682796, 28689483, 28690694, 28692103
28692275, 28692282, 28693954, 28694526, 28694639, 28694872, 28694877
28696373, 28697526, 28698087, 28699321, 28700945, 28703812, 28704412
28705231, 28707931, 28708400, 28708585, 28709063, 28709412, 28710385
28710469, 28710663, 28710734, 28714461, 28714720, 28715655, 28715727
28717406, 28718302, 28718469, 28719348, 28720204, 28720418, 28721497
28722229, 28729900, 28730079, 28730253, 28734355, 28734910, 28740708
28740799, 28740863, 28741374, 28742555, 28745367, 28747846, 28749853
28751498, 28752923, 28755011, 28755084, 28755309, 28755846, 28757960
28758722, 28760206, 28760662, 28763291, 28765983, 28767240, 28769456
28770865, 28771022, 28771947, 28772390, 28772816, 28774416, 28776431
28776811, 28777073, 28777214, 28777478, 28778754, 28781599, 28781754
28785273, 28785321, 28785531, 28788272, 28789531, 28789533, 28791576
28791852, 28793062, 28794230, 28795452, 28795551, 28795563, 28795734
28800508, 28802066, 28802734, 28804517, 28805242, 28806517, 28807247
28808314, 28808652, 28808656, 28810381, 28811560, 28811592, 28813317
28813931, 28815123, 28815355, 28815557, 28816871, 28817449, 28818063
28819640, 28820669, 28821847, 28824482, 28826113, 28827682, 28828390
28831971, 28833912, 28835937, 28836716, 28837979, 28838385, 28839869
28842408, 28844656, 28844738, 28845346, 28846759, 28847541, 28847572
28849494, 28849776, 28850084, 28851458, 28851467, 28852325, 28852334
28854004, 28854212, 28854733, 28855520, 28855922, 28857364, 28857552
28861861, 28862532, 28863263, 28863432, 28863487, 28865544, 28865569
28867698, 28867992, 28869215, 28870496, 28871040, 28872645, 28872829
28873575, 28874416, 28875089, 28876253, 28876639, 28876926, 28877252
28878865, 28880218, 28880864, 28881191, 28881848, 28882146, 28882751
28882784, 28884931, 28887305, 28888083, 28888327, 28889389, 28889730
28891867, 28891941, 28892794, 28896556, 28897123, 28897512, 28898967
28899663, 28900506, 28901126, 28902135, 28904380, 28905312, 28905390
28905457, 28905615, 28907196, 28909769, 28909992, 28910498, 28910586
28911140, 28912691, 28914144, 28915561, 28917080, 28918429, 28919145
28921844, 28922227, 28922485, 28922532, 28922608, 28922767, 28925250
28925460, 28925634, 28925880, 28927452, 28928462, 28930944, 28932914
28933079, 28933158, 28935293, 28935956, 28936114, 28937717, 28938167
28938422, 28938698, 28940179, 28940281, 28940472, 28941901, 28942118
28942455, 28942694, 28945421, 28945994, 28946233, 28946574, 28948554
28949888, 28950868, 28951332, 28951493, 28951533, 28952168, 28954762
28955606, 28955883, 28956145, 28956908, 28957260, 28957292, 28957723
28958088, 28958094, 28958590, 28959493, 28960863, 28962271, 28962775
28963036, 28965084, 28965095, 28965231, 28965376, 28966444, 28968211
28968779, 28970122, 28971177, 28974083, 28974902, 28974999, 28977322

28978664, 28979289, 28980448, 28980910, 28981871, 28983095, 28983486
28984313, 28985114, 28985272, 28985362, 28985478, 28986207, 28986231
28986257, 28986326, 28986481, 28986696, 28988482, 28988864, 28989306
28990681, 28993295, 28993353, 28994307, 28994542, 28994721, 28994783
28995287, 28996376, 28998369, 28999046, 29000000, 29001305, 29001888
29002273, 29002488, 29002784, 29002927, 29003207, 29003407, 29003617
29003738, 29004934, 29005748, 29006318, 29006621, 29007321, 29007353
29007775, 29008035, 29008669, 29009513, 29010126, 29010517, 29011936
29012609, 29013475, 29013832, 29014076, 29014385, 29015118, 29015273
29016294, 29017265, 29018655, 29018680, 29019121, 29020147, 29020271
29020423, 29021063, 29021352, 29022986, 29024028, 29024054, 29024448
29024552, 29024732, 29024795, 29024876, 29026154, 29026582, 29026606
29027456, 29027694, 29027914, 29027933, 29027940, 29030184, 29030927
29031575, 29031600, 29032234, 29032276, 29032457, 29032607, 29033052
29033145, 29033164, 29033200, 29033280, 29033655, 29034331, 29034587
29036278, 29037290, 29038528, 29038728, 29038730, 29039089, 29039510
29040032, 29040739, 29041739, 29041775, 29043554, 29043651, 29043725
29044086, 29044763, 29044954, 29046482, 29047127, 29047850, 29048178
29048289, 29048498, 29048605, 29048728, 29048792, 29048858, 29049014
29049673, 29050357, 29050560, 29050765, 29050886, 29051263, 29051702
29051953, 29052726, 29052850, 29053783, 29053902, 29055644, 29056024
29056270, 29056560, 29056767, 29056894, 29058476, 29059011, 29060216
29061016, 29061959, 29062692, 29062848, 29062860, 29062868, 29110526
29110783, 29110790, 29110797, 29110802, 29110805, 29111598, 29111631
29112455, 29113282, 29113305, 29115794, 29115857, 29116779, 29117337
29117526, 29117642, 29118543, 29119077, 29119733, 29120223, 29122224
29122254, 29122367, 29123297, 29123324, 29123432, 29123444, 29123482
29124104, 29124368, 29125036, 29125374, 29125380, 29125708, 29125786
29126345, 29127957, 29128693, 29128935, 29129450, 29129476, 29129497
29129691, 29129712, 29130219, 29131539, 29131772, 29132456, 29132869
29132938, 29133470, 29134447, 29135383, 29135649, 29136111, 29138641
29139070, 29139727, 29139761, 29139780, 29139956, 29141316, 29141341
29141685, 29141886, 29142609, 29142667, 29143516, 29144995, 29145214
29145730, 29146077, 29146157, 29146810, 29147849, 29148799, 29149170
29149829, 29150338, 29151520, 29152357, 29152603, 29152752, 29154057
29154631, 29154636, 29154725, 29154829, 29155099, 29155208, 29157051
29157389, 29158139, 29158680, 29158899, 29158990, 29159216, 29159661
29159909, 29159936, 29160174, 29160462, 29160824, 29161597, 29161923
29162095, 29162749, 29163073, 29163156, 29163415, 29163437, 29163524
29163567, 29164376, 29164446, 29165682, 29167111, 29167342, 29167374
29167940, 29168137, 29168219, 29168433, 29169073, 29169215, 29169540
29169739, 29170232, 29170717, 29171683, 29171942, 29172618, 29172826
29173140, 29173373, 29173618, 29173817, 29174004, 29174753, 29175638
29175765, 29175829, 29176318, 29177466, 29177543, 29177886, 29178385

29179097, 29180313, 29180455, 29180559, 29180721, 29180893, 29181078
29181153, 29181231, 29181568, 29181620, 29181743, 29181923, 29182019
29182517, 29182535, 29182901, 29182920, 29183298, 29183912, 29184297
29184666, 29185193, 29186091, 29186456, 29186605, 29188255, 29189302
29189307, 29189889, 29190235, 29190474, 29190663, 29190740, 29191541
29191827, 29192419, 29192468, 29192685, 29193207, 29193681, 29194205
29194367, 29194493, 29194827, 29194981, 29195279, 29195337, 29195758
29196151, 29196725, 29198092, 29198913, 29199163, 29199635, 29199733
29200316, 29200700, 29201143, 29201494, 29201539, 29201695, 29201787
29202104, 29202461, 29202850, 29203041, 29203122, 29203166, 29203227
29203425, 29203443, 29203604, 29205281, 29205323, 29205419, 29205463
29205767, 29205918, 29206109, 29206605, 29206631, 29207073, 29208260
29208732, 29209545, 29210455, 29210577, 29210610, 29210624, 29210683
29211457, 29211724, 29211895, 29212012, 29212433, 29212611, 29213320
29213351, 29213613, 29213641, 29213775, 29213850, 29213879, 29213893
29214561, 29214960, 29215658, 29216312, 29216723, 29216746, 29216984
29217294, 29217472, 29217828, 29217848, 29217856, 29218570, 29219205
29219273, 29219627, 29220079, 29221248, 29221745, 29221891, 29221942
29222031, 29222534, 29222784, 29222892, 29223110, 29223833, 29223859
29223967, 29224065, 29224294, 29224605, 29224710, 29225076, 29225168
29225758, 29225861, 29227602, 29228869, 29229164, 29229754, 29229839
29229844, 29229955, 29230252, 29230565, 29231133, 29232117, 29232154
29232449, 29232533, 29232653, 29233415, 29233810, 29233953, 29234123
29235934, 29236573, 29237538, 29237575, 29237744, 29240307, 29240668
29240759, 29241345, 29241651, 29241856, 29242017, 29242561, 29242884
29242906, 29243749, 29243958, 29244495, 29244766, 29244968, 29245063
29245137, 29245160, 29246163, 29246337, 29247183, 29247415, 29247712
29247906, 29248012, 29248495, 29248552, 29248723, 29248835, 29248858
29249289, 29249412, 29249583, 29249991, 29250059, 29250317, 29251259
29251564, 29252218, 29252510, 29252790, 29253184, 29253871, 29254031
29254177, 29254623, 29254930, 29255178, 29255273, 29255431, 29255435
29255616, 29255705, 29255718, 29255973, 29256279, 29256426, 29259119
29259320, 29260224, 29260407, 29260452, 29260956, 29261547, 29261548
29261695, 29261906, 29262143, 29262512, 29262887, 29265446, 29265448
29265780, 29266248, 29266899, 29267292, 29268412, 29269171, 29269228
29269825, 29270585, 29271019, 29273168, 29273360, 29273539, 29273570
29273735, 29273812, 29273847, 29274428, 29274564, 29274623, 29274627
29275461, 29276272, 29277317, 29278218, 29278684, 29279658, 29279751
29279854, 29281112, 29281527, 29281691, 29281796, 29282090, 29282233
29282666, 29282898, 29285197, 29285453, 29285503, 29285621, 29285788
29285956, 29286037, 29286220, 29286229, 29287130, 29287705, 29290110
29290235, 29292232, 29292253, 29292378, 29292837, 29293072, 29293574
29293806, 29294382, 29294753, 29296257, 29297863, 29297915, 29298220
29299049, 29299082, 29299830, 29299844, 29301139, 29301463, 29301566

29302565, 29302614, 29302963, 29303712, 29303918, 29304314, 29304640
29304692, 29304781, 29304853, 29305093, 29306226, 29306478, 29306713
29306790, 29307090, 29307109, 29307638, 29309698, 29311336, 29311528
29311588, 29311927, 29312310, 29312672, 29312734, 29312753, 29312889
29313347, 29313417, 29313525, 29314539, 29314636, 29314867, 29314949
29317756, 29318410, 29319441, 29319558, 29320900, 29321489, 29321689
29323946, 29323999, 29324568, 29324735, 29325087, 29325105, 29325257
29325347, 29325356, 29325497, 29325765, 29325993, 29326233, 29327044
29327892, 29327972, 29328305, 29329042, 29329087, 29329675, 29329807
29329848, 29330361, 29330791, 29331066, 29331209, 29331380, 29331493
29332292, 29332395, 29332763, 29332771, 29332966, 29333500, 29336843
29336899, 29337294, 29337310, 29337742, 29338315, 29338348, 29338453
29338780, 29338913, 29339101, 29339155, 29339299, 29339452, 29340333
29341209, 29341782, 29342099, 29343086, 29343156, 29343861, 29344541
29345382, 29345937, 29346057, 29346138, 29346211, 29346943, 29347620
29348176, 29348358, 29350052, 29350712, 29350762, 29350868, 29351044
29351386, 29351662, 29351708, 29351716, 29351735, 29351749, 29351771
29351786, 29352298, 29352724, 29352867, 29352947, 29353271, 29353389
29353432, 29353718, 29353821, 29353960, 29355654, 29355913, 29356547
29356634, 29356698, 29356704, 29356711, 29356752, 29356782, 29357424
29357821, 29358509, 29358828, 29360252, 29360285, 29360467, 29360672
29360775, 29360911, 29360950, 29361319, 29361472, 29361801, 29362596
29363090, 29363151, 29364171, 29364177, 29366406, 29366818, 29366940
29367019, 29367561, 29367971, 29368253, 29368310, 29368725, 29372069
29372541, 29372562, 29373418, 29373588, 29374179, 29374604, 29374627
29375355, 29375941, 29375984, 29376346, 29377804, 29377986, 29378029
29378287, 29378834, 29378913, 29379299, 29379381, 29379552, 29379750
29379978, 29380527, 29381000, 29382296, 29382641, 29382784, 29382815
29383695, 29384740, 29384781, 29384854, 29384864, 29384960, 29385339
29385429, 29385652, 29385774, 29386125, 29386502, 29386557, 29386635
29386660, 29386835, 29387073, 29387274, 29387310, 29387329, 29387337
29388020, 29388072, 29388094, 29388524, 29388830, 29389408, 29389889
29390011, 29390435, 29390501, 29390785, 29391030, 29391237, 29391301
29391438, 29391849, 29391925, 29392554, 29392966, 29393291, 29393649
29394014, 29394140, 29394749, 29394761, 29395657, 29396481, 29397841
29397954, 29397996, 29398192, 29398488, 29398863, 29399046, 29399100
29399121, 29399336, 29399938, 29399959, 29402110, 29402131, 29403307
29404425, 29404483, 29405012, 29405462, 29405651, 29405996, 29407488
29407637, 29407804, 29407932, 29408853, 29409149, 29409455, 29410311
29410834, 29411037, 29411427, 29411469, 29411931, 29412066, 29412269
29413205, 29413360, 29413382, 29413517, 29413544, 29413634, 29413956
29415493, 29415774, 29416339, 29416688, 29416700, 29417084, 29417113
29417173, 29417719, 29417884, 29418165, 29418341, 29420254, 29420834
29421059, 29423003, 29423016, 29423156, 29423227, 29423491, 29423826

29424094, 29424999, 29426241, 29426320, 29426521, 29428230, 29429017
29429087, 29429264, 29429336, 29429466, 29429566, 29429895, 29430524
29430866, 29431192, 29431402, 29431485, 29431985, 29432176, 29434301
29434777, 29434869, 29435474, 29435652, 29435966, 29436454, 29436514
29436522, 29436727, 29437029, 29437379, 29437594, 29437712, 29438150
29438277, 29438736, 29439522, 29440651, 29441196, 29442400, 29442936
29443187, 29443250, 29443559, 29444072, 29444275, 29444282, 29444524
29444583, 29444602, 29444906, 29445548, 29445707, 29446319, 29446669
29447460, 29448498, 29449477, 29449845, 29449852, 29450162, 29450193
29450273, 29450421, 29450812, 29450936, 29451085, 29451224, 29451386
29451660, 29452251, 29452576, 29452736, 29452739, 29452809, 29452813
29452864, 29452936, 29452953, 29452973, 29452977, 29453104, 29453105
29453109, 29453681, 29453682, 29454450, 29454467, 29454468, 29454469
29454470, 29454471, 29454978, 29455424, 29455773, 29456538, 29456714
29457312, 29457319, 29457370, 29457502, 29457807, 29457978, 29458132
29460252, 29461420, 29461791, 29461971, 29462594, 29462767, 29462957
29463047, 29463528, 29463553, 29463798, 29464616, 29464779, 29465047
29465177, 29466674, 29466707, 29467622, 29469563, 29469565, 29470059
29470205, 29470291, 29470636, 29470729, 29470814, 29470880, 29471633
29471832, 29471857, 29471860, 29472170, 29472172, 29472176, 29472204
29472235, 29472319, 29472402, 29472404, 29472405, 29472408, 29472411
29472446, 29472618, 29473708, 29474348, 29475386, 29476473, 29476702
29477015, 29481584, 29482021, 29483452, 29483532, 29483626, 29483672
29483685, 29483712, 29483723, 29483771, 29485099, 29485731, 29485785
29485877, 29486181, 29486848, 29487150, 29487189, 29487407, 29488894
29488996, 29489436, 29489546, 29490032, 29490256, 29491784, 29492127
29492939, 29493122, 29493821, 29494101, 29494245, 29494788, 29494934
29495057, 29495171, 29495684, 29496977, 29497053, 29497311, 29497588
29497696, 29497778, 29498198, 29499077, 29500257, 29500826, 29500963
29501218, 29502561, 29503543, 29503631, 29503827, 29504103, 29504492
29504682, 29505225, 29505589, 29505668, 29506942, 29507270, 29507616
29508681, 29508751, 29508998, 29509777, 29509975, 29510278, 29511064
29511611, 29511771, 29511980, 29512125, 29512773, 29512890, 29514284
29514479, 29515134, 29515240, 29515476, 29515534, 29515766, 29515834
29516300, 29516727, 29516766, 29516943, 29517168, 29517443, 29517883
29518604, 29518767, 29519131, 29521187, 29521688, 29521748, 29521862
29522358, 29522561, 29522662, 29523055, 29523216, 29523511, 29524043
29524599, 29524985, 29525366, 29525467, 29525886, 29526966, 29527595
29527610, 29528184, 29528368, 29529147, 29529436, 29530414, 29530440
29530515, 29530812, 29530909, 29531654, 29531836, 29532112, 29532532
29534218, 29536342, 29536445, 29536794, 29537829, 29538631, 29539027
29539413, 29540327, 29540831, 29540862, 29541517, 29541742, 29541769
29541973, 29542084, 29542449, 29542474, 29542580, 29542643, 29543034
29543956, 29544552, 29546817, 29547010, 29547867, 29548413, 29548427

29548592, 29548687, 29548722, 29549040, 29549071, 29549104, 29549154
29549730, 29550530, 29552402, 29552773, 29553141, 29554092, 29554351
29554554, 29554997, 29555105, 29555239, 29557144, 29557261, 29557336
29557556, 29558238, 29558452, 29558926, 29558975, 29559187, 29559395
29559446, 29559908, 29559981, 29560019, 29564592, 29564593, 29565611
29579919, 29580394, 29580983, 29581460, 29581771, 29583018, 29584261
29584693, 29586143, 29587299, 29587488, 29587720, 29587765, 29588580
29588732, 29589544, 29590666, 29591311, 29591343, 29591641, 29591661
29592011, 29592215, 29592433, 29592595, 29592946, 29593820, 29597158
29597536, 29597716, 29597754, 29598039, 29598040, 29598046, 29598226
29598233, 29598338, 29598981, 29599008, 29599243, 29599300, 29599552
29601461, 29602831, 29603460, 29603884, 29604002, 29604257, 29606261
29607136, 29607797, 29608000, 29608023, 29608888, 29609434, 29609468
29609603, 29610506, 29611020, 29611991, 29613733, 29614206, 29614931
29614987, 29615824, 29616244, 29616414, 29617414, 29618074, 29618190
29620042, 29620564, 29622936, 29623323, 29623592, 29624124, 29624408
29625065, 29625804, 29625827, 29625876, 29626154, 29626732, 29628200
29628647, 29629430, 29629650, 29629681, 29629745, 29630221, 29631749
29632095, 29632265, 29632611, 29632751, 29633697, 29633753, 29633936
29634643, 29635427, 29635717, 29635990, 29637362, 29637526, 29637560
29638285, 29638928, 29641373, 29641736, 29642451, 29643721, 29644426
29644464, 29645167, 29645349, 29646315, 29647176, 29647770, 29648928
29649694, 29651183, 29651517, 29651520, 29652809, 29653132, 29653246
29655164, 29655416, 29655668, 29655855, 29655895, 29656400, 29656819
29656843, 29657399, 29657422, 29657744, 29657960, 29657973, 29658056
29661028, 29661065, 29661722, 29663191, 29663368, 29663494, 29663601
29663813, 29664087, 29664161, 29665168, 29665940, 29666451, 29667527
29667994, 29668005, 29668253, 29669241, 29669413, 29670713, 29670782
29671363, 29672507, 29675446, 29676089, 29676921, 29677051, 29677173
29677733, 29677927, 29678217, 29679856, 29680700, 29681987, 29683039
29683189, 29683211, 29684518, 29685137, 29685276, 29687214, 29687220
29687459, 29687718, 29687727, 29687763, 29688867, 29689145, 29689255
29690795, 29690806, 29692115, 29692694, 29693847, 29694869, 29695425
29695821, 29695841, 29695964, 29695987, 29696242, 29696310, 29697928
29700125, 29700460, 29700770, 29701425, 29701720, 29701755, 29701937
29703932, 29704426, 29705793, 29706141, 29706160, 29707099, 29707493
29707582, 29707896, 29708324, 29708353, 29708876, 29708915, 29710188
29710858, 29713810, 29715220, 29715647, 29715703, 29716029, 29716194
29716227, 29716491, 29716602, 29716871, 29717659, 29717901, 29718198
29719146, 29720133, 29720373, 29721418, 29721576, 29722026, 29722092
29722167, 29722389, 29723113, 29724497, 29724658, 29725115, 29725421
29725425, 29725476, 29725781, 29726695, 29737941, 29738374, 29738400
29739576, 29741319, 29741976, 29742223, 29742926, 29743448, 29744225
29744400, 29744637, 29745288, 29745624, 29746003, 29746962, 29747493

29747648, 29747653, 29748285, 29748325, 29748336, 29748513, 29749469
29749471, 29750673, 29751094, 29753244, 29754196, 29754640, 29754951
29755821, 29756274, 29756444, 29757099, 29757264, 29757651, 29757687
29757814, 29758203, 29758217, 29758661, 29761678, 29761837, 29761911
29763158, 29764644, 29765035, 29765219, 29765347, 29765393, 29765493
29766207, 29766435, 29766503, 29766679, 29768487, 29768899, 29769549
29769695, 29769901, 29770750, 29771032, 29771242, 29772514, 29772761
29773185, 29773197, 29773205, 29773459, 29773633, 29773842, 29774362
29775393, 29775473, 29779196, 29779368, 29779793, 29779901, 29780140
29780459, 29780507, 29780633, 29782211, 29782284, 29782501, 29782823
29782866, 29783142, 29784106, 29785169, 29785239, 29785251, 29785311
29785544, 29785550, 29785831, 29787292, 29787766, 29788820, 29789911
29791152, 29791880, 29791916, 29792213, 29792433, 29793141, 29793151
29793318, 29794174, 29794462, 29795712, 29795957, 29796335, 29796378
29796916, 29797209, 29797726, 29801164, 29802382, 29802695, 29803593
29803638, 29803948, 29804875, 29805368, 29805772, 29806390, 29806964
29807964, 29809792, 29809837, 29809997, 29810012, 29810013, 29811616
29811720, 29812084, 29812166, 29812489, 29813503, 29813650, 29813671
29814455, 29814995, 29815341, 29815713, 29816887, 29817278, 29817547
29817784, 29818794, 29819753, 29820341, 29821130, 29821582, 29822714
29825525, 29827647, 29827792, 29827852, 29828644, 29829339, 29829453
29830374, 29831196, 29831404, 29831567, 29833406, 29833984, 29834506
29836096, 29836424, 29838337, 29838485, 29838740, 29838773, 29839481
29839715, 29840619, 29841267, 29841687, 29842369, 29843238, 29843277
29843692, 29843831, 29844131, 29844226, 29844275, 29845449, 29845530
29845691, 29846126, 29846525, 29846645, 29846688, 29847627, 29848084
29848849, 29849100, 29849139, 29850083, 29850552, 29850566, 29850930
29851020, 29851308, 29851401, 29851474, 29851733, 29853201, 29853485
29856420, 29856506, 29856859, 29856890, 29858121, 29858376, 29858420
29858929, 29859068, 29860022, 29860028, 29860994, 29861075, 29864203
29864261, 29865188, 29865590, 29865658, 29867728, 29868639, 29868736
29869052, 29869086, 29869149, 29869404, 29869857, 29869877, 29869887
29869906, 29870065, 29870533, 29871098, 29871312, 29871360, 29872401
29872720, 29872937, 29872983, 29873206, 29873665, 29873751, 29874090
29874761, 29875200, 29875459, 29875565, 29875919, 29876358, 29876989
29877608, 29878076, 29879723, 29881050, 29881478, 29881575, 29881643
29881839, 29882427, 29882454, 29882729, 29884958, 29885182, 29885781
29885890, 29886809, 29887045, 29887111, 29887840, 29888621, 29889184
29889358, 29890740, 29891075, 29891383, 29891533, 29891853, 29891857
29891916, 29892388, 29892604, 29892634, 29892973, 29892982, 29893132
29893197, 29893287, 29894021, 29894511, 29896510, 29897418, 29897720
29897863, 29899384, 29900186, 29900203, 29900824, 29901021, 29901025
29901419, 29901961, 29902299, 29902327, 29902330, 29902659, 29903190
29903299, 29903357, 29903454, 29904002, 29906678, 29907870, 29907942

29908389, 29908639, 29908777, 29909658, 29910218, 29910402, 29912135
29912286, 29913805, 29913934, 29913966, 29914449, 29914544, 29915182
29915217, 29915848, 29916198, 29916975, 29919782, 29919789, 29920025
29920376, 29920804, 29921214, 29921318, 29921559, 29922225, 29922435
29922461, 29923452, 29924147, 29924181, 29924479, 29925177, 29926466
29927360, 29927756, 29928040, 29928210, 29928340, 29928427, 29928564
29930457, 29931230, 29931956, 29932202, 29932310, 29932430, 29932780
29932953, 29933718, 29934048, 29934052, 29934158, 29934557, 29935685
29936841, 29937565, 29937655, 29937956, 29938063, 29938225, 29939075
29939400, 29939795, 29940373, 29941062, 29942096, 29942275, 29942554
29943670, 29943879, 29944035, 29944159, 29944660, 29944963, 29945645
29946101, 29946388, 29947145, 29947242, 29947428, 29948154, 29948165
29950018, 29950220, 29951620, 29951759, 29952700, 29955625, 29956016
29956222, 29957412, 29957493, 29958925, 29960325, 29960884, 29961080
29961353, 29961360, 29961609, 29961847, 29962160, 29962248, 29962590
29962834, 29962927, 29962939, 29965052, 29965207, 29965603, 29965888
29966768, 29966778, 29967223, 29967386, 29967911, 29967980, 29968085
29968703, 29969557, 29969985, 29970081, 29970261, 29970273, 29970298
29970587, 29970861, 29971027, 29971481, 29971888, 29971936, 29971951
29972134, 29972176, 29973012, 29989783, 29989845, 29990779, 29991257
29992299, 29993717, 29997326, 29997553, 29997937, 29997959, 30000518
30000664, 30001105, 30001331, 30003187, 30003356, 30004660, 30004856
30006123, 30006159, 30006280, 30006411, 30006472, 30006705, 30006985
30007450, 30007536, 30007797, 30008035, 30008125, 30008198, 30008214
30008456, 30009528, 30009710, 30010995, 30012181, 30012235, 30012737
30013243, 30013535, 30014200, 30015070, 30017836, 30018017, 30018126
30018903, 30019864, 30021830, 30024618, 30025814, 30026016, 30026596
30027614, 30027638, 30027649, 30028182, 30028599, 30028649, 30029519
30029806, 30031027, 30031613, 30032233, 30032376, 30032484, 30033040
30033547, 30034456, 30035444, 30035598, 30036258, 30038392, 30038576
30039796, 30039800, 30039959, 30040157, 30040511, 30041501, 30041514
30042490, 30043398, 30043610, 30043930, 30044108, 30044507, 30045242
30045273, 30045389, 30045484, 30045983, 30046497, 30047510, 30047531
30047702, 30047765, 30047931, 30048688, 30049966, 30051176, 30051783
30051804, 30052740, 30052928, 30053036, 30053501, 30053748, 30054980
30055640, 30056058, 30057718, 30057799, 30058149, 30058453, 30059106
30059109, 30059821, 30060267, 30060330, 30062364, 30062429, 30062736
30062819, 30064268, 30066352, 30067565, 30068101, 30068384, 30068792
30068871, 30070064, 30070506, 30071446, 30072018, 30072038, 30072905
30073314, 30073422, 30073744, 30074250, 30074296, 30074349, 30074469
30074472, 30074820, 30075037, 30076058, 30076197, 30076253, 30076604
30078586, 30078675, 30078934, 30079495, 30079949, 30080111, 30080266
30080297, 30080988, 30081055, 30081546, 30081580, 30082145, 30082402
30083100, 30083216, 30083488, 30083807, 30084458, 30084606, 30084971

30085897, 30086596, 30086992, 30087165, 30087509, 30088229, 30088421
30090568, 30092254, 30092280, 30092859, 30094929, 30094948, 30095499
30095591, 30095952, 30096138, 30096570, 30097092, 30097115, 30098251
30098719, 30099302, 30099420, 30099454, 30099852, 30100354, 30101090
30101186, 30101541, 30101847, 30102774, 30103551, 30103553, 30104348
30104378, 30104555, 30104722, 30104850, 30105458, 30106748, 30106901
30108012, 30109365, 30109839, 30110224, 30110370, 30110518, 30114477
30114489, 30114534, 30116085, 30116203, 30116753, 30116854, 30117209
30117220, 30117335, 30117469, 30117593, 30118261, 30118279, 30120608
30121009, 30122523, 30122583, 30123138, 30124026, 30125765, 30126145
30126470, 30127145, 30127522, 30127805, 30127904, 30128047, 30128231
30130240, 30131253, 30131286, 30131645, 30132708, 30132989, 30133841
30134103, 30134746, 30135396, 30135731, 30135899, 30135942, 30136102
30136346, 30137792, 30138600, 30138948, 30139392, 30140411, 30140425
30141240, 30142527, 30142802, 30142812, 30142815, 30142907, 30143470
30143593, 30145712, 30146593, 30146969, 30147195, 30147307, 30147308
30147473, 30147928, 30148343, 30148929, 30148966, 30148999, 30149035
30149658, 30150606, 30150710, 30151636, 30153533, 30153552, 30153885
30154633, 30155241, 30155320, 30155388, 30155489, 30155814, 30155837
30155999, 30156569, 30157526, 30158313, 30159329, 30159488, 30159511
30159536, 30159690, 30159752, 30159760, 30160025, 30160625, 30161094
30163243, 30164238, 30164714, 30165493, 30165503, 30165876, 30165892
30165897, 30166257, 30166352, 30166591, 30167787, 30169254, 30169841
30170104, 30172925, 30173113, 30173370, 30173556, 30174102, 30174394
30174401, 30175180, 30175291, 30175478, 30175587, 30177597, 30178250
30178839, 30178990, 30179012, 30179038, 30179644, 30179894, 30180195
30180208, 30180643, 30181756, 30182498, 30183367, 30183696, 30183715
30183920, 30184102, 30185852, 30186319, 30186476, 30186706, 30187627
30187866, 30188215, 30188631, 30189516, 30189535, 30190090, 30191274
30192691, 30192729, 30192853, 30193165, 30193262, 30193505, 30193506
30193584, 30193736, 30194612, 30194710, 30194972, 30195667, 30195668
30195684, 30195773, 30196195, 30196358, 30196629, 30198239, 30198598
30198861, 30198905, 30199890, 30200034, 30200132, 30200237, 30200680
30200758, 30202349, 30202388, 30202407, 30203929, 30204042, 30204542
30206220, 30206493, 30206675, 30207473, 30207519, 30208327, 30208690
30208723, 30209222, 30209736, 30210027, 30210429, 30210753, 30210884
30211567, 30213031, 30213540, 30213590, 30214769, 30214826, 30215130
30215302, 30215351, 30217206, 30217562, 30217982, 30218044, 30218317
30218956, 30219222, 30220932, 30221115, 30221237, 30221298, 30222187
30222512, 30222669, 30222975, 30223712, 30223847, 30223990, 30224544
30224650, 30224725, 30224868, 30224950, 30225265, 30225439, 30225443
30225718, 30225837, 30225844, 30226244, 30227400, 30228422, 30228567
30229030, 30229126, 30229683, 30230183, 30232638, 30233105, 30233536
30233934, 30234132, 30234227, 30235878, 30235919, 30235979, 30236092

30236399, 30236554, 30236746, 30236883, 30236964, 30237477, 30237640
30238211, 30238715, 30239480, 30240010, 30240547, 30240858, 30240930
30240972, 30241567, 30241807, 30241829, 30241920, 30242120, 30242724
30243216, 30243720, 30244340, 30244831, 30246053, 30246179, 30247305
30248520, 30248531, 30248564, 30249432, 30249738, 30249927, 30251003
30251130, 30252005, 30252098, 30252156, 30252458, 30252977, 30253035
30253090, 30253608, 30253705, 30253761, 30253835, 30254206, 30254525
30254576, 30254726, 30255143, 30255528, 30256542, 30257412, 30257908
30259120, 30259469, 30260523, 30260595, 30261244, 30262248, 30263013
30263377, 30264405, 30265523, 30265608, 30265615, 30265703, 30266791
30267155, 30269428, 30269748, 30270647, 30270744, 30271114, 30272329
30273212, 30274090, 30274188, 30274324, 30274662, 30275434, 30275548
30275569, 30275578, 30275784, 30276144, 30276243, 30277120, 30277451
30277589, 30277648, 30277733, 30277884, 30277887, 30278402, 30281428
30281615, 30282501, 30282591, 30282918, 30283296, 30283577, 30283579
30283581, 30283832, 30283932, 30284219, 30284369, 30284751, 30285026
30285166, 30285251, 30285341, 30285457, 30285540, 30285843, 30286961
30288343, 30288491, 30289074, 30289458, 30290185, 30290700, 30291536
30292305, 30293345, 30293935, 30294267, 30294465, 30294671, 30294865
30295110, 30295137, 30295549, 30295790, 30295808, 30297905, 30299367
30299817, 30299934, 30300030, 30300342, 30300363, 30300523, 30300538
30304037, 30305163, 30305264, 30305395, 30305568, 30305603, 30305880
30306407, 30307814, 30307883, 30308368, 30308578, 30308624, 30308772
30308947, 30309098, 30309798, 30310195, 30311826, 30312094, 30312546
30313749, 30313848, 30313989, 30314079, 30314198, 30314837, 30316667
30316897, 30317005, 30317209, 30317386, 30317397, 30318638, 30318943
30319080, 30319099, 30320029, 30321076, 30321398, 30322980, 30323219
30323658, 30323820, 30323849, 30324059, 30324180, 30324466, 30324649
30325407, 30325786, 30326115, 30326882, 30327149, 30327581, 30327678
30327810, 30328168, 30328209, 30328690, 30329209, 30329737, 30329751
30330123, 30331254, 30331356, 30331759, 30332505, 30332893, 30333443
30334484, 30334563, 30335127, 30335832, 30335987, 30336032, 30336383
30336530, 30336742, 30336996, 30337245, 30338434, 30338591, 30339049
30339103, 30339605, 30340540, 30341713, 30342371, 30342878, 30343370
30343750, 30344614, 30345201, 30345432, 30345593, 30345809, 30345926
30345950, 30346330, 30346729, 30346847, 30346867, 30347215, 30347410
30349714, 30350177, 30350543, 30351059, 30352278, 30352532, 30352581
30352623, 30352715, 30353841, 30354034, 30355490, 30356060, 30356461
30357463, 30357698, 30357897, 30358416, 30359614, 30360383, 30360653
30361070, 30361635, 30362003, 30362850, 30363088, 30363193, 30363311
30363658, 30363716, 30364329, 30364481, 30364613, 30364835, 30365265
30365745, 30367193, 30368048, 30368482, 30368534, 30368668, 30368917
30371264, 30371623, 30371909, 30372081, 30372782, 30373419, 30373541
30373550, 30374345, 30374570, 30374739, 30375109, 30376986, 30377347

30377692, 30377729, 30379468, 30379537, 30380511, 30380907, 30381207
30381525, 30381614, 30382364, 30382646, 30382982, 30383286, 30384121
30384152, 30387628, 30387666, 30388341, 30388853, 30389229, 30389414
30389507, 30389821, 30390279, 30390382, 30390635, 30391272, 30391794
30392011, 30392870, 30392987, 30393110, 30393317, 30393653, 30393944
30394509, 30394738, 30394974, 30395132, 30396120, 30396328, 30396946
30396974, 30397100, 30398099, 30398251, 30398257, 30398422, 30398770
30399906, 30402386, 30403284, 30403412, 30403763, 30403877, 30403881
30403902, 30403989, 30404117, 30404153, 30404357, 30404639, 30406227
30406709, 30408128, 30408443, 30408515, 30408808, 30408872, 30409207
30409339, 30409469, 30409472, 30409590, 30412188, 30412772, 30412863
30412885, 30412921, 30413137, 30413294, 30414491, 30414679, 30414714
30414725, 30416034, 30416603, 30417648, 30417732, 30418926, 30419024
30419196, 30419450, 30420105, 30420452, 30421009, 30421026, 30421204
30421439, 30421476, 30421706, 30422487, 30423135, 30423218, 30424347
30430921, 30431235, 30431274, 30431500, 30431504, 30431582, 30431698
30431703, 30431717, 30431867, 30432101, 30432470, 30433177, 30434793
30436326, 30436399, 30436406, 30437003, 30437149, 30438224, 30439985
30440651, 30440712, 30441277, 30441687, 30441959, 30442266, 30442749
30442805, 30442874, 30442884, 30443393, 30446436, 30446583, 30446820
30447060, 30447498, 30447589, 30447994, 30448182, 30448348, 30448355
30448917, 30449194, 30449837, 30450787, 30453442, 30454090, 30455427
30457633, 30457697, 30458080, 30458233, 30458568, 30458593, 30460095
30460558, 30460842, 30460922, 30461123, 30461458, 30462439, 30463938
30464250, 30464655, 30464667, 30466081, 30466214, 30469579, 30469777
30470402, 30470495, 30470947, 30472891, 30473634, 30474167, 30474386
30474497, 30474774, 30475041, 30475115, 30475813, 30476768, 30477588
30477685, 30477691, 30477767, 30479252, 30479647, 30479715, 30480591
30480872, 30481004, 30483065, 30483140, 30483217, 30483521, 30484042
30484623, 30484801, 30485255, 30486436, 30486896, 30487387, 30487697
30489582, 30490014, 30490578, 30490671, 30491456, 30492380, 30492786
30493331, 30493518, 30493656, 30494087, 30494259, 30494900, 30495035
30495078, 30495133, 30495483, 30496957, 30497057, 30497120, 30497765
30498824, 30500224, 30500297, 30500344, 30500582, 30501574, 30502029
30502415, 30503943, 30505029, 30505497, 30506794, 30506991, 30506996
30507032, 30507313, 30508100, 30509112, 30509277, 30510347, 30510527
30510718, 30512690, 30513285, 30513353, 30513480, 30513848, 30515886
30516868, 30517214, 30517516, 30517635, 30518114, 30518349, 30518447
30518923, 30519188, 30520662, 30521788, 30522285, 30522998, 30523137
30523538, 30523601, 30523750, 30524736, 30527198, 30527275, 30528547
30528637, 30528687, 30528704, 30528731, 30528935, 30529790, 30529915
30529940, 30530585, 30532811, 30533132, 30533580, 30534351, 30534549
30534662, 30534827, 30535905, 30536237, 30537403, 30537405, 30537533
30537584, 30538141, 30538818, 30539519, 30539866, 30540109, 30540407

30544247, 30544595, 30544629, 30544752, 30545040, 30545281, 30545556
30549223, 30549255, 30549368, 30549637, 30549789, 30549881, 30549883
30551000, 30551123, 30554178, 30556326, 30556523, 30556581, 30556807
30557386, 30557803, 30558561, 30559129, 30559218, 30559252, 30560365
30560513, 30561404, 30561590, 30561737, 30564139, 30564343, 30564898
30565004, 30565595, 30565699, 30565805, 30566054, 30567372, 30568514
30568896, 30570083, 30571095, 30571306, 30572816, 30573236, 30573703
30575243, 30575697, 30576112, 30576393, 30576853, 30577071, 30577591
30578221, 30579051, 30580813, 30580887, 30581448, 30582035, 30582221
30582500, 30584767, 30585141, 30585407, 30586493, 30587001, 30588738
30589914, 30591028, 30591475, 30592859, 30593046, 30593104, 30593863
30593899, 30594167, 30595114, 30595408, 30595860, 30596024, 30596270
30596320, 30596488, 30596694, 30598682, 30598746, 30598919, 30599377
30599405, 30599407, 30600173, 30600184, 30600230, 30602230, 30602828
30603211, 30605215, 30605676, 30606345, 30606451, 30608583, 30609737
30609799, 30610052, 30610097, 30610406, 30610667, 30611527, 30611603
30612199, 30613035, 30613937, 30613971, 30614411, 30614497, 30615851
30616406, 30616738, 30616776, 30617002, 30617626, 30618056, 30618230
30618406, 30619112, 30619138, 30619383, 30619414, 30619436, 30619525
30619665, 30619728, 30619787, 30620805, 30621255, 30621910, 30622393
30622528, 30622755, 30623138, 30623142, 30624243, 30624792, 30624864
30624874, 30625121, 30626046, 30628834, 30628899, 30629139, 30629643
30629799, 30630391, 30630829, 30630930, 30631393, 30631523, 30633259
30633395, 30633938, 30634026, 30634548, 30634559, 30635183, 30635302
30635326, 30635360, 30637270, 30637319, 30637841, 30638712, 30639996
30640436, 30641541, 30641755, 30641900, 30642046, 30642124, 30644358
30644530, 30644766, 30644889, 30645590, 30645896, 30645938, 30646077
30647133, 30649310, 30649360, 30649766, 30650297, 30650404, 30651231
30651570, 30651621, 30651674, 30652515, 30652595, 30652813, 30652853
30654131, 30654558, 30655504, 30655906, 30656839, 30657196, 30657365
30657566, 30657624, 30657706, 30657875, 30657906, 30657940, 30658421
30658533, 30658555, 30658702, 30659940, 30660412, 30661000, 30661939
30662634, 30662651, 30662668, 30662736, 30662803, 30663591, 30663646
30664266, 30665036, 30665399, 30665720, 30666902, 30668407, 30668754
30669938, 30670096, 30670328, 30670369, 30670584, 30671606, 30671720
30671813, 30671958, 30674373, 30674959, 30675651, 30676209, 30677633
30679595, 30679707, 30679771, 30679804, 30681085, 30681222, 30681462
30681516, 30681521, 30681697, 30681727, 30682289, 30684902, 30685163
30686017, 30686131, 30686809, 30687047, 30689557, 30689988, 30690686
30691604, 30691731, 30691857, 30692462, 30692473, 30692760, 30693791
30694947, 30695670, 30696566, 30696821, 30698289, 30699770, 30702732
30703610, 30704826, 30705448, 30706073, 30707740, 30708735, 30710088
30710506, 30710783, 30710807, 30710917, 30711370, 30711386, 30712670
30713133, 30714151, 30714715, 30716001, 30716863, 30718769, 30718841

30718862, 30719327, 30719419, 30720736, 30720844, 30722105, 30722705
30723671, 30724679, 30724881, 30726204, 30727629, 30727701, 30727759
30728196, 30729278, 30729604, 30729839, 30730026, 30732711, 30733270
30733563, 30734242, 30734362, 30734707, 30735091, 30735153, 30735624
30735736, 30736348, 30736718, 30737970, 30739013, 30739876, 30740115
30740250, 30740440, 30740444, 30740669, 30740997, 30741263, 30747820
30748411, 30748707, 30749181, 30749644, 30749722, 30750219, 30750991
30751171, 30751521, 30751527, 30751639, 30751968, 30753432, 30755348
30758836, 30758854, 30758943, 30759573, 30759585, 30760739, 30761871
30761878, 30763272, 30763305, 30763639, 30763754, 30763970, 30764405
30764663, 30764706, 30764976, 30765486, 30765995, 30767277, 30767654
30768636, 30769312, 30769454, 30770717, 30771009, 30772069, 30773164
30773696, 30773797, 30776416, 30776676, 30776929, 30777519, 30777759
30778855, 30779240, 30781032, 30781041, 30781461, 30781970, 30782266
30782300, 30782414, 30783395, 30783551, 30785101, 30786237, 30786641
30786655, 30787365, 30788973, 30789427, 30789904, 30789973, 30790047
30790441, 30796980, 30801050, 30801296, 30801510, 30803210, 30804646
30806757, 30806984, 30807723, 30807888, 30808109, 30808364, 30808869
30809087, 30809226, 30809267, 30810418, 30810680, 30810765, 30812574
30814266, 30814285, 30815204, 30815269, 30815495, 30815852, 30815994
30816760, 30816938, 30817822, 30819340, 30819629, 30819756, 30820155
30821297, 30822207, 30822502, 30822919, 30823744, 30825391, 30825419
30825656, 30826474, 30827849, 30828205, 30828350, 30829779, 30829844
30830555, 30832466, 30832775, 30833454, 30834068, 30834110, 30834705
30835184, 30835219, 30835853, 30836129, 30838605, 30839253, 30839315
30839451, 30839836, 30839961, 30840150, 30840791, 30840793, 30841241
30842277, 30843271, 30844395, 30844839, 30845806, 30846063, 30846159
30846263, 30846782, 30847442, 30847871, 30848028, 30848097, 30848773
30849278, 30851448, 30851951, 30852945, 30852954, 30855101, 30856358
30856923, 30857501, 30857721, 30858444, 30858810, 30858877, 30858919
30860741, 30860768, 30860803, 30861988, 30862285, 30863115, 30864607
30865346, 30865805, 30866141, 30866988, 30867685, 30868010, 30868186
30869131, 30870043, 30870248, 30870439, 30870513, 30871716, 30871792
30873527, 30874084, 30874270, 30874337, 30874660, 30876666, 30878110
30879169, 30879708, 30880774, 30880913, 30881161, 30881407, 30883715
30883785, 30883877, 30886188, 30887199, 30887435, 30887501, 30887777
30887976, 30887989, 30889443, 30889607, 30889723, 30890720, 30890752
30890971, 30891760, 30891792, 30892319, 30893601, 30894554, 30895426
30895577, 30896615, 30896620, 30896685, 30898131, 30898366, 30898381
30898748, 30898939, 30901889, 30902655, 30903129, 30904672, 30905604
30906274, 30906407, 30909329, 30909596, 30909907, 30909918, 30910255
30910264, 30910267, 30913399, 30914272, 30914411, 30914674, 30915781
30917976, 30919403, 30919587, 30919691, 30919804, 30920082, 30920427
30921136, 30921259, 30922450, 30922936, 30922996, 30923514, 30923517

30923597, 30923732, 30923940, 30924599, 30925316, 30925419, 30925828
30927440, 30927821, 30929206, 30930149, 30930339, 30931068, 30931311
30931981, 30932330, 30932674, 30932923, 30933117, 30936251, 30936831
30936942, 30937340, 30937391, 30937410, 30938413, 30939307, 30939317
30939934, 30940259, 30940382, 30940868, 30940869, 30941056, 30942353
30944643, 30945005, 30945772, 30946072, 30946141, 30946595, 30946768
30946843, 30946876, 30946896, 30947294, 30948278, 30950326, 30950786
30952104, 30952191, 30953157, 30953266, 30953836, 30954062, 30954071
30955702, 30956374, 30956571, 30956647, 30957739, 30958493, 30960314
30960356, 30960590, 30960736, 30961566, 30961824, 30962322, 30963567
30964068, 30964194, 30965111, 30965554, 30965649, 30966205, 30966496
30967084, 30968737, 30968781, 30970518, 30972817, 30972841, 30972887
30972947, 30972951, 30972959, 30972966, 30973085, 30973113, 30973127
30973137, 30973143, 30973197, 30973698, 30973715, 30973877, 30974207
30974512, 30974813, 30976603, 30977294, 30977411, 30978313, 30978554
30978747, 30978868, 30979701, 30980023, 30980115, 30980280, 30980317
30980733, 30981182, 30981240, 30983064, 30985027, 30985906, 30986423
30987088, 30987105, 30987243, 30987717, 30987724, 30988444, 30989951
30990034, 30992120, 30992330, 30992477, 30992597, 30992670, 30993198
30993518, 30993604, 30994996, 30996945, 30996991, 30997375, 30997584
30997960, 30998035, 30998475, 30998662, 30998759, 30998847, 30999219
31000312, 31001017, 31001455, 31001490, 31001859, 31002223, 31002346
31002923, 31003137, 31003659, 31003759, 31004077, 31004717, 31004719
31004844, 31004871, 31005003, 31006011, 31006259, 31006792, 31006953
31008240, 31008858, 31008907, 31009032, 31009271, 31009545, 31009590
31009680, 31010218, 31010554, 31010976, 31011361, 31011690, 31013127
31013531, 31014323, 31015330, 31016413, 31018218, 31019249, 31019407
31021068, 31021109, 31021157, 31021324, 31021542, 31021780, 31022858
31025267, 31025520, 31025531, 31025859, 31026220, 31026591, 31026860
31026870, 31027747, 31028883, 31028986, 31029936, 31030898, 31031240
31031955, 31032463, 31032725, 31032904, 31032913, 31034794, 31035287
31035916, 31037421, 31038220, 31038447, 31038817, 31039337, 31039618
31039627, 31039928, 31040847, 31041540, 31042208, 31042337, 31043483
31043630, 31043695, 31043747, 31044145, 31044460, 31044504, 31044951
31045929, 31046188, 31046619, 31046830, 31047022, 31047169, 31047333
31047697, 31047740, 31048025, 31048741, 31049215, 31049995, 31050103
31050433, 31050557, 31051056, 31051075, 31052735, 31052809, 31053669
31054031, 31054177, 31054874, 31055142, 31056909, 31057402, 31058548
31061482, 31061504, 31062010, 31062645, 31063315, 31063380, 31063769
31064025, 31065701, 31065838, 31066082, 31066250, 31066265, 31066554
31067456, 31067483, 31067892, 31067913, 31069059, 31069872, 31070528
31071080, 31073424, 31073440, 31073586, 31074032, 31074875, 31075323
31075960, 31077117, 31077365, 31078391, 31078757, 31079204, 31080474
31081558, 31082719, 31082726, 31084778, 31084921, 31086467, 31086869

31086954, 31087361, 31087679, 31088115, 31088341, 31089259, 31089270
31090262, 31091402, 31091469, 31091868, 31092129, 31092233, 31092581
31092921, 31093712, 31094183, 31094228, 31094249, 31094374, 31094625
31094688, 31095972, 31096846, 31097760, 31097961, 31098661, 31098870
31099312, 31099926, 31099981, 31100172, 31101386, 31101840, 31103065
31103804, 31104809, 31105225, 31105733, 31105896, 31106140, 31106577
31107577, 31108603, 31108644, 31109506, 31109924, 31110021, 31110225
31110887, 31112088, 31112209, 31112530, 31112972, 31113089, 31113177
31113249, 31113426, 31113682, 31114116, 31114265, 31114671, 31115201
31115502, 31115653, 31117282, 31118486, 31118702, 31118809, 31118844
31119057, 31119368, 31119467, 31119846, 31120361, 31121222, 31122876
31123976, 31124213, 31124363, 31124821, 31124914, 31125773, 31125849
31125918, 31126053, 31126058, 31126362, 31127043, 31127457, 31127961
31127968, 31127969, 31128086, 31129851, 31130156, 31132732, 31133839
31134430, 31137765, 31138106, 31138371, 31139643, 31140940, 31141792
31142377, 31142749, 31142815, 31143146, 31143415, 31143870, 31145389
31145403, 31145525, 31145688, 31145804, 31146338, 31146727, 31151483
31153120, 31153485, 31154794, 31155085, 31155305, 31155634, 31156301
31156383, 31156767, 31156898, 31158151, 31158341, 31158380, 31159382
31161861, 31162457, 31162711, 31162915, 31163379, 31163498, 31163534
31165038, 31165577, 31165722, 31166083, 31166801, 31168440, 31169366
31170082, 31171096, 31171147, 31171631, 31171828, 31172207, 31172233
31172642, 31173887, 31174836, 31175365, 31176451, 31176502, 31177193
31177204, 31177221, 31178051, 31178058, 31178103, 31180519, 31181375
31181380, 31181989, 31182159, 31182451, 31182756, 31182793, 31183413
31184230, 31184370, 31185224, 31188038, 31188398, 31189749, 31190624
31191224, 31192039, 31192261, 31192739, 31193292, 31193511, 31193695
31193745, 31193936, 31194015, 31194049, 31194264, 31195090, 31195430
31195600, 31195838, 31196164, 31196272, 31196310, 31196395, 31196812
31197969, 31200057, 31200845, 31201001, 31201366, 31201611, 31202536
31204002, 31204412, 31204878, 31205834, 31206070, 31206201, 31207446
31208287, 31209735, 31211220, 31212282, 31213034, 31214119, 31214928
31215422, 31215438, 31215548, 31215854, 31216823, 31216995, 31217946
31218837, 31218904, 31219047, 31219975, 31220188, 31220549, 31220837
31220850, 31220881, 31220912, 31221251, 31221454, 31222103, 31222780
31223382, 31224819, 31225538, 31226448, 31226534, 31228670, 31230250
31230775, 31233170, 31233235, 31234765, 31234790, 31234983, 31235797
31236624, 31240626, 31240864, 31241124, 31242319, 31242976, 31243859
31244165, 31244968, 31245856, 31246583, 31247532, 31247838, 31248496
31249008, 31249406, 31249689, 31249696, 31250120, 31250152, 31250221
31251325, 31251489, 31252659, 31253451, 31254243, 31254297, 31254535
31254929, 31255369, 31255869, 31256383, 31257740, 31257826, 31258101
31258344, 31258697, 31258995, 31260692, 31261467, 31261641, 31262275
31262388, 31263980, 31265651, 31265773, 31266236, 31266779, 31266843

31268326, 31268557, 31270711, 31270847, 31271032, 31274074, 31279605
31279670, 31281708, 31282037, 31283557, 31287091, 31287296, 31287741
31287871, 31289115, 31290017, 31290300, 31290427, 31291986, 31292298
31293484, 31293791, 31293867, 31298871, 31301460, 31303032, 31303249
31304573, 31304945, 31304975, 31305114, 31305309, 31305624, 31306248
31306261, 31306470, 31306867, 31306927, 31307715, 31309379, 31309867
31310564, 31310624, 31311732, 31311830, 31312450, 31312976, 31313117
31313177, 31313214, 31313444, 31313812, 31314323, 31314885, 31315441
31315495, 31315876, 31315923, 31316250, 31317032, 31321092, 31322720
31323383, 31323484, 31324442, 31324507, 31325584, 31326320, 31326608
31326977, 31326998, 31327046, 31327259, 31327278, 31327349, 31327391
31327896, 31331265, 31331354, 31331372, 31333105, 31333156, 31334338
31334606, 31334961, 31335037, 31335142, 31336298, 31336371, 31338249
31338673, 31338686, 31338769, 31339457, 31339643, 31339744, 31341138
31341421, 31341746, 31343110, 31344046, 31344097, 31346493, 31347878
31348711, 31348922, 31349426, 31350348, 31352517, 31353098, 31353610
31354026, 31355339, 31356601, 31356954, 31357581, 31357737, 31358308
31358474, 31358511, 31359215, 31359366, 31360146, 31360155, 31360214
31360282, 31360314, 31360323, 31360469, 31360529, 31362408, 31362692
31364001, 31364383, 31366716, 31367188, 31367364, 31368027, 31369444
31370500, 31371071, 31372498, 31373825, 31373837, 31373843, 31374283
31374449, 31374738, 31375772, 31375865, 31376011, 31376708, 31377129
31377206, 31377487, 31377701, 31377808, 31377936, 31380443, 31381174
31381389, 31381701, 31382518, 31383049, 31383396, 31383464, 31383814
31384324, 31385668, 31386394, 31386696, 31387033, 31387123, 31387426
31387443, 31388201, 31388288, 31389006, 31390936, 31390955, 31391991
31393208, 31393600, 31393991, 31394341, 31394347, 31394365, 31394544
31395222, 31395247, 31396027, 31396609, 31396695, 31396980, 31398505
31398617, 31398663, 31398721, 31398761, 31399131, 31399883, 31400754
31401831, 31401919, 31402078, 31402598, 31403177, 31403565, 31404014
31404130, 31404263, 31404487, 31404550, 31405300, 31405751, 31408636
31408732, 31409483, 31409912, 31409964, 31410289, 31410607, 31411163
31412209, 31414023, 31414524, 31415324, 31416193, 31416213, 31416250
31417007, 31417192, 31417242, 31417336, 31417844, 31417990, 31418442
31419363, 31420295, 31420316, 31420320, 31420337, 31421316, 31421471
31422440, 31422620, 31423645, 31424838, 31425167, 31425761, 31425800
31427345, 31429020, 31429501, 31429590, 31429692, 31429770, 31429784
31429809, 31429844, 31429971, 31430722, 31430735, 31430910, 31431005
31431326, 31431771, 31431964, 31431969, 31431971, 31431973, 31431975
31431986, 31432906, 31433092, 31433579, 31433749, 31434421, 31434805
31434870, 31434915, 31435163, 31435308, 31435400, 31435735, 31437030
31437448, 31437886, 31439905, 31440252, 31440426, 31440813, 31441916
31441920, 31442332, 31442714, 31443030, 31444353, 31444516, 31445356
31446431, 31447733, 31448642, 31448680, 31448818, 31449354, 31450392

31450653, 31450942, 31451019, 31453375, 31453585, 31454428, 31454972
31454988, 31455051, 31455597, 31456383, 31456857, 31457334, 31458049
31458537, 31458634, 31458739, 31459231, 31459242, 31459369, 31461990
31462082, 31462940, 31462969, 31463613, 31464165, 31465389, 31466433
31468060, 31468705, 31469001, 31469418, 31471119, 31471441, 31471589
31471856, 31472077, 31473148, 31474315, 31475085, 31475378, 31475635
31476093, 31476603, 31476701, 31476736, 31477424, 31477695, 31479072
31479075, 31479106, 31479272, 31479772, 31481750, 31481893, 31483466
31483949, 31484385, 31484603, 31485340, 31485386, 31485507, 31486061
31486557, 31487441, 31487491, 31487775, 31487826, 31487844, 31488085
31488464, 31489032, 31489137, 31489481, 31489590, 31489672, 31489731
31489936, 31490604, 31491634, 31492171, 31492191, 31492588, 31492655
31492856, 31493153, 31493840, 31494095, 31494132, 31494264, 31494420
31494794, 31495254, 31495297, 31495564, 31496174, 31497550, 31498559
31499370, 31499700, 31500699, 31500719, 31500971, 31501139, 31502301
31503349, 31503674, 31503688, 31503934, 31504723, 31505088, 31506095
31507107, 31507129, 31508229, 31508460, 31508712, 31509279, 31510891
31510910, 31511142, 31511519, 31511771, 31511940, 31512044, 31512262
31513011, 31515163, 31515869, 31515879, 31515911, 31515929, 31516164
31516184, 31516255, 31516265, 31517395, 31517417, 31517502, 31517652
31518068, 31518371, 31521504, 31521701, 31522560, 31522708, 31522866
31523548, 31523578, 31523585, 31523620, 31523646, 31523728, 31523736
31523836, 31525310, 31525463, 31525609, 31525783, 31526250, 31526903
31527103, 31527199, 31527381, 31527726, 31528544, 31528724, 31528738
31528962, 31529594, 31529967, 31530985, 31530995, 31531079, 31532084
31532176, 31532308, 31532339, 31533050, 31533113, 31533274, 31533799
31533817, 31533833, 31534841, 31535073, 31535516, 31535782, 31535870
31535955, 31536401, 31536703, 31536731, 31537521, 31537736, 31538274
31538363, 31538891, 31539566, 31541805, 31541864, 31541895, 31541905
31542347, 31542356, 31542851, 31542956, 31543810, 31544097, 31545109
31545400, 31545477, 31546864, 31547220, 31547445, 31547480, 31548675
31549221, 31549468, 31551142, 31552433, 31552563, 31552615, 31552738
31552755, 31553178, 31553289, 31553674, 31553813, 31553968, 31554610
31555126, 31555173, 31555346, 31555539, 31555800, 31556139, 31556950
31557160, 31557518, 31557663, 31558194, 31559079, 31559085, 31559415
31559563, 31560323, 31560348, 31560592, 31561886, 31562484, 31563138
31564060, 31564760, 31564795, 31567124, 31567403, 31567441, 31567719
31568423, 31569057, 31569867, 31570054, 31570161, 31571415, 31571688
31571742, 31572006, 31572046, 31572267, 31573269, 31573457, 31574122
31574150, 31574244, 31574267, 31575529, 31575649, 31575665, 31576738
31577569, 31578202, 31578994, 31580079, 31580122, 31580374, 31580437
31581627, 31582179, 31582244, 31583865, 31584056, 31584555, 31584853
31585040, 31585319, 31585351, 31585491, 31585789, 31586381, 31586862
31587966, 31588631, 31588933, 31589785, 31590099, 31590826, 31591087

31591384, 31591400, 31591409, 31591421, 31592707, 31594725, 31595025
31595632, 31597104, 31597668, 31597727, 31598146, 31599215, 31599363
31599990, 31600023, 31600291, 31600894, 31601385, 31602782, 31603199
31603380, 31603625, 31605119, 31605370, 31605737, 31606474, 31607937
31608753, 31609974, 31610024, 31611125, 31612535, 31613275, 31613838
31615078, 31615736, 31616101, 31616104, 31617492, 31617523, 31619276
31620252, 31620748, 31620829, 31620944, 31621569, 31622250, 31623413
31623463, 31625579, 31625618, 31625959, 31626438, 31626493, 31626528
31626572, 31627587, 31627856, 31628155, 31628311, 31628753, 31628975
31629056, 31630551, 31630794, 31630946, 31631985, 31632273, 31632534
31632548, 31632605, 31632663, 31633224, 31634510, 31634805, 31635875
31635963, 31635980, 31637094, 31637607, 31637680, 31638398, 31638733
31638943, 31639082, 31640139, 31640197, 31640240, 31642462, 31642556
31642639, 31643308, 31644775, 31645288, 31647304, 31647789, 31648120
31648157, 31649223, 31649447, 31649818, 31649819, 31649958, 31649962
31650046, 31650112, 31650202, 31652641, 31652763, 31653080, 31653167
31653634, 31653647, 31653758, 31653913, 31653916, 31653917, 31654116
31654119, 31654122, 31654125, 31654133, 31655807, 31656263, 31656601
31657084, 31657211, 31657324, 31657462, 31657483, 31657681, 31658464
31658819, 31658943, 31659065, 31660283, 31661369, 31661586, 31661865
31661879, 31662131, 31662143, 31662504, 31662625, 31662925, 31663189
31663788, 31664203, 31664399, 31665107, 31666449, 31666684, 31667096
31667180, 31667940, 31668033, 31668061, 31668065, 31668312, 31668694
31668768, 31668872, 31669064, 31670014, 31670263, 31670353, 31671512
31671568, 31671836, 31672507, 31672605, 31673406, 31674380, 31674801
31674947, 31675568, 31675852, 31675860, 31676324, 31676927, 31676941
31677345, 31677460, 31677479, 31677587, 31678629, 31679900, 31680709
31680713, 31680985, 31682766, 31683044, 31683260, 31683311, 31683337
31683373, 31683708, 31684080, 31684494, 31685612, 31685882, 31685989
31686545, 31686979, 31688127, 31688241, 31688978, 31691030, 31691089
31691480, 31694070, 31695062, 31695693, 31696043, 31696577, 31696853
31697741, 31699090, 31699230, 31700234, 31700640, 31701239, 31701429
31701517, 31701910, 31703614, 31705178, 31705265, 31705356, 31705704
31706000, 31706595, 31706758, 31706956, 31707190, 31707557, 31708133
31708175, 31708529, 31709647, 31709739, 31709777, 31710272, 31710587
31711155, 31711720, 31711889, 31711997, 31712260, 31714645, 31715935
31716510, 31716873, 31717010, 31718000, 31718134, 31718346, 31718842
31719167, 31720344, 31720377, 31720839, 31720942, 31721557, 31721577
31721863, 31721880, 31722558, 31722646, 31723226, 31723323, 31723651
31725154, 31727229, 31727231, 31727233, 31727560, 31728149, 31728160
31728440, 31728444, 31728447, 31728477, 31728486, 31728858, 31729557
31730485, 31730766, 31731076, 31731407, 31732095, 31732311, 31732672
31734007, 31734012, 31734017, 31734583, 31735662, 31736095, 31737059
31737603, 31739198, 31739891, 31740252, 31741359, 31741938, 31743771

31744832, 31745130, 31745233, 31745528, 31746054, 31747706, 31747818
31747935, 31747989, 31748000, 31748182, 31748233, 31748944, 31750577
31750581, 31750889, 31752492, 31752502, 31752633, 31753202, 31753425
31753478, 31753582, 31753692, 31754240, 31754546, 31754887, 31754980
31755245, 31755451, 31756415, 31756465, 31756568, 31756650, 31757357
31757775, 31757824, 31758083, 31758344, 31758846, 31758939, 31758960
31759565, 31760278, 31760592, 31760721, 31760738, 31761510, 31762819
31763030, 31763356, 31763707, 31763905, 31764089, 31764239, 31764866
31764913, 31765068, 31765246, 31765257, 31765296, 31766462, 31766499
31766534, 31766675, 31766696, 31767204, 31767237, 31767598, 31767852
31768490, 31768497, 31768505, 31768866, 31769267, 31769373, 31769511
31769530, 31770289, 31771302, 31771370, 31771410, 31771468, 31771745
31771836, 31772002, 31772070, 31773582, 31773909, 31774019, 31774132
31775101, 31776121, 31776659, 31776785, 31776994, 31777410, 31777489
31779833, 31780567, 31781758, 31781897, 31781944, 31783422, 31783451
31783782, 31783872, 31783985, 31783991, 31784352, 31785445, 31785572
31786282, 31786697, 31786838, 31787057, 31787236, 31787655, 31788104
31788594, 31788704, 31788761, 31788785, 31789167, 31789178, 31789335
31790500, 31790757, 31792397, 31792465, 31792615, 31793126, 31793691
31793713, 31794336, 31794631, 31794882, 31795231, 31795696, 31796208
31796277, 31796882, 31798001, 31798323, 31798669, 31798702, 31798742
31799858, 31800053, 31800059, 31800139, 31800757, 31804838, 31805303
31805812, 31807179, 31807431, 31807516, 31808296, 31809510, 31809729
31810213, 31812352, 31812824, 31813214, 31813662, 31815099, 31815227
31816158, 31816343, 31816631, 31817206, 31817634, 31818080, 31820632
31820662, 31820842, 31820859, 31820926, 31821129, 31821701, 31821835
31822026, 31822951, 31823051, 31823327, 31823716, 31824504, 31824792
31824934, 31825151, 31825324, 31825410, 31827339, 31827605, 31827912
31828378, 31828999, 31829366, 31829617, 31829639, 31831950, 31832785
31832901, 31833172, 31833585, 31833896, 31833948, 31834191, 31834214
31834611, 31834677, 31834871, 31835300, 31835805, 31835854, 31836113
31836454, 31839038, 31839779, 31839888, 31840180, 31840490, 31840516
31840992, 31841147, 31841210, 31841696, 31842545, 31843028, 31843462
31843476, 31843716, 31843842, 31843845, 31844137, 31844357, 31844557
31844560, 31845092, 31845403, 31845549, 31845803, 31845955, 31846318
31846454, 31847489, 31847541, 31848331, 31848365, 31848391, 31848903
31849859, 31850132, 31850227, 31851383, 31851449, 31852482, 31852506
31852574, 31854285, 31854692, 31855307, 31855484, 31855526, 31855996
31857143, 31858580, 31858621, 31858833, 31859067, 31859143, 31860193
31860406, 31860760, 31862359, 31862593, 31862611, 31863118, 31863250
31863537, 31863890, 31864818, 31864947, 31865822, 31866141, 31866159
31866388, 31867037, 31867331, 31867351, 31869348, 31869601, 31869944
31869954, 31869966, 31870010, 31870150, 31870164, 31870190, 31870196
31871384, 31871692, 31872230, 31872320, 31873155, 31875140, 31876138

31876192, 31876368, 31876867, 31878256, 31878314, 31878605, 31880154
31881527, 31883124, 31883343, 31883739, 31883845, 31886547, 31886695
31886745, 31886848, 31887130, 31887709, 31888148, 31888731, 31888964
31889222, 31890230, 31890240, 31890516, 31892029, 31892856, 31895670
31897023, 31897178, 31897786, 31897854, 31898193, 31898257, 31898326
31900476, 31900585, 31902517, 31902662, 31903523, 31903713, 31903786
31903962, 31904739, 31904933, 31904960, 31905033, 31905839, 31905861
31907042, 31907137, 31907510, 31907565, 31907792, 31907962, 31908308
31908345, 31908482, 31908571, 31908750, 31909295, 31909807, 31911290
31912638, 31912834, 31913650, 31913828, 31913839, 31914003, 31914943
31915444, 31915968, 31916096, 31916644, 31917378, 31917494, 31917856
31917967, 31918462, 31919563, 31919952, 31921267, 31922161, 31922580
31923463, 31923622, 31925162, 31925462, 31925765, 31926203, 31926811
31926848, 31927078, 31927510, 31927930, 31928046, 31930204, 31930635
31932042, 31932196, 31933451, 31933837, 31933842, 31933846, 31933914
31934254, 31934301, 31935336, 31935672, 31935717, 31935970, 31936588
31936983, 31938116, 31938288, 31939263, 31939461, 31939486, 31939494
31939767, 31940176, 31940458, 31941148, 31941948, 31942136, 31942144
31942258, 31942274, 31942473, 31943497, 31943691, 31944980, 31945038
31945407, 31945659, 31945701, 31945827, 31945928, 31946936, 31947385
31947732, 31947861, 31949490, 31949573, 31950145, 31950244, 31950577
31951599, 31951628, 31952046, 31952052, 31953394, 31953449, 31953989
31954223, 31956113, 31956435, 31956920, 31957152, 31957564, 31957674
31957683, 31958038, 31958958, 31959140, 31959253, 31960124, 31960389
31960603, 31961214, 31961578, 31961940, 31963193, 31964519, 31964610
31965012, 31965391, 31965542, 31965574, 31966094, 31968431, 31969646
31970188, 31971792, 31972615, 31972671, 31973203, 31974187, 31974424
31974597, 31974693, 31976303, 31977024, 31977257, 31980125, 31980216
31980296, 31981745, 31981751, 31982879, 31983029, 31985032, 31985494
31985738, 31985961, 31986808, 31986836, 31986905, 31986909, 31987278
31987922, 31988079, 31988833, 31990386, 31991705, 31992242, 31992270
31992428, 31992615, 31992953, 31993051, 31993795, 31994145, 31994206
31994298, 31995577, 31995937, 31996264, 31996331, 31997107, 31997457
31997611, 31997658, 31997660, 31998181, 31998189, 31998861, 31999024
31999453, 32000837, 32001851, 32002411, 32003551, 32003908, 32004148
32004299, 32004977, 32005046, 32005048, 32005053, 32005215, 32005394
32006467, 32006703, 32006824, 32006883, 32007076, 32007698, 32008408
32008586, 32008716, 32008819, 32009197, 32009334, 32009754, 32010275
32010593, 32010707, 32011107, 32011888, 32012137, 32012400, 32012788
32012891, 32012975, 32013253, 32013403, 32014520, 32015642, 32015820
32016340, 32016884, 32017215, 32017301, 32017422, 32017570, 32017635
32017671, 32018632, 32018953, 32020701, 32021877, 32022223, 32022711
32022814, 32022867, 32023471, 32025328, 32028155, 32028269, 32032653
32032733, 32032887, 32033795, 32034085, 32034137, 32034318, 32034766

32035268, 32035483, 32035536, 32035893, 32035899, 32035902, 32036045
32037237, 32037962, 32038054, 32038780, 32038812, 32038844, 32038996
32039059, 32040940, 32040971, 32041003, 32041799, 32042256, 32042352
32042706, 32042926, 32043743, 32044533, 32044767, 32044903, 32045377
32046125, 32046412, 32046587, 32047226, 32047444, 32048412, 32048616
32048921, 32049479, 32050048, 32051896, 32052587, 32052992, 32053746
32054806, 32055692, 32055733, 32056529, 32057291, 32057333, 32057565
32057639, 32057755, 32058260, 32060164, 32060577, 32061018, 32061146
32061173, 32061648, 32062227, 32064239, 32064593, 32064682, 32064826
32066061, 32067130, 32067356, 32067675, 32067937, 32068110, 32068187
32068190, 32068709, 32069160, 32069508, 32069696, 32069834, 32070206
32071183, 32071457, 32071582, 32072747, 32072944, 32073027, 32073710
32074450, 32074708, 32074728, 32075009, 32075020, 32075130, 32075580
32076305, 32076561, 32076599, 32077318, 32078078, 32079097, 32079573
32079739, 32080081, 32080655, 32081074, 32081381, 32082098, 32084068
32087287, 32087331, 32087597, 32087956, 32088132, 32088478, 32089051
32089820, 32090518, 32090725, 32092312, 32092797, 32093558, 32094825
32095097, 32095380, 32095610, 32095658, 32096252, 32096397, 32097125
32097387, 32097589, 32097604, 32097767, 32097882, 32097962, 32098224
32098237, 32098535, 32099153, 32099539, 32099580, 32101305, 32101419
32101499, 32102542, 32102722, 32102854, 32103383, 32103427, 32103628
32104324, 32104402, 32104578, 32104610, 32105135, 32105239, 32105412
32105468, 32107505, 32107621, 32107664, 32108094, 32108115, 32108566
32108576, 32109384, 32109796, 32111046, 32112798, 32112822, 32113113
32113530, 32113791, 32114541, 32114561, 32114572, 32114746, 32115403
32115642, 32116952, 32117115, 32117253, 32117490, 32118543, 32118727
32119144, 32119339, 32119565, 32120283, 32120453, 32121014, 32121326
32121673, 32121803, 32121885, 32122197, 32122574, 32123331, 32123673
32124176, 32124334, 32124570, 32124594, 32124607, 32124611, 32125142
32125160, 32125845, 32127227, 32127448, 32127911, 32128142, 32129659
32130083, 32130485, 32130504, 32131010, 32131401, 32131774, 32132464
32132504, 32133039, 32133898, 32138257, 32138478, 32138782, 32139064
32139432, 32139659, 32139728, 32140616, 32140800, 32142788, 32143492
32143562, 32143669, 32144917, 32147340, 32148419, 32148651, 32148662
32149848, 32150818, 32150854, 32151098, 32152341, 32153396, 32153619
32153909, 32156194, 32157050, 32157075, 32157078, 32158561, 32159343
32161260, 32161381, 32162391, 32164053, 32164112, 32164218, 32165367
32165759, 32165814, 32165887, 32166950, 32167592, 32167923, 32168026
32169151, 32170162, 32170190, 32171622, 32171791, 32172050, 32172773
32172777, 32172783, 32173142, 32173376, 32173543, 32174321, 32174405
32174492, 32174571, 32175329, 32175780, 32176303, 32176922, 32177701
32177869, 32178217, 32178966, 32179209, 32179306, 32180918, 32181149
32182097, 32182783, 32183102, 32183756, 32183809, 32184235, 32184577
32184844, 32184855, 32185296, 32186186, 32186983, 32187775, 32189400

32189869, 32189952, 32190132, 32190190, 32190284, 32190419, 32190573
32191427, 32191451, 32193431, 32195333, 32195815, 32195946, 32196265
32196492, 32196738, 32196943, 32197147, 32198292, 32198368, 32198396
32199681, 32200524, 32201743, 32201903, 32201936, 32202976, 32203068
32203354, 32205455, 32205514, 32205825, 32207088, 32207920, 32208144
32208326, 32208346, 32208691, 32209784, 32210660, 32211423, 32212041
32212062, 32212635, 32212916, 32213376, 32213696, 32214021, 32214080
32214195, 32214238, 32214654, 32214743, 32214782, 32215240, 32215991
32216027, 32216223, 32216841, 32216930, 32218369, 32218395, 32218498
32218552, 32219179, 32219318, 32219835, 32219988, 32220017, 32220364
32220709, 32221141, 32222473, 32223045, 32223654, 32223669, 32224140
32224583, 32225117, 32225353, 32225742, 32225899, 32227352, 32228188
32228677, 32229431, 32229625, 32229919, 32230213, 32230775, 32230787
32230953, 32231049, 32231356, 32233406, 32234148, 32234161, 32234845
32235513, 32236601, 32236685, 32236798, 32237489, 32237778, 32238935
32239137, 32239730, 32240272, 32241889, 32242601, 32243007, 32243148
32243814, 32243882, 32243985, 32244187, 32245711, 32245850, 32246090
32246756, 32247141, 32247420, 32248131, 32248405, 32248649, 32248747
32249207, 32249371, 32249509, 32249640, 32249674, 32250232, 32250238
32251364, 32251671, 32252036, 32252213, 32252262, 32252294, 32253703
32253937, 32254063, 32254399, 32254686, 32255029, 32255073, 32255529
32255753, 32255762, 32257449, 32258021, 32258136, 32258388, 32258423
32259063, 32259322, 32259535, 32259785, 32260010, 32260290, 32263923
32264556, 32266406, 32266906, 32267171, 32267610, 32268669, 32268800
32269481, 32269499, 32274403, 32277643, 32277793, 32279351, 32280901
32281066, 32283798, 32284241, 32284325, 32284485, 32284608, 32284725
32285086, 32285563, 32285717, 32285789, 32287797, 32287989, 32289552
32289858, 32290227, 32290313, 32290399, 32290754, 32290812, 32290949
32290990, 32291114, 32291139, 32292180, 32292805, 32293615, 32294031
32294566, 32294851, 32295794, 32296259, 32296941, 32297373, 32297469
32297849, 32298004, 32298173, 32298782, 32300098, 32300822, 32300849
32301856, 32302470, 32302561, 32303160, 32303657, 32304293, 32304712
32305034, 32305792, 32306556, 32307046, 32307586, 32307983, 32309046
32309488, 32309723, 32310880, 32311019, 32312131, 32312412, 32312586
32312771, 32315173, 32316070, 32316252, 32316326, 32317012, 32317306
32318528, 32318820, 32318914, 32319410, 32320789, 32321317, 32321319
32321765, 32322629, 32322738, 32323277, 32323488, 32323600, 32323816
32324219, 32325525, 32325574, 32325611, 32327201, 32327208, 32327690
32328231, 32329914, 32330269, 32330540, 32331889, 32332107, 32334745
32335257, 32335769, 32336990, 32338220, 32338476, 32338579, 32338736
32338897, 32338919, 32338953, 32339801, 32340392, 32340885, 32341217
32341260, 32341820, 32342172, 32342345, 32342750, 32342824, 32343092
32343678, 32344099, 32344168, 32344199, 32345001, 32345050, 32345178
32345272, 32345785, 32346649, 32346733, 32347957, 32350182, 32351767

32353343, 32355765, 32355912, 32356340, 32356545, 32356609, 32356628
32357412, 32357665, 32358760, 32359044, 32361175, 32361677, 32362016
32362066, 32362072, 32362698, 32363212, 32363549, 32363711, 32363981
32364147, 32366154, 32366303, 32366461, 32366536, 32367151, 32368161
32368480, 32368789, 32368792, 32369041, 32371828, 32372725, 32374050
32374431, 32374566, 32374616, 32375438, 32375493, 32376603, 32376614
32376774, 32376872, 32376922, 32377901, 32378953, 32379001, 32379140
32379303, 32379775, 32380591, 32380842, 32381403, 32381605, 32382021
32382207, 32382667, 32385068, 32385141, 32385832, 32386482, 32386683
32386720, 32386877, 32387555, 32387818, 32388247, 32389047, 32389416
32389497, 32390629, 32390855, 32391021, 32392724, 32393137, 32393612
32394623, 32394660, 32394986, 32396085, 32396154, 32396326, 32397113
32397350, 32398714, 32400076, 32401086, 32401333, 32402243, 32402292
32403509, 32403748, 32404638, 32404933, 32405239, 32406222, 32406479
32407783, 32408640, 32409009, 32409344, 32409942, 32410175, 32412340
32413042, 32413512, 32414944, 32414996, 32415846, 32415989, 32416652
32416655, 32417227, 32417242, 32417274, 32417301, 32417438, 32417632
32417766, 32417870, 32419774, 32421958, 32422965, 32423100, 32423678
32423985, 32424465, 32425097, 32425124, 32425194, 32425205, 32425778
32425862, 32426213, 32426315, 32426900, 32427158, 32427173, 32427226
32427583, 32427953, 32428097, 32428189, 32428330, 32428919, 32430745
32431049, 32431067, 32431251, 32431290, 32431413, 32432078, 32432245
32433627, 32433687, 32434131, 32435493, 32435911, 32436342, 32436460
32436721, 32436757, 32437538, 32439726, 32440067, 32440681, 32441128
32441671, 32441834, 32442229, 32442404, 32443087, 32443531, 32443744
32443935, 32444159, 32446565, 32446740, 32449622, 32449909, 32450344
32453583, 32453611, 32453888, 32455219, 32455516, 32455650, 32455742
32455961, 32456625, 32457252, 32457974, 32459153, 32459632, 32460136
32460145, 32461726, 32462153, 32464021, 32464584, 32465193, 32465209
32465466, 32465495, 32465853, 32465894, 32466474, 32467812, 32468643
32468791, 32469004, 32469225, 32471100, 32471251, 32471346, 32471642
32472561, 32472589, 32473465, 32474686, 32474827, 32474926, 32474997
32475694, 32476437, 32477479, 32478452, 32480419, 32480510, 32480528
32480541, 32480873, 32481807, 32482131, 32483115, 32483966, 32484945
32485859, 32485961, 32486528, 32486955, 32489206, 32490128, 32490416
32490804, 32491443, 32492075, 32492343, 32492382, 32492422, 32492452
32495545, 32495572, 32497756, 32498459, 32498569, 32498602, 32498752
32498783, 32499155, 32500117, 32501930, 32503790, 32504340, 32504786
32505009, 32505439, 32505557, 32505634, 32506166, 32506309, 32506473
32506809, 32507542, 32508585, 32509271, 32509318, 32509584, 32509606
32509814, 32510116, 32512048, 32512145, 32512438, 32512918, 32514516
32515708, 32515850, 32516220, 32516336, 32517405, 32517797, 32518029
32518679, 32519995, 32520525, 32520645, 32520691, 32520994, 32522300
32522472, 32523206, 32523613, 32523750, 32524841, 32525039, 32526118

32526703, 32527621, 32529396, 32529483, 32530202, 32531259, 32531627
32531647, 32533019, 32533225, 32533461, 32534925, 32535106, 32535156
32535159, 32535520, 32536006, 32538436, 32538824, 32539300, 32539322
32539914, 32539936, 32540706, 32540995, 32541049, 32542063, 32542641
32544124, 32544464, 32544740, 32544784, 32545415, 32546408, 32546937
32547361, 32548580, 32548704, 32549168, 32549277, 32549351, 32550051
32550281, 32550589, 32550751, 32550894, 32551177, 32551246, 32552043
32552602, 32553241, 32555120, 32555592, 32556165, 32556311, 32556891
32557354, 32559543, 32561759, 32561791, 32561841, 32562587, 32563106
32563114, 32563151, 32563940, 32565722, 32565870, 32567750, 32567788
32568124, 32568163, 32568259, 32569603, 32569745, 32573197, 32573703
32573942, 32574796, 32576097, 32576508, 32576534, 32577408, 32578113
32578616, 32578792, 32579075, 32579371, 32579529, 32580082, 32580378
32580852, 32583315, 32583355, 32583375, 32583692, 32584347, 32584375
32584505, 32585832, 32586534, 32587305, 32587472, 32587567, 32587721
32587793, 32587994, 32588298, 32588656, 32588691, 32589147, 32589819
32589990, 32593590, 32593845, 32593877, 32593886, 32593955, 32594965
32595551, 32596355, 32596705, 32597099, 32597637, 32598380, 32598406
32601769, 32601882, 32602194, 32602344, 32602599, 32602735, 32602871
32602990, 32603092, 32603152, 32603319, 32603564, 32603619, 32605116
32605919, 32606093, 32606489, 32606531, 32607812, 32607991, 32608297
32608821, 32609394, 32609512, 32609730, 32609886, 32610185, 32610271
32613788, 32614157, 32614583, 32615310, 32615776, 32616678, 32618819
32619195, 32619298, 32619327, 32620859, 32620919, 32621140, 32621309
32622507, 32622612, 32625160, 32625356, 32625619, 32626384, 32626756
32627140, 32627280, 32628131, 32628221, 32628237, 32629028, 32629772
32629859, 32630060, 32631551, 32631787, 32633251, 32634049, 32634996
32635881, 32635931, 32636938, 32638991, 32639432, 32639663, 32639860
32639950, 32641593, 32641748, 32642587, 32642994, 32643533, 32644392
32645139, 32646025, 32646044, 32647170, 32648248, 32649737, 32649749
32651063, 32651304, 32651769, 32651773, 32652143, 32652573, 32652605
32653470, 32653669, 32654172, 32654962, 32655446, 32655691, 32656130
32656231, 32656275, 32657251, 32658076, 32658481, 32659438, 32659574
32659772, 32659930, 32659983, 32660528, 32661293, 32662037, 32662165
32663019, 32664665, 32665550, 32665836, 32666862, 32668900, 32668907
32669149, 32670769, 32671437, 32671481, 32672057, 32674819, 32675095
32675227, 32675756, 32676084, 32676350, 32676659, 32677000, 32677702
32678737, 32682430, 32682586, 32682703, 32684009, 32684387, 32685743
32685989, 32686338, 32686850, 32689123, 32690400, 32690423, 32690581
32692372, 32693242, 32695999, 32697157, 32697431, 32697781, 32697859
32698508, 32698569, 32700396, 32700455, 32700548, 32700675, 32700989
32701048, 32702005, 32703155, 32704013, 32704119, 32704231, 32704765
32705734, 32705800, 32706821, 32707007, 32707211, 32710053, 32710165
32710534, 32710750, 32711099, 32711741, 32712220, 32712791, 32712916

32715346, 32715845, 32715945, 32716529, 32716726, 32718204, 32718316
32718510, 32718547, 32718721, 32719288, 32719310, 32720344, 32720458
32722118, 32724505, 32724654, 32725484, 32726772, 32727143, 32728216
32728984, 32730701, 32731498, 32732179, 32733671, 32733845, 32734021
32734171, 32734299, 32734800, 32735915, 32735980, 32736370, 32737774
32737827, 32737969, 32738356, 32739966, 32740421, 32740503, 32740506
32740515, 32740694, 32740987, 32743290, 32743511, 32746508, 32746515
32746831, 32747680, 32747738, 32748974, 32749028, 32750264, 32750940
32751438, 32752229, 32753371, 32753472, 32753946, 32754044, 32754574
32754845, 32755356, 32755493, 32755517, 32755731, 32756125, 32756914
32757219, 32758096, 32758260, 32759503, 32760504, 32760795, 32760868
32760906, 32761229, 32761294, 32761932, 32762155, 32762231, 32763283
32763544, 32763599, 32764690, 32765738, 32766252, 32766397, 32766407
32766916, 32768752, 32769786, 32769880, 32770812, 32771735, 32775512
32775526, 32776891, 32778725, 32780676, 32781826, 32782851, 32783456
32784393, 32784403, 32786308, 32786309, 32788660, 32789228, 32790012
32790255, 32793286, 32794120, 32794261, 32795016, 32795712, 32797115
32797486, 32800137, 32800539, 32801192, 32801303, 32801337, 32802926
32803416, 32803807, 32803850, 32804604, 32804609, 32804760, 32806069
32806112, 32806856, 32806915, 32807517, 32809152, 32809234, 32810125
32810668, 32811069, 32811131, 32813351, 32813767, 32816003, 32817950
32818019, 32818230, 32818242, 32818436, 32818545, 32821107, 32822436
32822847, 32823545, 32823692, 32827206, 32828093, 32828636, 32828738
32829060, 32829563, 32829937, 32830405, 32831451, 32831855, 32831901
32832521, 32833378, 32833812, 32834168, 32834394, 32834426, 32835524
32837435, 32837741, 32838028, 32838533, 32838574, 32841689, 32841994
32842415, 32842823, 32843576, 32843672, 32843754, 32844640, 32846272
32846876, 32847962, 32847975, 32848060, 32848531, 32848816, 32850174
32850514, 32851615, 32851841, 32852484, 32852504, 32853080, 32855257
32855878, 32856375, 32856546, 32856640, 32857370, 32857881, 32857908
32858358, 32858446, 32863689, 32863795, 32864241, 32864736, 32866089
32867469, 32868116, 32868344, 32868369, 32869560, 32870681, 32871988
32872839, 32873969, 32874571, 32874995, 32875003, 32875118, 32875482
32875931, 32877550, 32878039, 32879447, 32879655, 32879990, 32880225
32880390, 32880490, 32881057, 32881462, 32881853, 32883252, 32883853
32886951, 32887649, 32888458, 32888472, 32889096, 32889434, 32890532
32891500, 32892883, 32893686, 32893951, 32894842, 32895105, 32897184
32897679, 32898672, 32898678, 32898971, 32899387, 32900165, 32900208
32902635, 32903472, 32903625, 32905994, 32907741, 32907975, 32908241
32908249, 32908946, 32909255, 32909292, 32909936, 32910846, 32912726
32913527, 32913610, 32913791, 32914508, 32914711, 32914795, 32915110
32915747, 32915760, 32915847, 32915909, 32916025, 32916080, 32917969
32918041, 32918394, 32920489, 32920547, 32921786, 32922090, 32922635
32924796, 32925421, 32925703, 32926513, 32926653, 32930360, 32930423

32930665, 32931078, 32931941, 32932487, 32933936, 32935932, 32936005
32936402, 32936424, 32936537, 32936859, 32936950, 32936961, 32936988
32937167, 32937338, 32939376, 32939883, 32940440, 32940714, 32940955
32941096, 32941509, 32941792, 32943694, 32945404, 32946347, 32946711
32947264, 32947268, 32951181, 32951258, 32952285, 32953258, 32955962
32956092, 32956896, 32957606, 32958616, 32959929, 32961142, 32961939
32962162, 32965460, 32966389, 32966688, 32967871, 32968221, 32968634
32969466, 32969863, 32970478, 32972633, 32972716, 32973035, 32973406
32973518, 32976022, 32977489, 32980826, 32982562, 32983419, 32983750
32983871, 32984625, 32984679, 32985908, 32986577, 32987004, 32987206
32987308, 32988028, 32991289, 32991527, 32992004, 32993522, 32993998
32994080, 32995072, 32995206, 32995242, 32995863, 32996071, 32996974
32998659, 32999086, 32999329, 32999541, 32999836, 33000440, 33000516
33000980, 33001094, 33001615, 33003575, 33003817, 33004172, 33004888
33005241, 33007394, 33008265, 33009224, 33009321, 33009351, 33010173
33010444, 33011078, 33011198, 33012307, 33012903, 33013379, 33015716
33016007, 33018951, 33019726, 33020016, 33020510, 33021036, 33021100
33021642, 33022043, 33022140, 33022563, 33022926, 33023671, 33025005
33026533, 33026796, 33026949, 33027087, 33027377, 33027525, 33027539
33027553, 33028013, 33028286, 33028462, 33028480, 33030293, 33031619
33032299, 33032400, 33032579, 33033425, 33034103, 33034619, 33034642
33034846, 33035201, 33035710, 33035954, 33036321, 33037136, 33037150
33037531, 33037895, 33038120, 33038422, 33038479, 33038537, 33039277
33040335, 33043590, 33043854, 33044062, 33045137, 33046179, 33047645
33047827, 33048074, 33048277, 33048591, 33049012, 33049866, 33049915
33049925, 33050205, 33050587, 33050622, 33050626, 33052585, 33053538
33055560, 33055827, 33056383, 33056579, 33058363, 33059891, 33059924
33060161, 33060212, 33060935, 33061152, 33061339, 33061595, 33062419
33063919, 33064324, 33064565, 33065089, 33065343, 33065415, 33065437
33065526, 33065979, 33066892, 33068672, 33069366, 33069583, 33069889
33069936, 33071321, 33072392, 33072854, 33075133, 33075246, 33075452
33076129, 33080651, 33082407, 33084064, 33084323, 33085296, 33085361
33088535, 33088863, 33089096, 33089130, 33089192, 33090110, 33090127
33090781, 33090848, 33092087, 33093144, 33093807, 33095358, 33096609
33097276, 33097433, 33099666, 33099872, 33100195, 33100352, 33101055
33101058, 33101334, 33102477, 33105276, 33105354, 33105656, 33106822
33106897, 33107872, 33108317, 33109335, 33109981, 33110192, 33110642
33110992, 33111729, 33112046, 33113848, 33114640, 33115438, 33115892
33116125, 33116131, 33116481, 33117641, 33120284, 33120828, 33120920
33121866, 33121880, 33121934, 33123402, 33123404, 33123985, 33125873
33126216, 33126290, 33127032, 33127141, 33127312, 33129473, 33131149
33131335, 33131526, 33131742, 33132050, 33135083, 33136016, 33136252
33136601, 33137328, 33137554, 33139230, 33139277, 33140218, 33141420
33141890, 33142123, 33142479, 33142533, 33142739, 33142764, 33144001

33145153, 33145583, 33146001, 33146055, 33147065, 33148063, 33149578
33149850, 33150236, 33150645, 33151063, 33151089, 33151731, 33152388
33152652, 33152838, 33153797, 33155914, 33157157, 33157547, 33159956
33161035, 33161424, 33161535, 33161726, 33163159, 33163187, 33164865
33165183, 33165391, 33166116, 33166242, 33167315, 33169254, 33172549
33172631, 33172679, 33174203, 33176523, 33176672, 33177660, 33178223
33178248, 33179718, 33180354, 33181281, 33181349, 33181881, 33182152
33182737, 33184467, 33185231, 33185773, 33186578, 33186650, 33187513
33188597, 33189199, 33190454, 33190694, 33190761, 33191073, 33191584
33192462, 33192939, 33193293, 33194363, 33195096, 33195330, 33195897
33196009, 33196035, 33196475, 33197296, 33198902, 33199431, 33201415
33203951, 33205229, 33205781, 33206160, 33206701, 33207143, 33207240
33207247, 33207342, 33208644, 33211160, 33211334, 33211942, 33212112
33214493, 33214554, 33214707, 33215225, 33216590, 33216667, 33218194
33218259, 33218392, 33218518, 33218694, 33219840, 33220466, 33221061
33221340, 33223248, 33224375, 33225584, 33225678, 33227044, 33227337
33228119, 33229327, 33230882, 33230975, 33232128, 33233560, 33234302
33235620, 33236729, 33237523, 33239083, 33239267, 33239946, 33239980
33240195, 33240921, 33241118, 33241692, 33242408, 33242622, 33243077
33244297, 33245879, 33245940, 33246099, 33246700, 33247240, 33247372
33247795, 33247862, 33251111, 33251188, 33251482, 33252648, 33252911
33253370, 33253466, 33253504, 33254019, 33261707, 33261786, 33263108
33266449, 33268162, 33270427, 33270914, 33271941, 33273598, 33273638
33273682, 33274012, 33275564, 33275880, 33276748, 33278133, 33278440
33278509, 33279339, 33279489, 33279810, 33280121, 33281287, 33281785
33282110, 33282129, 33282502, 33282504, 33282605, 33282871, 33282971
33283122, 33284571, 33287418, 33288427, 33289442, 33289604, 33289734
33290765, 33291305, 33292174, 33292175, 33292429, 33292896, 33292950
33294123, 33294139, 33294845, 33295267, 33297275, 33299877, 33301277
33301919, 33303419, 33303486, 33303555, 33303725, 33304435, 33304775
33304830, 33305150, 33305175, 33305254, 33305995, 33306161, 33306852
33307945, 33308107, 33308199, 33308244, 33308736, 33309178, 33309324
33311488, 33312823, 33312932, 33313374, 33314115, 33314122, 33314422
33314523, 33315230, 33315432, 33315590, 33315801, 33315835, 33316711
33316815, 33317279, 33317740, 33317752, 33318311, 33318949, 33319065
33319353, 33319802, 33320455, 33322672, 33323634, 33323903, 33324226
33325981, 33327118, 33329027, 33329192, 33329493, 33329960, 33330508
33331329, 33332612, 33332891, 33333026, 33333616, 33334218, 33334340
33334404, 33334945, 33334957, 33334972, 33335941, 33337385, 33337620
33337799, 33337807, 33338247, 33338891, 33339868, 33340595, 33343993
33344767, 33345269, 33346851, 33347947, 33349744, 33349880, 33350643
33351136, 33351978, 33352629, 33352740, 33352794, 33353474, 33354011
33354275, 33354662, 33354933, 33354968, 33355007, 33355136, 33355766
33356602, 33356612, 33357029, 33357655, 33358233, 33358968, 33359279

33359773, 33359963, 33360117, 33360246, 33362391, 33362597, 33364012
33364820, 33366942, 33367076, 33367184, 33367909, 33369166, 33370332
33371121, 33371641, 33373644, 33373693, 33375194, 33376694, 33378856
33379172, 33379714, 33380058, 33380472, 33380871, 33381652, 33381775
33381839, 33382108, 33382224, 33382529, 33382620, 33382859, 33384092
33384505, 33387120, 33387654, 33387767, 33388473, 33388715, 33388927
33389651, 33390561, 33390695, 33390717, 33390917, 33390925, 33392926
33392996, 33393503, 33393671, 33394330, 33395219, 33397350, 33397495
33397605, 33398383, 33398674, 33401519, 33402361, 33402406, 33402456
33402847, 33403040, 33403843, 33404069, 33406991, 33407135, 33407139
33408858, 33409163, 33409376, 33409759, 33409841, 33410321, 33415279
33416041, 33416405, 33417145, 33417828, 33417987, 33418439, 33418443
33420096, 33420249, 33420490, 33421125, 33421440, 33421721, 33421972
33422596, 33422675, 33422877, 33423728, 33423815, 33424192, 33425046
33425127, 33426135, 33427823, 33427991, 33428191, 33429020, 33431382
33433944, 33434256, 33434602, 33434897, 33435012, 33435454, 33437800
33437802, 33440178, 33440442, 33440899, 33441073, 33441786, 33443834
33444647, 33446226, 33446788, 33447015, 33447602, 33447957, 33448908
33450599, 33450736, 33451134, 33452091, 33454288, 33454299, 33454753
33455225, 33455471, 33456516, 33456703, 33456848, 33457235, 33457584
33457842, 33458082, 33458732, 33459161, 33459348, 33460265, 33460450
33460521, 33460870, 33462514, 33462620, 33463044, 33464061, 33464358
33464378, 33464843, 33466822, 33467243, 33467715, 33469785, 33470077
33470092, 33470254, 33471858, 33473564, 33473583, 33473795, 33473815
33473989, 33474080, 33474386, 33474769, 33474916, 33476482, 33476928
33479415, 33479703, 33480124, 33480392, 33480765, 33482137, 33482590
33483222, 33484230, 33484387, 33485134, 33485207, 33488913, 33489699
33490023, 33490031, 33490293, 33491676, 33492066, 33492136, 33493957
33495024, 33495575, 33495588, 33496433, 33497160, 33498037, 33499125
33499867, 33500486, 33501425, 33503732, 33504158, 33504432, 33504626
33504902, 33505158, 33507610, 33507953, 33510062, 33510077, 33510171
33510735, 33511329, 33511523, 33512062, 33513037, 33513434, 33513447
33513526, 33513906, 33514038, 33514172, 33514179, 33514440, 33514881
33515115, 33516571, 33517445, 33517703, 33520658, 33521864, 33522170
33522372, 33522799, 33522941, 33523189, 33523393, 33523831, 33523982
33524097, 33525014, 33525448, 33527359, 33527630, 33527663, 33527739
33528779, 33531067, 33531364, 33531929, 33532136, 33532470, 33532517
33532755, 33533239, 33533269, 33534589, 33534891, 33536140, 33536640
33537225, 33537630, 33537652, 33538009, 33538063, 33538767, 33538807
33539504, 33540746, 33541736, 33541865, 33542695, 33544375, 33544836
33545633, 33545698, 33546789, 33546839, 33547527, 33547840, 33548186
33548709, 33548869, 33549008, 33549281, 33550827, 33551931, 33553452
33553902, 33555482, 33555673, 33556254, 33556394, 33557278, 33557344
33558058, 33558087, 33558251, 33558317, 33558391, 33558960, 33559245

33559316, 33559848, 33560308, 33561671, 33561708, 33561845, 33562255
33563137, 33563167, 33563718, 33564109, 33564809, 33566611, 33566851
33566856, 33567156, 33568223, 33568355, 33570800, 33571225, 33572061
33573142, 33574722, 33575022, 33575100, 33576132, 33578015, 33580079
33580212, 33580595, 33580746, 33582466, 33583859, 33584585, 33584637
33585244, 33585591, 33587171, 33589647, 33589667, 33590420, 33590551
33590607, 33591046, 33596056, 33596304, 33596361, 33596874, 33598703
33598728, 33598840, 33599665, 33599734, 33600479, 33600509, 33601195
33601538, 33601673, 33601849, 33603291, 33604939, 33606850, 33607081
33607127, 33607613, 33607709, 33611438, 33613169, 33613512, 33613829
33613833, 33615198, 33615478, 33615505, 33616923, 33617587, 33617685
33618962, 33621739, 33621871, 33621893, 33621993, 33622325, 33622575
33622927, 33624052, 33624356, 33625059, 33625559, 33625597, 33625822
33627360, 33627820, 33627879, 33628258, 33628304, 33628592, 33628693
33630464, 33631068, 33631337, 33631562, 33631820, 33631959, 33632051
33632754, 33633469, 33633875, 33633883, 33635094, 33635886, 33636280
33636345, 33637219, 33641592, 33645932, 33646203, 33647498, 33647716
33647739, 33647820, 33648273, 33649782, 33651003, 33651993, 33652008
33652234, 33652291, 33653008, 33653695, 33655399, 33656104, 33656406
33656608, 33656679, 33657553, 33658696, 33660093, 33660782, 33660816
33660838, 33661960, 33662079, 33662706, 33663113, 33663305, 33663444
33664388, 33664959, 33664976, 33666228, 33666803, 33667166, 33667505
33667548, 33667790, 33668078, 33668496, 33670617, 33670793, 33674035
33674065, 33674755, 33676061, 33676296, 33676842, 33677163, 33677196
33677721, 33679665, 33679838, 33681238, 33682799, 33684125, 33684377
33684692, 33687039, 33689330, 33689561, 33690169, 33690676, 33692669
33695048, 33695100, 33696508, 33698504, 33699798, 33702035, 33702922
33703196, 33704431, 33704635, 33705050, 33706074, 33706800, 33708795
33708879, 33708958, 33709660, 33710568, 33711151, 33711724, 33711938
33713578, 33714000, 33714495, 33715183, 33715322, 33718837, 33718848
33719173, 33720017, 33723325, 33725523, 33726388, 33726590, 33726682
33726788, 33726841, 33727390, 33727406, 33727922, 33727983, 33729692
33729700, 33729789, 33730024, 33731488, 33733810, 33735478, 33735790
33736618, 33737627, 33738135, 33738702, 33741444, 33741730, 33742827
33743745, 33744512, 33745199, 33745318, 33746114, 33748852, 33749367
33749626, 33749984, 33750344, 33750791, 33751080, 33751431, 33754410
33754633, 33755161, 33755486, 33756794, 33757064, 33757884, 33758069
33758164, 33759204, 33760298, 33761538, 33763570, 33763679, 33764147
33764761, 33765925, 33766130, 33766686, 33766937, 33767425, 33768567
33770079, 33770883, 33770960, 33771433, 33773883, 33774856, 33775072
33775544, 33775825, 33776598, 33777176, 33777718, 33779360, 33779364
33779494, 33779786, 33780182, 33780312, 33782200, 33783365, 33783627
33783710, 33784447, 33785175, 33786005, 33786208, 33787325, 33787804
33787884, 33788643, 33789142, 33790553, 33792885, 33792937, 33794088

33794281, 33794290, 33796040, 33797504, 33797970, 33798328, 33799368
33800450, 33800460, 33800471, 33800500, 33801197, 33801237, 33803836
33804758, 33805155, 33805836, 33807727, 33808041, 33808204, 33808574
33808955, 33809062, 33809642, 33810107, 33810130, 33810360, 33811111
33811601, 33811659, 33812475, 33813801, 33813849, 33814415, 33815940
33816129, 33816674, 33817457, 33817717, 33817746, 33818252, 33819404
33821129, 33821145, 33821234, 33821569, 33822187, 33822881, 33823203
33824185, 33824830, 33825303, 33826285, 33827120, 33827191, 33827202
33828137, 33828243, 33828570, 33828982, 33832499, 33832583, 33833554
33833783, 33834239, 33835379, 33835574, 33836203, 33837343, 33837484
33838019, 33840343, 33840911, 33840932, 33840940, 33841610, 33841850
33842364, 33842953, 33843368, 33843512, 33845824, 33846103, 33846146
33846662, 33847898, 33848060, 33848148, 33848294, 33849209, 33849726
33850434, 33850437, 33850535, 33851855, 33852315, 33852881, 33853330
33858183, 33858700, 33860280, 33860501, 33860895, 33860900, 33862262
33862735, 33862860, 33863150, 33863597, 33863611, 33864784, 33865116
33865165, 33865495, 33865537, 33866472, 33866585, 33867451, 33867491
33868507, 33870133, 33870373, 33870702, 33871591, 33871761, 33871795
33872487, 33872610, 33874274, 33874455, 33875167, 33876296, 33876730
33876739, 33877868, 33878003, 33878970, 33879044, 33879054, 33880474
33882024, 33883017, 33883347, 33884314, 33886297, 33886487, 33886862
33886871, 33888856, 33888932, 33889459, 33890066, 33890586, 33891059
33891752, 33893127, 33895721, 33896341, 33896412, 33896423, 33896760
33897055, 33898336, 33899027, 33899867, 33899902, 33900564, 33900807
33901118, 33902235, 33902465, 33902539, 33904512, 33904798, 33904963
33906515, 33906897, 33906975, 33907094, 33907659, 33907663, 33907815
33907942, 33909666, 33909729, 33909838, 33909842, 33910272, 33912833
33912872, 33913103, 33913336, 33913384, 33915586, 33916081, 33916206
33916249, 33916311, 33917203, 33918190, 33919778, 33921410, 33921441
33921860, 33922026, 33922061, 33925702, 33926252, 33927256, 33927405
33927483, 33928325, 33929317, 33931668, 33932721, 33932921, 33933784
33934979, 33935707, 33936939, 33937333, 33937866, 33939477, 33940540
33941905, 33941967, 33942062, 33943313, 33945728, 33945794, 33949153
33950698, 33951799, 33952245, 33952532, 33952588, 33952976, 33953054
33953568, 33954999, 33955060, 33955371, 33956182, 33957025, 33957705
33960379, 33960464, 33960647, 33961800, 33963458, 33964258, 33964671
33964867, 33964963, 33965211, 33967599, 33969303, 33969309, 33970659
33970841, 33972204, 33973155, 33973593, 33973695, 33973908, 33973922
33974068, 33974554, 33974560, 33974788, 33974835, 33975649, 33976016
33976581, 33976796, 33976856, 33980195, 33981298, 33982111, 33982392
33982541, 33983204, 33985986, 33986030, 33987063, 33987170, 33987911
33987976, 33988339, 33988388, 33988926, 33988974, 33989017, 33990166
33990559, 33992920, 33993028, 33993386, 33994084, 33994833, 33997092
33997202, 33997826, 33998060, 33998365, 33998441, 33998706, 34001147

34001406, 34001696, 34003077, 34003270, 34003643, 34004063, 34006614
34006650, 34007432, 34009154, 34009751, 34010877, 34011029, 34011657
34012165, 34013753, 34013946, 34017363, 34018423, 34019478, 34020888
34020905, 34022133, 34022834, 34023045, 34023117, 34023644, 34024924
34027056, 34027199, 34027770, 34027791, 34027965, 34028486, 34031036
34033267, 34034279, 34034799, 34038365, 34039170, 34039802, 34039805
34042084, 34042088, 34042759, 34042949, 34043824, 34044661, 34045021
34045081, 34045429, 34045719, 34048056, 34048076, 34048685, 34049216
34050156, 34051355, 34051770, 34052378, 34052471, 34052869, 34053296
34053514, 34054814, 34055289, 34056235, 34056691, 34056918, 34058858
34058951, 34060122, 34060268, 34060829, 34061796, 34062228, 34064415
34066286, 34066652, 34069804, 34070318, 34070446, 34070561, 34071111
34071627, 34072143, 34072411, 34072690, 34075499, 34078255, 34078687
34079542, 34080081, 34080691, 34083290, 34083697, 34085116, 34086300
34088194, 34088299, 34088989, 34089934, 34090927, 34091587, 34092979
34094476, 34096200, 34096213, 34097324, 34097491, 34098840, 34098862
34099185, 34100909, 34100969, 34101724, 34101781, 34101785, 34102850
34103647, 34103857, 34104105, 34104403, 34104747, 34105531, 34105578
34105851, 34106199, 34106567, 34106830, 34107143, 34107171, 34110342
34111239, 34111708, 34113634, 34113754, 34115338, 34115571, 34115674
34115836, 34116531, 34116534, 34117188, 34117618, 34118219, 34119621
34119948, 34120395, 34122000, 34123350, 34125814, 34126068, 34126600
34127787, 34128961, 34129587, 34129689, 34129964, 34130289, 34131435
34131640, 34132089, 34132182, 34132256, 34132318, 34135867, 34136552
34136598, 34136651, 34137325, 34137360, 34137400, 34137513, 34137936
34139110, 34139217, 34141328, 34142034, 34142701, 34142725, 34142884
34145178, 34145715, 34146833, 34146985, 34146987, 34147169, 34148591
34149263, 34149515, 34151061, 34153098, 34153238, 34153367, 34154060
34154847, 34155072, 34157133, 34157543, 34158902, 34159409, 34160874
34161298, 34162108, 34162111, 34162325, 34162335, 34162419, 34162936
34163576, 34164486, 34164828, 34166857, 34167090, 34167286, 34168185
34171382, 34171631, 34171779, 34172434, 34172950, 34172951, 34173003
34173450, 34173655, 34174125, 34174543, 34175766, 34175987, 34176645
34177012, 34177162, 34177216, 34177554, 34182054, 34182692, 34183461
34183998, 34186437, 34186556, 34187150, 34188859, 34191370, 34191733
34191990, 34193022, 34194445, 34195569, 34195583, 34196203, 34197142
34198944, 34200295, 34201566, 34202065, 34202285, 34202297, 34203331
34203704, 34203713, 34204673, 34205962, 34207008, 34207506, 34207825
34208572, 34208822, 34210475, 34210478, 34211059, 34211843, 34212105
34212743, 34214908, 34215091, 34215118, 34215356, 34215503, 34216177
34216873, 34219168, 34219478, 34219756, 34219769, 34219922, 34220568
34220609, 34220943, 34220961, 34220991, 34221484, 34221568, 34221772
34222165, 34224381, 34224955, 34225479, 34226067, 34226553, 34226596
34228868, 34229104, 34229250, 34229833, 34233694, 34234394, 34235520

34236849, 34236850, 34236929, 34237240, 34237348, 34238278, 34238326
34238452, 34239023, 34239253, 34239708, 34239739, 34240339, 34241948
34242857, 34243634, 34244123, 34244448, 34245547, 34248685, 34248786
34250357, 34250510, 34250712, 34256822, 34256867, 34257221, 34257821
34259077, 34259505, 34260401, 34260455, 34261458, 34261528, 34261536
34261947, 34262719, 34262797, 34263456, 34264633, 34269674, 34270419
34271046, 34271144, 34271261, 34271831, 34272249, 34272626, 34272942
34276007, 34276035, 34276149, 34278993, 34279907, 34280456, 34281503
34281636, 34281906, 34282948, 34284147, 34284415, 34284480, 34286049
34286361, 34286896, 34287904, 34288172, 34289040, 34289391, 34291104
34291231, 34292131, 34296307, 34296882, 34299775, 34299927, 34300648
34301118, 34303814, 34305015, 34305086, 34305465, 34306996, 34308796
34309486, 34309870, 34310304, 34310878, 34314448, 34314510, 34315238
34317656, 34318537, 34320078, 34320104, 34320607, 34322521, 34325454
34328460, 34329645, 34329853, 34330060, 34330202, 34330960, 34331370
34333986, 34339279, 34339332, 34339511, 34340632, 34343228, 34346865
34347024, 34348856, 34349149, 34349276, 34349447, 34349515, 34349594
34349942, 34350364, 34351706, 34352389, 34352605, 34356459, 34358131
34358718, 34358785, 34363214, 34363828, 34364656, 34366429, 34366627
34367505, 34368448, 34368509, 34369008, 34369015, 34369457, 34370261
34370607, 34371061, 34373053, 34373173, 34373784, 34376103, 34376468
34376629, 34377917, 34379814, 34381597, 34382203, 34382212, 34383066
34383726, 34385931, 34386836, 34387451, 34387852, 34392047, 34394126
34394707, 34394887, 34395591, 34396087, 34396210, 34396450, 34397170
34400193, 34400514, 34400786, 34401276, 34401444, 34405224, 34405413
34406030, 34406120, 34406370, 34408490, 34410488, 34411019, 34411060
34411587, 34413701, 34414246, 34414328, 34415224, 34415933, 34416002
34417794, 34420046, 34420448, 34421053, 34422617, 34423163, 34424661
34424728, 34425846, 34426849, 34428819, 34430514, 34430618, 34432402
34436025, 34443644, 34444824, 34444997, 34445568, 34445728, 34446152
34446545, 34447012, 34448189, 34448235, 34449511, 34450366, 34450853
34451554, 34452628, 34453303, 34453468, 34453799, 34453970, 34454035
34455245, 34456728, 34457911, 34458786, 34460273, 34461154, 34461697
34462113, 34462893, 34464036, 34465619, 34465871, 34466767, 34467295
34468807, 34469934, 34470389, 34470542, 34470753, 34471029, 34472508
34473578, 34473730, 34475838, 34476155, 34477555, 34479812, 34481187
34481738, 34482043, 34484622, 34485380, 34485525, 34485657, 34485723
34487506, 34487786, 34489508, 34491503, 34491739, 34492025, 34492379
34494444, 34495234, 34496630, 34497838, 34498028, 34499374, 34502032
34504292, 34505752, 34509388, 34510828, 34511443, 34511846, 34511870
34512077, 34513107, 34517973, 34519783, 34520519, 34521072, 34521241
34523306, 34523596, 34524704, 34524915, 34525391, 34525691, 34525806
34530272, 34530839, 34532111, 34532831, 34533061, 34533150, 34533431
34534178, 34535189, 34535190, 34536480, 34538232, 34539284, 34539633

34539998, 34542994, 34543854, 34543938, 34544486, 34544657, 34545238
34545472, 34547912, 34548830, 34549471, 34549588, 34549620, 34550486
34551005, 34551359, 34552065, 34552940, 34555251, 34556258, 34557246
34557307, 34557355, 34557500, 34557851, 34558559, 34558586, 34559114
34559432, 34559964, 34560327, 34561380, 34561402, 34562023, 34562200
34562346, 34562513, 34564274, 34567061, 34567240, 34567246, 34567785
34569338, 34570620, 34572347, 34572899, 34574048, 34574650, 34575765
34575784, 34576656, 34577339, 34580665, 34580955, 34583967, 34585151
34587326, 34588265, 34588563, 34588602, 34589443, 34589885, 34590147
34591645, 34592878, 34595033, 34596388, 34596863, 34598617, 34599377
34599777, 34600007, 34600477, 34600757, 34601469, 34603342, 34604941
34605269, 34605306, 34605643, 34606514, 34609482, 34609883, 34611735
34612360, 34614070, 34614081, 34614417, 34615359, 34617503, 34619587
34619921, 34624814, 34627724, 34627975, 34630604, 34632426, 34633291
34634012, 34635564, 34637351, 34638404, 34639116, 34641746, 34645516
34645605, 34647902, 34648006, 34648786, 34649403, 34650488, 34651089
34651385, 34651785, 34653168, 34653621, 34655977, 34658262, 34658861
34659006, 34659326, 34664941, 34667496, 34670162, 34670941, 34671488
34671630, 34672044, 34672192, 34673162, 34677014, 34680126, 34680130
34681314, 34681779, 34682800, 34684300, 34684487, 34685578, 34687204
34687665, 34691455, 34691800, 34692403, 34695366, 34696015, 34696043
34696612, 34697338, 34697861, 34698179, 34699616, 34700228, 34700255
34700643, 34700660, 34701323, 34704162, 34704506, 34705215, 34706625
34709158, 34710427, 34710569, 34711434, 34711897, 34712405, 34713413
34713951, 34714760, 34715072, 34715158, 34715960, 34716391, 34718643
34719772, 34720677, 34720762, 34720854, 34724125, 34724331, 34724535
34724582, 34724986, 34725039, 34726380, 34726666, 34729397, 34729755
34730231, 34730930, 34731121, 34732383, 34733192, 34733234, 34736787
34737946, 34738737, 34739733, 34740434, 34742578, 34742761, 34743170
34743331, 34743869, 34744334, 34744980, 34745335, 34747517, 34748613
34749799, 34752011, 34752186, 34752935, 34754028, 34759287, 34761284
34761787, 34762290, 34763780, 34765046, 34765783, 34767159, 34769588
34769939, 34771499, 34773273, 34773547, 34774426, 34775460, 34775863
34777391, 34778310, 34782365, 34782556, 34783802, 34784422, 34785211
34786432, 34787623, 34793099, 34794246, 34797143, 34797565, 34797666
34797733, 34798577, 34800180, 34801889, 34802312, 34804060, 34804845
34806060, 34808536, 34809715, 34810252, 34810533, 34810987, 34811942
34813568, 34814154, 34816203, 34816271, 34816383, 34816423, 34816446
34820088, 34821386, 34822118, 34822847, 34825329, 34827391, 34829425
34830056, 34830523, 34831677, 34832629, 34832725, 34833503, 34835042
34836063, 34837452, 34837737, 34839112, 34841743, 34844505, 34845369
34845920, 34846247, 34847038, 34848229, 34850178, 34851191, 34851345
34852202, 34855224, 34855355, 34855777, 34858818, 34859550, 34860551
34861159, 34861493, 34862366, 34863611, 34865504, 34866621, 34870095

34871935, 34872784, 34873139, 34874803, 34875355, 34875817, 34878842
34879016, 34879878, 34884137, 34884270, 34884398, 34884598, 34885986
34886534, 34888945, 34891346, 34892381, 34894430, 34894796, 34896800
34898313, 34898860, 34899985, 34901118, 34903294, 34904610, 34906779
34907142, 34910877, 34911010, 34913418, 34919485, 34921040, 34922162
34922189, 34922278, 34922345, 34925412, 34927892, 34931856, 34933484
34936786, 34944713, 34944894, 34949129, 34951381, 34953532, 34956645
34958012, 34961049, 34962223, 34965881, 34968089, 34969675, 34969920
34974052, 34975490, 34977125, 34978108, 34986710, 34987218, 34988484
34993018, 34993116, 34993572, 34995066, 34996911, 34998034, 34998152
34999123, 34999256, 35001525, 35001642, 35001950, 35001966, 35004974
35011038, 35011794, 35012562, 35012866, 35013485, 35017301, 35019861
35020339, 35020474, 35020686, 35021301, 35022351, 35023651, 35024528
35028559, 35034357, 35034419, 35037368, 35037877, 35038887, 35045932
35046819, 35047664, 35047747, 35054513, 35061730, 35063106, 35064830
35065501, 35066263, 35067685, 35074697, 35075067, 35075794, 35079707
35080170, 35081595, 35089117, 35090180, 35092748, 35095186, 35095748
35096413, 35098094, 35099667, 35099674, 35100889, 35108500, 35108659
35111235, 35111766, 35114002, 35116794, 35116995, 35119957, 35120120
35123499, 35123829, 35126657, 35133091, 35133360, 35135018, 35135099
35136259, 35137435, 35141642, 35146613, 35146774, 35150992, 35152252
35154281, 35154926, 35154960, 35156218, 35156936, 35157812, 35160590
35160800, 35161640, 35162446, 35167216, 35167687, 35169842, 35170600
35176667, 35177450, 35182029, 35185281, 35185582, 35192392, 35192409
35194313, 35196311, 35196527, 35200616, 35201760, 35204054, 35209217
35209504, 35216660, 35220732, 35224455, 35224820, 35225526, 35236335
35238243, 35239280, 35241630, 35241785, 35242133, 35243199, 35246710
35251084, 35254297, 35255487, 35256214, 35256970, 35257945, 35261641
35271571, 35276686, 35279084, 35279794, 35280309, 35282519, 35284198
35285519, 35285795, 35286006, 35286643, 35297129, 35300684, 35309432
35313797, 35314366, 35320424, 35323379, 35325831, 35330506, 35331461
35335219, 35336174, 35336918, 35338859, 35343260, 35350522, 35352132
35354098, 35355841, 35358495, 35360571, 35373245, 35378997, 35383562
35383695, 35389856, 35393406, 35395648, 35397199, 35399131, 35403044
35406065, 35406883, 35407223, 35412130, 35412492, 35412607, 35413561
35413641, 35414664, 35428646, 35429800, 35432001, 35442758, 35454504
35461252, 35464439, 35464935, 35471762, 35475118, 35481088, 35481836
35486570, 35491283, 35491431, 35499173, 35500783, 35509815, 35510595
35511113, 35513164, 35516861, 35518158, 35518161, 35519977, 35527573
35532862, 35546332, 35555753, 35562961, 35566791, 35567384, 35572071
35585502, 35598272, 35598911, 35600358, 35612086, 35617844, 35618472
35622388, 35623675, 35627364, 35635081, 35636459, 35646719, 35665871
35677162, 35685102, 35689562, 35692792, 35700030, 35717077, 35737047

35754528, 35761923, 35782231, 35784008, 35861995

Version 19.0.0.0.ru-2023-07.rur-2023-07.r1

Version 19.0.0.0.ru-2023-07.rur-2023-07.r1 includes the following:

- Patch [35239280](#): DSTV42 UPDATE - TZDATA2023C - NEED OJVM FIX
- Patch [33125873](#): MAKE CACHE GLOBAL OBJECT INVALIDATION CIC NON-SERIALIZE FOR BETTER PERFORMANCE
- Patch [29213893](#): DBMS_STATS FAILING WITH ERROR ORA-01422 WHEN GATHERING STATS FOR USER\$ TABLE
- Patch [28730253](#): SUPPORT NEW ERA REIWA FOR JAPANESE IMPERIAL CALENDAR
- Patch [35354406](#): OJVM RELEASE UPDATE: 19.20.0.0.230718 (35354406)
- Patch [35320081](#): DATABASE RELEASE UPDATE: 19.20.0.0.230718 (35320081)
- Patch [29585399](#): OCW RELEASE UPDATE 19.3.0.0.0 (29585399)
- PreUpgrade Jar: preupgrade_19_cbuild_13_lf.zip

Combined patches for version 19.0.0.0.ru-2023-07.rur-2023-07.r1, released July 2023

Bugs fixed:

1297945, 7391838, 8460502, 8476681, 9002767, 10123661, 12565410
 12949919, 14112098, 14570574, 14735102, 15897884, 15931756, 15959416
 16662822, 16664572, 16750494, 16799766, 17275499, 17395507, 17428816
 17443054, 17468475, 17562236, 17777718, 18534283, 18697534, 18759260
 18943905, 19080742, 19138896, 19147630, 19397646, 19630878, 19697993
 19884953, 19958239, 20007421, 20083476, 20289608, 20313356, 20319830
 20479545, 20661314, 20721183, 20867658, 20875943, 20922160, 21119541
 21217621, 21232786, 21245711, 21374587, 21528318, 21533734, 21629064
 21639146, 21888352, 21965541, 22037067, 22066547, 22252368, 22325312
 22387320, 22553815, 22580355, 22725871, 22729345, 22748979, 22813401
 22873666, 23020668, 23066463, 23094775, 23125587, 23220873, 23294761
 23296836, 23311885, 23606241, 23614160, 23645975, 23734075, 23734111
 23763462, 24336782, 24356932, 24559425, 24561942, 24596874, 24597536
 24669730, 24687075, 24701882, 24833686, 24916492, 24957575, 24971456
 25030027, 25033515, 25092651, 25093917, 25148135, 25153902, 25173172
 25195515, 25404117, 25415139, 25416731, 25467237, 25541233, 25560538

25562258, 25607406, 25607716, 25632308, 25642769, 25655012, 25661172
25675134, 25677036, 25756945, 25792962, 25804387, 25804908, 25806201
25809128, 25869323, 25881271, 25883179, 25905368, 25913778, 25933030
25979242, 25986062, 25997810, 26001677, 26003708, 26108369, 26127355
26139817, 26173091, 26203132, 26247450, 26256280, 26280704, 26284288
26352569, 26352615, 26440142, 26476244, 26476323, 26497655, 26499997
26500553, 26516556, 26528202, 26577716, 26587659, 26611353, 26621826
26668264, 26716835, 26739322, 26758837, 26777814, 26785852, 26789742
26800890, 26819036, 26860844, 26872233, 26897528, 26925969, 26951566
26957541, 26960568, 26963540, 26978857, 27004798, 27004828, 27015468
27019512, 27036163, 27044169, 27044246, 27063461, 27086374, 27091809
27096103, 27101798, 27126122, 27126938, 27130348, 27131416, 27155644
27162036, 27166935, 27175854, 27195575, 27195935, 27207214, 27207959
27221350, 27222128, 27243840, 27244999, 27254335, 27260704, 27261477
27275126, 27277677, 27302372, 27329690, 27359766, 27359770, 27362994
27369515, 27378053, 27381279, 27392968, 27406105, 27411022, 27423500
27428898, 27439716, 27453490, 27458357, 27458493, 27460010, 27489107
27497101, 27525303, 27572040, 27582210, 27589260, 27595082, 27597359
27604329, 27614573, 27622946, 27627811, 27629928, 27636387, 27639208
27654410, 27658166, 27661222, 27666312, 27684864, 27691701, 27692173
27697886, 27700413, 27710072, 27722357, 27729678, 27742354, 27745728
27751111, 27751518, 27760043, 27764052, 27768096, 27782078, 27785931
27786168, 27801144, 27825962, 27828892, 27829722, 27841399, 27846298
27860754, 27873364, 27877830, 27880025, 27897090, 27899093, 27907898
27908460, 27917890, 27929509, 27933036, 27934711, 27935464, 27941110
27950978, 27951757, 27957203, 27957963, 27962025, 27967484, 27979632
27989365, 27998559, 28001632, 28007516, 28023467, 28031385, 28044739
28052648, 28064977, 28072567, 28078186, 28089605, 28092783, 28104176
28109326, 28112563, 28125947, 28127287, 28127569, 28129791, 28133903
28138566, 28138847, 28144569, 28145995, 28156781, 28163768, 28167557
28173612, 28181021, 28185286, 28187837, 28189466, 28193268, 28198802
28201045, 28204104, 28204262, 28205555, 28209601, 28209985, 28210681
28215483, 28234255, 28248841, 28263142, 28267957, 28271258, 28271693
28276054, 28279176, 28279456, 28279612, 28294439, 28294563, 28298401
28302580, 28303692, 28313275, 28319114, 28322973, 28326928, 28337860
28338211, 28350595, 28351919, 28362187, 28364580, 28370061, 28371123
28373960, 28375383, 28379065, 28381939, 28383667, 28386259, 28387185
28387574, 28390177, 28390273, 28392179, 28395302, 28397317, 28402823
28403019, 28406374, 28410431, 28412163, 28414968, 28430240, 28431445
28432345, 28435333, 28436173, 28436414, 28442896, 28451312, 28452123
28454215, 28461031, 28461789, 28463226, 28470673, 28475242, 28479352
28482048, 28482049, 28484299, 28487818, 28489419, 28492006, 28498976
28499269, 28502773, 28503081, 28504631, 28505321, 28513129, 28513333
28521330, 28522750, 28523644, 28526715, 28530171, 28530697, 28534475

28534493, 28535127, 28537481, 28538439, 28541606, 28542455, 28544270
28546290, 28547068, 28547926, 28553649, 28553981, 28558489, 28558645
28561704, 28564479, 28565296, 28567417, 28567819, 28569897, 28570589
28572165, 28572407, 28572533, 28572544, 28572667, 28572834, 28578945
28587723, 28589194, 28589509, 28589644, 28591817, 28592647, 28593127
28593682, 28594086, 28597221, 28598022, 28600107, 28601957, 28602253
28604647, 28605066, 28606598, 28607316, 28607632, 28608211, 28612239
28618343, 28620697, 28621543, 28621781, 28622202, 28625580, 28625862
28625873, 28627033, 28628592, 28630381, 28632796, 28632799, 28636532
28639299, 28640772, 28642469, 28642551, 28642899, 28643583, 28643654
28643718, 28644549, 28645570, 28646200, 28646939, 28647544, 28649388
28651078, 28652776, 28655209, 28657026, 28658263, 28659098, 28661333
28661362, 28663289, 28663782, 28670402, 28672124, 28672457, 28673945
28674263, 28681153, 28682182, 28682796, 28689483, 28690694, 28692103
28692275, 28692282, 28693954, 28694526, 28694639, 28694872, 28694877
28696373, 28697526, 28698087, 28699321, 28700945, 28703812, 28704412
28705231, 28707931, 28708400, 28708585, 28709063, 28710385, 28710469
28710663, 28710734, 28714461, 28714720, 28715655, 28715727, 28717406
28718302, 28718469, 28719348, 28720204, 28720418, 28721497, 28722229
28729900, 28730079, 28730253, 28734355, 28734910, 28740708, 28740799
28740863, 28741374, 28742555, 28745367, 28747846, 28749853, 28751498
28752923, 28755011, 28755084, 28755309, 28755846, 28757960, 28758722
28760206, 28760662, 28763291, 28765983, 28767240, 28769456, 28770865
28771022, 28771947, 28772390, 28772816, 28774416, 28776431, 28776811
28777073, 28777214, 28777478, 28778754, 28781599, 28781754, 28785273
28785321, 28785531, 28788272, 28789531, 28789533, 28791576, 28791852
28793062, 28794230, 28795452, 28795551, 28795563, 28795734, 28800508
28802066, 28802734, 28804517, 28805242, 28806517, 28807247, 28808314
28808652, 28808656, 28810381, 28811560, 28811592, 28813317, 28813931
28815123, 28815355, 28815557, 28816871, 28817449, 28818063, 28819640
28820669, 28821847, 28824482, 28826113, 28827682, 28828390, 28831971
28833912, 28835937, 28836716, 28837979, 28838385, 28839869, 28842408
28844656, 28844738, 28845346, 28846759, 28847541, 28847572, 28849494
28849776, 28850084, 28851458, 28851467, 28852325, 28852334, 28854004
28854212, 28854733, 28855520, 28855922, 28857364, 28857552, 28861861
28862532, 28863263, 28863432, 28863487, 28865544, 28865569, 28867698
28867992, 28869215, 28870496, 28871040, 28872645, 28872829, 28873575
28874416, 28875089, 28876253, 28876639, 28876926, 28877252, 28878865
28880218, 28880864, 28881191, 28881848, 28882146, 28882751, 28882784
28884931, 28887305, 28888083, 28888327, 28889389, 28889730, 28891867
28891941, 28892794, 28896556, 28897123, 28897512, 28898967, 28899663
28900506, 28901126, 28902135, 28904380, 28905312, 28905390, 28905457
28905615, 28907196, 28909769, 28909992, 28910498, 28910586, 28911140
28912691, 28914144, 28915561, 28917080, 28918429, 28919145, 28921844

28922227, 28922485, 28922532, 28922608, 28922767, 28925250, 28925460
28925634, 28925880, 28927452, 28928462, 28930944, 28932914, 28933079
28933158, 28935293, 28935956, 28936114, 28937717, 28938167, 28938422
28938698, 28940179, 28940281, 28940472, 28941901, 28942118, 28942455
28942694, 28945421, 28945994, 28946233, 28946574, 28948554, 28949888
28950868, 28951332, 28951493, 28951533, 28952168, 28954762, 28955606
28955883, 28956145, 28956908, 28957260, 28957292, 28957723, 28958088
28958094, 28958590, 28959493, 28960863, 28962271, 28962775, 28963036
28965084, 28965095, 28965231, 28965376, 28966444, 28968211, 28968779
28970122, 28971177, 28974083, 28974902, 28974999, 28977322, 28978664
28979289, 28980448, 28980910, 28981871, 28983095, 28983486, 28984313
28985114, 28985272, 28985362, 28985478, 28986207, 28986231, 28986257
28986326, 28986481, 28986696, 28988482, 28988864, 28989306, 28990681
28993295, 28993353, 28994307, 28994542, 28994721, 28994783, 28995287
28996376, 28998369, 28999046, 29000000, 29001305, 29001888, 29002273
29002488, 29002784, 29002927, 29003207, 29003407, 29003617, 29003738
29004934, 29005748, 29006318, 29006621, 29007321, 29007353, 29007775
29008035, 29008669, 29009513, 29010126, 29010517, 29011936, 29012609
29013475, 29013832, 29014076, 29014385, 29015118, 29015273, 29016294
29017265, 29018655, 29018680, 29019121, 29020147, 29020271, 29020423
29021063, 29021352, 29022986, 29024028, 29024054, 29024448, 29024552
29024732, 29024795, 29024876, 29026154, 29026582, 29026606, 29027456
29027694, 29027914, 29027933, 29027940, 29030184, 29030927, 29031575
29031600, 29032234, 29032276, 29032457, 29032607, 29033052, 29033145
29033164, 29033200, 29033280, 29033655, 29034331, 29034587, 29036278
29037290, 29038528, 29038728, 29038730, 29039089, 29039510, 29040032
29040739, 29041739, 29041775, 29043554, 29043651, 29043725, 29044086
29044763, 29044954, 29046482, 29047127, 29047850, 29048178, 29048289
29048498, 29048605, 29048728, 29048792, 29048858, 29049014, 29049673
29050357, 29050560, 29050765, 29050886, 29051263, 29051702, 29051953
29052726, 29052850, 29053783, 29053902, 29055644, 29056024, 29056270
29056560, 29056767, 29056894, 29058476, 29059011, 29060216, 29061016
29061959, 29062692, 29062848, 29062860, 29062868, 29110526, 29110783
29110790, 29110797, 29110802, 29110805, 29111598, 29111631, 29112455
29113282, 29113305, 29115794, 29115857, 29116779, 29117337, 29117526
29117642, 29118543, 29119077, 29119733, 29120223, 29122224, 29122254
29122367, 29123297, 29123324, 29123432, 29123444, 29123482, 29124104
29124368, 29125036, 29125374, 29125380, 29125708, 29125786, 29126345
29127957, 29128693, 29128935, 29129450, 29129476, 29129497, 29129691
29129712, 29130219, 29131539, 29131772, 29132456, 29132869, 29132938
29133470, 29134447, 29135383, 29135649, 29136111, 29138641, 29139070
29139727, 29139761, 29139780, 29139956, 29141316, 29141341, 29141685
29141886, 29142609, 29142667, 29143516, 29144995, 29145214, 29145730
29146077, 29146157, 29146810, 29147849, 29148799, 29149170, 29149829

29150338, 29151520, 29152357, 29152603, 29152752, 29154057, 29154631
29154636, 29154725, 29154829, 29155099, 29155208, 29157051, 29157389
29158139, 29158680, 29158899, 29158990, 29159216, 29159661, 29159909
29159936, 29160174, 29160462, 29160824, 29161597, 29161923, 29162095
29162749, 29163073, 29163156, 29163415, 29163437, 29163524, 29163567
29164376, 29164446, 29165682, 29167111, 29167342, 29167374, 29167940
29168137, 29168219, 29168433, 29169073, 29169215, 29169540, 29169739
29170232, 29170717, 29171683, 29171942, 29172618, 29172826, 29173140
29173373, 29173618, 29173817, 29174004, 29174753, 29175638, 29175765
29175829, 29176318, 29177466, 29177543, 29177886, 29178385, 29179097
29180313, 29180455, 29180559, 29180721, 29180893, 29181078, 29181153
29181231, 29181568, 29181620, 29181743, 29181923, 29182019, 29182517
29182535, 29182901, 29182920, 29183298, 29183912, 29184297, 29184666
29185193, 29186091, 29186456, 29186605, 29188255, 29189302, 29189307
29189889, 29190235, 29190474, 29190663, 29190740, 29191541, 29191827
29192419, 29192468, 29192685, 29193207, 29193681, 29194205, 29194367
29194493, 29194827, 29194981, 29195279, 29195337, 29195758, 29196151
29196725, 29198092, 29198913, 29199163, 29199635, 29199733, 29200316
29200700, 29201143, 29201494, 29201539, 29201695, 29201787, 29202104
29202461, 29202850, 29203041, 29203122, 29203166, 29203227, 29203425
29203443, 29203604, 29205281, 29205323, 29205419, 29205463, 29205767
29205918, 29206109, 29206605, 29206631, 29207073, 29208260, 29208732
29209545, 29210455, 29210577, 29210610, 29210624, 29210683, 29211457
29211724, 29211895, 29212012, 29212433, 29212611, 29213320, 29213351
29213613, 29213641, 29213775, 29213850, 29213879, 29213893, 29214561
29214960, 29215658, 29216312, 29216723, 29216746, 29216984, 29217294
29217472, 29217828, 29217848, 29217856, 29218570, 29219205, 29219273
29219627, 29220079, 29221248, 29221745, 29221891, 29221942, 29222031
29222534, 29222784, 29222892, 29223110, 29223833, 29223859, 29223967
29224065, 29224294, 29224605, 29224710, 29225076, 29225168, 29225758
29225861, 29227602, 29228869, 29229164, 29229754, 29229839, 29229844
29229955, 29230252, 29230565, 29231133, 29232117, 29232154, 29232449
29232533, 29232653, 29233415, 29233810, 29233953, 29234123, 29235934
29236573, 29237538, 29237575, 29237744, 29240307, 29240668, 29240759
29241345, 29241651, 29242017, 29242561, 29242884, 29242906, 29243749
29243958, 29244495, 29244766, 29244968, 29245063, 29245137, 29245160
29246163, 29246337, 29247183, 29247415, 29247712, 29247906, 29248012
29248495, 29248552, 29248723, 29248835, 29248858, 29249289, 29249412
29249583, 29249991, 29250059, 29250317, 29251259, 29251564, 29252218
29252510, 29252790, 29253184, 29253871, 29254031, 29254177, 29254623
29254930, 29255178, 29255273, 29255431, 29255435, 29255616, 29255705
29255718, 29255973, 29256279, 29256426, 29259119, 29259320, 29260224
29260407, 29260452, 29260956, 29261547, 29261548, 29261695, 29261906
29262143, 29262512, 29262887, 29265446, 29265448, 29265780, 29266248

29266899, 29267292, 29268412, 29269171, 29269228, 29269825, 29270585
29271019, 29273168, 29273360, 29273539, 29273570, 29273735, 29273812
29273847, 29274428, 29274564, 29274623, 29274627, 29275461, 29276272
29277317, 29278218, 29278684, 29279658, 29279751, 29279854, 29281112
29281527, 29281691, 29281796, 29282090, 29282233, 29282666, 29282898
29285197, 29285453, 29285503, 29285621, 29285788, 29285956, 29286037
29286220, 29286229, 29287130, 29287705, 29290110, 29290235, 29292232
29292253, 29292378, 29292837, 29293072, 29293574, 29293806, 29294382
29294753, 29296257, 29297863, 29297915, 29298220, 29299049, 29299082
29299830, 29299844, 29301139, 29301463, 29301566, 29302565, 29302614
29302963, 29303712, 29303918, 29304314, 29304640, 29304692, 29304781
29304853, 29305093, 29306226, 29306478, 29306713, 29306790, 29307090
29307109, 29307638, 29309698, 29311336, 29311528, 29311588, 29311927
29312310, 29312672, 29312734, 29312753, 29312889, 29313347, 29313417
29313525, 29314539, 29314636, 29314867, 29314949, 29317756, 29318410
29319441, 29319558, 29320900, 29321489, 29321689, 29323946, 29323999
29324568, 29324735, 29325087, 29325105, 29325257, 29325356, 29325497
29325765, 29325993, 29326233, 29327044, 29327892, 29327972, 29328305
29329042, 29329087, 29329675, 29329807, 29329848, 29330361, 29330791
29331066, 29331209, 29331380, 29331493, 29332292, 29332395, 29332763
29332771, 29332966, 29333500, 29333683, 29333689, 29337294, 29337310
29337742, 29338315, 29338348, 29338453, 29338780, 29338913, 29339101
29339155, 29339299, 29339452, 29340333, 29341209, 29341782, 29342099
29343086, 29343156, 29343861, 29344541, 29345382, 29345937, 29346057
29346138, 29346211, 29346943, 29347620, 29348176, 29348358, 29350052
29350712, 29350762, 29350868, 29351044, 29351386, 29351662, 29351708
29351716, 29351735, 29351749, 29351771, 29351786, 29352298, 29352724
29352867, 29352947, 29353271, 29353389, 29353432, 29353718, 29353821
29353960, 29355654, 29355913, 29356547, 29356634, 29356698, 29356704
29356711, 29356752, 29356782, 29357424, 29357821, 29358509, 29358828
29360252, 29360285, 29360467, 29360672, 29360775, 29360911, 29360950
29361319, 29361472, 29361801, 29362596, 29363090, 29363151, 29364171
29364177, 29366406, 29366818, 29366940, 29367019, 29367561, 29367971
29368253, 29368310, 29368725, 29372069, 29372541, 29372562, 29373418
29373588, 29374179, 29374604, 29374627, 29375355, 29375941, 29375984
29376346, 29377804, 29377986, 29378029, 29378287, 29378834, 29378913
29379299, 29379381, 29379552, 29379750, 29379978, 29380527, 29381000
29382296, 29382641, 29382784, 29382815, 29383695, 29384740, 29384781
29384854, 29384864, 29384960, 29385339, 29385429, 29385652, 29385774
29386125, 29386502, 29386557, 29386635, 29386660, 29386835, 29387073
29387274, 29387310, 29387329, 29387337, 29388020, 29388072, 29388094
29388524, 29388830, 29389408, 29389889, 29390011, 29390435, 29390501
29390785, 29391030, 29391237, 29391301, 29391438, 29391849, 29391925
29392554, 29392966, 29393291, 29393649, 29394014, 29394140, 29394749

29394761, 29395657, 29396481, 29397841, 29397954, 29397996, 29398192
29398488, 29398863, 29399046, 29399100, 29399121, 29399336, 29399938
29399959, 29402110, 29402131, 29403307, 29404425, 29404483, 29405012
29405462, 29405651, 29405996, 29407488, 29407637, 29407804, 29407932
29408853, 29409149, 29409455, 29410311, 29410834, 29411037, 29411427
29411469, 29411931, 29412066, 29412269, 29413205, 29413360, 29413382
29413517, 29413544, 29413634, 29413956, 29415493, 29415774, 29416339
29416688, 29416700, 29417084, 29417113, 29417173, 29417719, 29417884
29418165, 29418341, 29420254, 29420834, 29421059, 29423003, 29423016
29423156, 29423227, 29423491, 29423826, 29424094, 29424999, 29426241
29426320, 29426521, 29428230, 29429017, 29429087, 29429264, 29429336
29429466, 29429566, 29429895, 29430524, 29430866, 29431192, 29431402
29431485, 29431985, 29432176, 29434301, 29434777, 29434869, 29435474
29435652, 29435966, 29436454, 29436514, 29436522, 29436727, 29437029
29437379, 29437594, 29437712, 29438150, 29438277, 29438736, 29439522
29440651, 29441196, 29442400, 29442936, 29443187, 29443250, 29443559
29444072, 29444275, 29444282, 29444524, 29444602, 29444906, 29445548
29445707, 29446319, 29446669, 29447460, 29448498, 29449477, 29449845
29449852, 29450162, 29450193, 29450273, 29450421, 29450812, 29450936
29451085, 29451224, 29451386, 29451660, 29452251, 29452576, 29452736
29452739, 29452809, 29452813, 29452864, 29452936, 29452953, 29452973
29452977, 29453104, 29453105, 29453109, 29453681, 29453682, 29454450
29454467, 29454468, 29454469, 29454470, 29454471, 29454978, 29455424
29455773, 29456538, 29456714, 29457312, 29457319, 29457370, 29457502
29457807, 29457978, 29458132, 29460252, 29461420, 29461791, 29461971
29462594, 29462767, 29462957, 29463047, 29463528, 29463553, 29463798
29464616, 29464779, 29465047, 29465177, 29466674, 29466707, 29467622
29469563, 29469565, 29470059, 29470205, 29470291, 29470636, 29470814
29470880, 29471633, 29471832, 29471857, 29471860, 29472170, 29472172
29472176, 29472204, 29472235, 29472319, 29472402, 29472404, 29472405
29472408, 29472411, 29472446, 29472618, 29473708, 29474348, 29475386
29476473, 29476702, 29477015, 29481584, 29482021, 29483452, 29483532
29483626, 29483672, 29483685, 29483712, 29483723, 29483771, 29485099
29485731, 29485877, 29486181, 29486848, 29487150, 29487189, 29487407
29488894, 29488996, 29489436, 29489546, 29490032, 29490256, 29491784
29492127, 29492939, 29493122, 29493821, 29494101, 29494245, 29494788
29494934, 29495057, 29495171, 29495684, 29496977, 29497053, 29497311
29497588, 29497696, 29497778, 29498198, 29499077, 29500257, 29500826
29500963, 29501218, 29502561, 29503543, 29503631, 29503827, 29504103
29504492, 29504682, 29505225, 29505589, 29505668, 29506942, 29507270
29507616, 29508681, 29508751, 29508998, 29509777, 29509975, 29510278
29511064, 29511611, 29511771, 29511980, 29512125, 29512773, 29512890
29514284, 29514479, 29515134, 29515240, 29515476, 29515534, 29515766
29515834, 29516300, 29516727, 29516766, 29516943, 29517168, 29517443

29517883, 29518604, 29518767, 29519131, 29521187, 29521688, 29521748
29521862, 29522358, 29522561, 29522662, 29523055, 29523216, 29523511
29524043, 29524599, 29524985, 29525366, 29525467, 29525886, 29526966
29527595, 29527610, 29528184, 29528368, 29529147, 29529436, 29530414
29530440, 29530515, 29530812, 29530909, 29531654, 29531836, 29532112
29532532, 29534218, 29536342, 29536445, 29536794, 29537829, 29538631
29539027, 29539413, 29540327, 29540831, 29540862, 29541517, 29541742
29541769, 29541973, 29542084, 29542449, 29542474, 29542580, 29542643
29543034, 29543956, 29544552, 29546817, 29547010, 29547867, 29548413
29548427, 29548592, 29548687, 29548722, 29549040, 29549071, 29549104
29549154, 29549730, 29550530, 29552402, 29552773, 29553141, 29554092
29554351, 29554554, 29554997, 29555105, 29555239, 29557144, 29557261
29557336, 29557556, 29558238, 29558452, 29558926, 29558975, 29559187
29559395, 29559446, 29559908, 29559981, 29560019, 29564592, 29564593
29565611, 29579919, 29580394, 29580983, 29581460, 29581771, 29583018
29584261, 29584693, 29586143, 29587299, 29587488, 29587720, 29587765
29588580, 29588732, 29589544, 29590666, 29591311, 29591343, 29591641
29591661, 29592011, 29592215, 29592433, 29592595, 29592946, 29593820
29597158, 29597536, 29597716, 29597754, 29598039, 29598040, 29598046
29598226, 29598233, 29598338, 29598981, 29599008, 29599243, 29599300
29599552, 29601461, 29602831, 29603460, 29603884, 29604002, 29604257
29606261, 29607136, 29607797, 29608000, 29608023, 29608888, 29609434
29609468, 29609603, 29610506, 29611020, 29611991, 29613733, 29614206
29614931, 29614987, 29615824, 29616244, 29616414, 29617414, 29618074
29618190, 29620042, 29620564, 29622936, 29623323, 29623592, 29624124
29624408, 29625065, 29625804, 29625827, 29625876, 29626154, 29626732
29628200, 29628647, 29629430, 29629650, 29629681, 29629745, 29630221
29631749, 29632095, 29632265, 29632611, 29632751, 29633697, 29633753
29633936, 29634643, 29635427, 29635717, 29635990, 29637362, 29637526
29637560, 29638285, 29638928, 29641373, 29641736, 29642451, 29643721
29644426, 29644464, 29645167, 29645349, 29646315, 29647176, 29647770
29648928, 29649694, 29651183, 29651517, 29651520, 29652809, 29653132
29653246, 29655164, 29655416, 29655668, 29655855, 29655895, 29656400
29656819, 29656843, 29657399, 29657422, 29657744, 29657960, 29657973
29658056, 29661028, 29661065, 29661722, 29663191, 29663368, 29663494
29663601, 29663813, 29664087, 29664161, 29665168, 29665940, 29666451
29667527, 29667994, 29668005, 29668253, 29669241, 29669413, 29670713
29670782, 29671363, 29672507, 29675446, 29676089, 29676921, 29677051
29677173, 29677733, 29677927, 29678217, 29679856, 29680700, 29681987
29683039, 29683189, 29683211, 29684518, 29685137, 29685276, 29687214
29687220, 29687459, 29687718, 29687727, 29687763, 29688867, 29689145
29689255, 29690795, 29690806, 29692115, 29692694, 29693847, 29694869
29695425, 29695821, 29695841, 29695964, 29695987, 29696242, 29696310
29697928, 29700125, 29700460, 29700770, 29701425, 29701720, 29701755

29701937, 29703932, 29704426, 29705793, 29706141, 29706160, 29707099
29707493, 29707582, 29707896, 29708324, 29708353, 29708876, 29708915
29710188, 29710858, 29713810, 29715220, 29715647, 29715703, 29716029
29716194, 29716227, 29716491, 29716602, 29716871, 29717659, 29717901
29718198, 29719146, 29720133, 29720373, 29721418, 29721576, 29722026
29722092, 29722167, 29722389, 29723113, 29724497, 29724658, 29725115
29725421, 29725425, 29725476, 29725781, 29726695, 29737941, 29738374
29738400, 29739576, 29741319, 29741976, 29742223, 29742926, 29743448
29744225, 29744400, 29744637, 29745288, 29745624, 29746003, 29746962
29747493, 29747648, 29747653, 29748285, 29748325, 29748336, 29748513
29749469, 29749471, 29750673, 29751094, 29753244, 29754196, 29754640
29754951, 29755821, 29756274, 29756444, 29757099, 29757264, 29757651
29757687, 29758203, 29758217, 29758661, 29761678, 29761837, 29761911
29763158, 29764644, 29765035, 29765219, 29765347, 29765393, 29765493
29766207, 29766435, 29766503, 29766679, 29768487, 29768899, 29769549
29769695, 29769901, 29770750, 29771032, 29771242, 29772514, 29772761
29773185, 29773197, 29773205, 29773459, 29773633, 29773842, 29774362
29775393, 29775473, 29779196, 29779368, 29779793, 29779901, 29780140
29780459, 29780507, 29780633, 29782211, 29782284, 29782501, 29782823
29782866, 29783142, 29784106, 29785169, 29785239, 29785251, 29785311
29785544, 29785550, 29785831, 29787292, 29787766, 29788820, 29789911
29791152, 29791880, 29791916, 29792213, 29792433, 29793141, 29793151
29793318, 29794174, 29794462, 29795712, 29795957, 29796335, 29796378
29796916, 29797209, 29797726, 29801164, 29802382, 29802695, 29803593
29803948, 29804875, 29805368, 29805772, 29806390, 29806964, 29807964
29809792, 29809837, 29810012, 29810013, 29811616, 29811720, 29812084
29812166, 29812489, 29813503, 29813650, 29813671, 29814455, 29814995
29815341, 29815713, 29816887, 29817278, 29817547, 29817784, 29818794
29819753, 29820341, 29821130, 29821582, 29822714, 29825525, 29827647
29827792, 29827852, 29828644, 29829339, 29829453, 29830374, 29831196
29831404, 29831567, 29833406, 29833984, 29834506, 29836096, 29836424
29838337, 29838485, 29838740, 29838773, 29839481, 29839715, 29840619
29841267, 29841687, 29842369, 29843238, 29843277, 29843692, 29843831
29844131, 29844226, 29844275, 29845449, 29845530, 29845691, 29846126
29846525, 29846645, 29846688, 29847627, 29848084, 29848849, 29849100
29849139, 29850083, 29850552, 29850566, 29850930, 29851020, 29851308
29851401, 29851474, 29851733, 29853201, 29853485, 29856420, 29856506
29856859, 29856890, 29858121, 29858376, 29858420, 29858929, 29859068
29860022, 29860028, 29860994, 29861075, 29864203, 29864261, 29865188
29865590, 29865658, 29867728, 29868639, 29868736, 29869052, 29869086
29869149, 29869404, 29869857, 29869877, 29869887, 29869906, 29870065
29870533, 29871098, 29871312, 29871360, 29872401, 29872720, 29872937
29872983, 29873206, 29873665, 29873751, 29874090, 29874761, 29875200
29875459, 29875565, 29875919, 29876358, 29876989, 29877608, 29878076

29879723, 29881050, 29881478, 29881575, 29881643, 29881839, 29882427
29882454, 29882729, 29884958, 29885182, 29885781, 29885890, 29886809
29887045, 29887111, 29887840, 29888621, 29889184, 29889358, 29890740
29891075, 29891383, 29891533, 29891853, 29891857, 29891916, 29892388
29892604, 29892634, 29892973, 29892982, 29893132, 29893197, 29893287
29894021, 29896510, 29897418, 29897720, 29897863, 29899384, 29900186
29900203, 29900824, 29901021, 29901025, 29901419, 29901961, 29902299
29902327, 29902330, 29902659, 29903190, 29903299, 29903357, 29903454
29904002, 29906678, 29907870, 29907942, 29908389, 29908639, 29908777
29909658, 29910218, 29910402, 29912135, 29912286, 29913805, 29913934
29913966, 29914449, 29914544, 29915182, 29915217, 29915848, 29916198
29916975, 29919782, 29919789, 29920025, 29920376, 29920804, 29921214
29921318, 29921559, 29922225, 29922435, 29922461, 29923452, 29924147
29924181, 29924479, 29925177, 29926466, 29927360, 29927756, 29928040
29928210, 29928340, 29928427, 29928564, 29930457, 29931230, 29931956
29932202, 29932310, 29932430, 29932780, 29932953, 29933718, 29934048
29934052, 29934158, 29934557, 29935685, 29936841, 29937565, 29937655
29937956, 29938063, 29938225, 29939075, 29939400, 29939795, 29940373
29941062, 29942096, 29942275, 29942554, 29943670, 29943879, 29944035
29944159, 29944660, 29944963, 29945645, 29946101, 29946388, 29947145
29947242, 29947428, 29948154, 29948165, 29950018, 29950220, 29951620
29951759, 29952700, 29955625, 29956016, 29956222, 29957412, 29957493
29958925, 29960325, 29960884, 29961353, 29961360, 29961609, 29961847
29962160, 29962248, 29962590, 29962834, 29962927, 29962939, 29965052
29965207, 29965603, 29965888, 29966768, 29966778, 29967223, 29967386
29967911, 29967980, 29968085, 29968703, 29969557, 29969985, 29970081
29970261, 29970273, 29970298, 29970587, 29970861, 29971027, 29971481
29971888, 29971936, 29971951, 29972134, 29972176, 29973012, 29989783
29989845, 29990779, 29991257, 29992299, 29993717, 29997326, 29997553
29997937, 29997959, 30000518, 30000664, 30001105, 30001331, 30003187
30003356, 30004660, 30004856, 30006123, 30006159, 30006280, 30006411
30006472, 30006705, 30006985, 30007450, 30007536, 30007797, 30008035
30008125, 30008198, 30008214, 30008456, 30009528, 30009710, 30010995
30012181, 30012235, 30012737, 30013243, 30013535, 30014200, 30015070
30017836, 30018017, 30018126, 30018903, 30019864, 30021830, 30024618
30025814, 30026016, 30026596, 30027614, 30027638, 30027649, 30028182
30028599, 30028649, 30029519, 30029806, 30031027, 30031613, 30032233
30032376, 30032484, 30033040, 30033547, 30034456, 30035444, 30035598
30036258, 30038392, 30038576, 30039796, 30039800, 30039959, 30040157
30040511, 30041501, 30041514, 30042490, 30043398, 30043610, 30043930
30044108, 30044507, 30045242, 30045273, 30045389, 30045484, 30045983
30046497, 30047510, 30047531, 30047702, 30047765, 30047931, 30048688
30049966, 30051176, 30051783, 30051804, 30052740, 30052928, 30053036
30053501, 30053748, 30054980, 30055640, 30056058, 30057718, 30057799

30058149, 30058453, 30059106, 30059109, 30059821, 30060267, 30060330
30062364, 30062429, 30062736, 30062819, 30064268, 30066352, 30067565
30068101, 30068384, 30068792, 30068871, 30070064, 30070506, 30071446
30072018, 30072038, 30072905, 30073314, 30073422, 30073744, 30074250
30074296, 30074349, 30074469, 30074472, 30074820, 30075037, 30076058
30076197, 30076253, 30076604, 30078675, 30078934, 30079495, 30079949
30080111, 30080266, 30080297, 30080988, 30081055, 30081546, 30081580
30082145, 30082402, 30083100, 30083216, 30083488, 30083807, 30084458
30084606, 30084971, 30085897, 30086596, 30086992, 30087165, 30087509
30088229, 30088421, 30090568, 30092254, 30092280, 30092859, 30094929
30094948, 30095499, 30095591, 30095952, 30096138, 30096570, 30097092
30097115, 30098251, 30098719, 30099302, 30099420, 30099454, 30099852
30100354, 30101090, 30101186, 30101541, 30101847, 30102774, 30103551
30103553, 30104348, 30104378, 30104555, 30104722, 30104850, 30105458
30106748, 30106901, 30108012, 30109365, 30109839, 30110224, 30110370
30110518, 30114477, 30114489, 30114534, 30116085, 30116203, 30116753
30116854, 30117209, 30117220, 30117335, 30117469, 30117593, 30118261
30118279, 30120608, 30121009, 30122523, 30122583, 30123138, 30124026
30125765, 30126145, 30126470, 30127145, 30127522, 30127805, 30127904
30128047, 30128231, 30130240, 30131253, 30131286, 30131645, 30132708
30132989, 30133841, 30134103, 30134746, 30135396, 30135731, 30135899
30135942, 30136102, 30136346, 30137792, 30138600, 30138948, 30139392
30140425, 30141240, 30142527, 30142802, 30142812, 30142815, 30142907
30143470, 30143593, 30145712, 30146593, 30146969, 30147195, 30147307
30147308, 30147473, 30147928, 30148343, 30148929, 30148966, 30148999
30149035, 30149658, 30150606, 30150710, 30151636, 30153533, 30153552
30153885, 30154633, 30155241, 30155320, 30155388, 30155489, 30155814
30155837, 30155999, 30156569, 30157526, 30158313, 30159329, 30159488
30159511, 30159536, 30159690, 30159752, 30159760, 30160025, 30160625
30161094, 30163243, 30164238, 30164714, 30165493, 30165503, 30165876
30165892, 30165897, 30166257, 30166352, 30166591, 30167787, 30169254
30169841, 30170104, 30172925, 30173113, 30173370, 30173556, 30174102
30174394, 30174401, 30175180, 30175291, 30175478, 30175587, 30177597
30178250, 30178839, 30178990, 30179012, 30179038, 30179644, 30179894
30180195, 30180208, 30180643, 30181756, 30182498, 30183367, 30183696
30183715, 30183920, 30184102, 30185852, 30186319, 30186476, 30186706
30187627, 30187866, 30188215, 30188631, 30189516, 30189535, 30190090
30191274, 30192691, 30192729, 30192853, 30193165, 30193262, 30193505
30193506, 30193584, 30193736, 30194612, 30194710, 30194972, 30195667
30195668, 30195684, 30195773, 30196195, 30196358, 30196629, 30198239
30198598, 30198861, 30198905, 30199890, 30200034, 30200132, 30200237
30200680, 30200758, 30202349, 30202388, 30202407, 30203929, 30204042
30204542, 30206220, 30206493, 30206675, 30207473, 30207519, 30208327
30208690, 30208723, 30209222, 30209736, 30210027, 30210429, 30210753

30210884, 30211567, 30213031, 30213540, 30213590, 30214769, 30214826
30215130, 30215302, 30215351, 30217206, 30217562, 30217982, 30218044
30218317, 30218956, 30219222, 30220932, 30221115, 30221237, 30221298
30222187, 30222512, 30222669, 30222975, 30223712, 30223847, 30223990
30224544, 30224650, 30224725, 30224868, 30224950, 30225265, 30225439
30225443, 30225718, 30225837, 30225844, 30226244, 30227400, 30228422
30228567, 30229030, 30229126, 30229683, 30230183, 30232638, 30233105
30233536, 30233934, 30234132, 30234227, 30235878, 30235919, 30235979
30236092, 30236399, 30236554, 30236746, 30236883, 30236964, 30237477
30237640, 30238211, 30238715, 30239480, 30240010, 30240547, 30240858
30240930, 30240972, 30241567, 30241807, 30241829, 30241920, 30242120
30242724, 30243216, 30243720, 30244340, 30244831, 30246053, 30246179
30247305, 30248520, 30248531, 30248564, 30249432, 30249738, 30249927
30251003, 30251130, 30252005, 30252098, 30252156, 30252458, 30252977
30253035, 30253090, 30253608, 30253705, 30253761, 30253835, 30254206
30254525, 30254576, 30254726, 30255143, 30255528, 30256542, 30257412
30257908, 30259120, 30259469, 30260523, 30260595, 30261244, 30262248
30263013, 30263377, 30264405, 30265523, 30265608, 30265615, 30265703
30266791, 30267155, 30269428, 30269748, 30270647, 30270744, 30271114
30272329, 30273212, 30274090, 30274188, 30274324, 30274662, 30275434
30275548, 30275569, 30275578, 30275784, 30276144, 30276243, 30277120
30277451, 30277589, 30277648, 30277733, 30277884, 30277887, 30278402
30281428, 30281615, 30282501, 30282591, 30282918, 30283296, 30283577
30283579, 30283581, 30283832, 30283932, 30284219, 30284369, 30284751
30285026, 30285166, 30285251, 30285341, 30285457, 30285540, 30285843
30286961, 30288343, 30288491, 30289074, 30289458, 30290185, 30290700
30291536, 30292305, 30293345, 30293935, 30294267, 30294465, 30294671
30294865, 30295110, 30295137, 30295549, 30295790, 30295808, 30297905
30299367, 30299817, 30299934, 30300030, 30300342, 30300363, 30300523
30300538, 30304037, 30305163, 30305264, 30305395, 30305568, 30305603
30305880, 30306407, 30307814, 30307883, 30308368, 30308578, 30308624
30308772, 30308947, 30309098, 30309798, 30310195, 30311826, 30312094
30312546, 30313749, 30313848, 30313989, 30314079, 30314198, 30314837
30316667, 30316897, 30317005, 30317209, 30317386, 30317397, 30318638
30318943, 30319080, 30319099, 30320029, 30321076, 30321398, 30322980
30323219, 30323658, 30323820, 30323849, 30324059, 30324180, 30324466
30324649, 30325407, 30325786, 30326115, 30326882, 30327149, 30327581
30327678, 30327810, 30328168, 30328209, 30328690, 30329209, 30329737
30329751, 30330123, 30331254, 30331356, 30331759, 30332505, 30332893
30333443, 30334484, 30334563, 30335127, 30335832, 30335987, 30336032
30336383, 30336530, 30336742, 30336996, 30337245, 30338434, 30338591
30339049, 30339103, 30339605, 30340540, 30341713, 30342371, 30342878
30343370, 30343750, 30344614, 30345201, 30345432, 30345593, 30345809
30345926, 30345950, 30346330, 30346729, 30346847, 30346867, 30347215

30347410, 30349714, 30350177, 30350543, 30351059, 30352278, 30352532
30352581, 30352623, 30352715, 30353841, 30354034, 30355490, 30356060
30356461, 30357463, 30357698, 30357897, 30358416, 30359614, 30360383
30360653, 30361070, 30361635, 30362003, 30362850, 30363088, 30363193
30363311, 30363658, 30363716, 30364329, 30364481, 30364613, 30364835
30365265, 30365745, 30367193, 30368048, 30368482, 30368534, 30368668
30368917, 30371264, 30371623, 30371909, 30372081, 30372782, 30373419
30373541, 30373550, 30374345, 30374570, 30374739, 30375109, 30376986
30377347, 30377692, 30377729, 30379468, 30379537, 30380511, 30380907
30381207, 30381525, 30381614, 30382364, 30382646, 30382982, 30383286
30384121, 30384152, 30387628, 30387666, 30388341, 30388853, 30389229
30389414, 30389507, 30389821, 30390279, 30390382, 30390635, 30391272
30391794, 30392011, 30392870, 30392987, 30393110, 30393317, 30393653
30393944, 30394509, 30394738, 30394974, 30395132, 30396120, 30396328
30396946, 30396974, 30397100, 30398099, 30398251, 30398257, 30398422
30398770, 30399906, 30402386, 30403284, 30403412, 30403763, 30403877
30403881, 30403902, 30403989, 30404117, 30404153, 30404357, 30404639
30406227, 30406709, 30408128, 30408443, 30408515, 30408808, 30408872
30409207, 30409339, 30409469, 30409472, 30409590, 30412188, 30412772
30412863, 30412885, 30412921, 30413137, 30413294, 30414491, 30414679
30414714, 30414725, 30416034, 30416603, 30417648, 30417732, 30418926
30419024, 30419196, 30419450, 30420105, 30420452, 30421009, 30421026
30421204, 30421439, 30421476, 30421706, 30422487, 30423135, 30423218
30424347, 30430921, 30431235, 30431274, 30431500, 30431504, 30431582
30431698, 30431703, 30431717, 30431867, 30432101, 30432470, 30433177
30434793, 30436326, 30436399, 30436406, 30437003, 30437149, 30438224
30439985, 30440651, 30440712, 30441277, 30441687, 30441959, 30442266
30442749, 30442805, 30442874, 30442884, 30443393, 30446436, 30446583
30446820, 30447060, 30447498, 30447589, 30447994, 30448182, 30448348
30448355, 30448917, 30449194, 30449837, 30450787, 30453442, 30454090
30455427, 30457633, 30457697, 30458080, 30458233, 30458568, 30458593
30460095, 30460558, 30460842, 30460922, 30461123, 30461458, 30462439
30463938, 30464250, 30464655, 30464667, 30466081, 30466214, 30469579
30469777, 30470402, 30470495, 30470947, 30472891, 30473634, 30474167
30474386, 30474497, 30474774, 30475041, 30475115, 30475813, 30476768
30477588, 30477685, 30477691, 30477767, 30479252, 30479647, 30479715
30480591, 30480872, 30481004, 30483065, 30483140, 30483217, 30483521
30484042, 30484623, 30484801, 30485255, 30486436, 30486896, 30487387
30487697, 30489582, 30490014, 30490578, 30490671, 30491456, 30492380
30492786, 30493331, 30493518, 30493656, 30494087, 30494259, 30494900
30495035, 30495078, 30495133, 30495483, 30496957, 30497057, 30497120
30497765, 30498824, 30500224, 30500297, 30500344, 30500582, 30501574
30502415, 30503943, 30505029, 30505497, 30506794, 30506991, 30506996
30507032, 30507313, 30508100, 30509112, 30509277, 30510347, 30510527

30510718, 30512690, 30513285, 30513353, 30513480, 30513848, 30515886
30516868, 30517214, 30517516, 30517635, 30518114, 30518349, 30518447
30518923, 30519188, 30520662, 30521788, 30522285, 30522998, 30523137
30523538, 30523601, 30523750, 30524736, 30527198, 30527275, 30528547
30528637, 30528687, 30528704, 30528731, 30528935, 30529790, 30529915
30529940, 30530585, 30532811, 30533132, 30533580, 30534351, 30534549
30534662, 30534827, 30535905, 30536237, 30537403, 30537405, 30537533
30537584, 30538141, 30538818, 30539519, 30539866, 30540109, 30540407
30544247, 30544595, 30544629, 30544752, 30545040, 30545281, 30545556
30549223, 30549255, 30549368, 30549637, 30549789, 30549881, 30549883
30551000, 30551123, 30554178, 30556326, 30556523, 30556581, 30556807
30557386, 30557803, 30558561, 30559129, 30559218, 30559252, 30560365
30560513, 30561404, 30561590, 30561737, 30564139, 30564343, 30564898
30565004, 30565595, 30565699, 30565805, 30566054, 30567372, 30568514
30568896, 30570083, 30571095, 30571306, 30572816, 30573236, 30573703
30575243, 30575697, 30576112, 30576393, 30576853, 30577071, 30577591
30578221, 30579051, 30580813, 30580887, 30581448, 30582035, 30582221
30582500, 30584767, 30585141, 30585407, 30586493, 30587001, 30588738
30589914, 30591028, 30591475, 30592859, 30593046, 30593104, 30593863
30593899, 30594167, 30595114, 30595408, 30595860, 30596024, 30596270
30596320, 30596488, 30596694, 30598682, 30598746, 30598919, 30599377
30599405, 30599407, 30600173, 30600184, 30600230, 30602230, 30602828
30603211, 30605215, 30605676, 30606345, 30606451, 30608583, 30609737
30609799, 30610052, 30610097, 30610406, 30610667, 30611527, 30611603
30612199, 30613035, 30613937, 30613971, 30614411, 30614497, 30616406
30616738, 30616776, 30617002, 30617626, 30618056, 30618230, 30618406
30619112, 30619138, 30619383, 30619414, 30619525, 30619665, 30619728
30619787, 30620805, 30621255, 30621910, 30622393, 30622528, 30622755
30623138, 30623142, 30624243, 30624792, 30624864, 30624874, 30625121
30626046, 30628834, 30628899, 30629139, 30629643, 30629799, 30630391
30630829, 30630930, 30631393, 30631523, 30633259, 30633395, 30633938
30634026, 30634548, 30634559, 30635183, 30635302, 30635326, 30635360
30637270, 30637319, 30637841, 30638712, 30639996, 30640436, 30641541
30641755, 30641900, 30642046, 30642124, 30644358, 30644530, 30644766
30644889, 30645590, 30645896, 30645938, 30646077, 30647133, 30649310
30649766, 30650297, 30650404, 30651231, 30651570, 30651621, 30651674
30652515, 30652595, 30652813, 30652853, 30654131, 30654558, 30655504
30655906, 30656839, 30657196, 30657365, 30657566, 30657624, 30657706
30657875, 30657906, 30657940, 30658421, 30658533, 30658555, 30658702
30659940, 30660412, 30661000, 30661939, 30662634, 30662651, 30662736
30662803, 30663591, 30663646, 30664266, 30665036, 30665399, 30665720
30666902, 30668407, 30668754, 30669938, 30670096, 30670328, 30670369
30670584, 30671606, 30671720, 30671813, 30671958, 30674373, 30674959
30675651, 30676209, 30677633, 30679595, 30679707, 30679771, 30679804

30681085, 30681222, 30681462, 30681516, 30681521, 30681697, 30681727
30682289, 30684902, 30685163, 30686017, 30686131, 30686809, 30687047
30689557, 30689988, 30690686, 30691604, 30691731, 30691857, 30692462
30692473, 30692760, 30693791, 30694947, 30695670, 30696566, 30696821
30698289, 30699770, 30702732, 30703610, 30704826, 30705448, 30706073
30707740, 30708735, 30710088, 30710506, 30710783, 30710807, 30710917
30711370, 30711386, 30712670, 30713133, 30714151, 30714715, 30716001
30716863, 30718841, 30718862, 30719327, 30719419, 30720736, 30720844
30722105, 30722705, 30723671, 30724679, 30724881, 30726204, 30727629
30727701, 30727759, 30728196, 30729278, 30729604, 30729839, 30730026
30732711, 30733270, 30733563, 30734242, 30734362, 30734707, 30735091
30735153, 30735624, 30735736, 30736718, 30737970, 30739013, 30739876
30740115, 30740250, 30740440, 30740444, 30740669, 30740997, 30741263
30747820, 30748411, 30748707, 30749181, 30749644, 30749722, 30750219
30750991, 30751171, 30751521, 30751527, 30751639, 30751968, 30753432
30755348, 30758836, 30758854, 30758943, 30759573, 30759585, 30760739
30761871, 30761878, 30763272, 30763305, 30763639, 30763754, 30763970
30764405, 30764663, 30764706, 30764976, 30765486, 30765995, 30767277
30767654, 30768636, 30769312, 30769454, 30770717, 30771009, 30772069
30773164, 30773696, 30773797, 30776416, 30776676, 30776929, 30777519
30777759, 30778855, 30779240, 30781032, 30781041, 30781461, 30781970
30782266, 30782300, 30782414, 30783395, 30783551, 30785101, 30786237
30786641, 30786655, 30787365, 30788973, 30789427, 30789904, 30789973
30790047, 30790441, 30796980, 30801050, 30801296, 30801510, 30803210
30804646, 30806757, 30806984, 30807723, 30807888, 30808109, 30808364
30808869, 30809087, 30809226, 30809267, 30810418, 30810680, 30810765
30812574, 30814266, 30814285, 30815204, 30815269, 30815495, 30815852
30815994, 30816760, 30816938, 30817822, 30819340, 30819629, 30819756
30820155, 30821297, 30822207, 30822502, 30822919, 30823744, 30825391
30825419, 30825656, 30826474, 30827849, 30828205, 30828350, 30829779
30829844, 30830555, 30832466, 30832775, 30833454, 30834068, 30834110
30834705, 30835184, 30835219, 30835853, 30836129, 30838605, 30839253
30839315, 30839451, 30839836, 30839961, 30840150, 30840791, 30840793
30841241, 30842277, 30843271, 30844395, 30844839, 30845806, 30846063
30846159, 30846263, 30846782, 30847442, 30847871, 30848028, 30848097
30848773, 30849278, 30851448, 30851951, 30852945, 30852954, 30855101
30856358, 30856923, 30857501, 30857721, 30858444, 30858810, 30858877
30858919, 30860741, 30860768, 30860803, 30861988, 30862285, 30863115
30864607, 30865346, 30865805, 30866141, 30866988, 30867685, 30868010
30868186, 30869131, 30870043, 30870248, 30870439, 30870513, 30871716
30871792, 30873527, 30874084, 30874270, 30874337, 30874660, 30876666
30879169, 30879708, 30880774, 30880913, 30881161, 30881407, 30883715
30883785, 30883877, 30886188, 30887435, 30887501, 30887777, 30887976
30887989, 30889443, 30889607, 30889723, 30890720, 30890752, 30890971

30891760, 30891792, 30892319, 30893601, 30894554, 30895426, 30895577
30896615, 30896620, 30896685, 30898131, 30898366, 30898381, 30898748
30898939, 30901889, 30902655, 30903129, 30904672, 30905604, 30906274
30906407, 30909329, 30909596, 30909907, 30909918, 30910255, 30910264
30910267, 30913399, 30914272, 30914411, 30914674, 30915781, 30917976
30919403, 30919587, 30919691, 30919804, 30920082, 30920427, 30921136
30921259, 30922450, 30922936, 30922996, 30923514, 30923517, 30923597
30923732, 30923940, 30924599, 30925316, 30925419, 30925828, 30927440
30927821, 30929206, 30930149, 30930339, 30931068, 30931311, 30931981
30932330, 30932674, 30932923, 30933117, 30936251, 30936831, 30936942
30937340, 30937391, 30937410, 30938413, 30939307, 30939317, 30939934
30940259, 30940382, 30940868, 30940869, 30941056, 30942353, 30944643
30945005, 30945772, 30946072, 30946141, 30946595, 30946768, 30946843
30946876, 30946896, 30947294, 30948278, 30950326, 30950786, 30952104
30952191, 30953157, 30953266, 30953836, 30954062, 30954071, 30955702
30956374, 30956571, 30956647, 30957739, 30958493, 30960314, 30960356
30960590, 30960736, 30961566, 30961824, 30963567, 30964194, 30965111
30965554, 30965649, 30966205, 30967084, 30968737, 30968781, 30970518
30972817, 30972841, 30972887, 30972947, 30972951, 30972959, 30972966
30973085, 30973113, 30973127, 30973137, 30973143, 30973197, 30973698
30973715, 30973877, 30974207, 30974512, 30974813, 30976603, 30977294
30977411, 30978313, 30978554, 30978747, 30978868, 30979701, 30980023
30980115, 30980280, 30980317, 30980733, 30981182, 30981240, 30983064
30985027, 30985906, 30986423, 30987088, 30987105, 30987243, 30987717
30987724, 30988444, 30989951, 30990034, 30992120, 30992330, 30992477
30992597, 30992670, 30993198, 30993518, 30993604, 30994996, 30996945
30996991, 30997375, 30997584, 30997960, 30998035, 30998475, 30998662
30998759, 30998847, 30999219, 31000312, 31001017, 31001455, 31001490
31001859, 31002223, 31002346, 31002923, 31003137, 31003659, 31003759
31004077, 31004717, 31004719, 31004844, 31004871, 31005003, 31006011
31006259, 31006792, 31006953, 31008240, 31008858, 31008907, 31009032
31009271, 31009545, 31009590, 31009680, 31010218, 31010554, 31010976
31011361, 31011690, 31013127, 31013531, 31014323, 31015330, 31016413
31018218, 31019249, 31019407, 31021068, 31021109, 31021157, 31021324
31021542, 31021780, 31022858, 31025267, 31025520, 31025531, 31025859
31026220, 31026591, 31026860, 31026870, 31027747, 31028883, 31028986
31029936, 31030898, 31031240, 31031955, 31032463, 31032725, 31032904
31032913, 31034794, 31035287, 31035916, 31037421, 31038220, 31038447
31038817, 31039337, 31039618, 31039627, 31039928, 31040847, 31041540
31042208, 31042337, 31043483, 31043630, 31043695, 31043747, 31044145
31044460, 31044504, 31044951, 31045929, 31046188, 31046619, 31046830
31047022, 31047169, 31047333, 31047697, 31047740, 31048025, 31048741
31049215, 31049995, 31050103, 31050433, 31050557, 31051056, 31051075
31052735, 31052809, 31053669, 31054031, 31054177, 31054874, 31055142

31056909, 31057402, 31058548, 31061482, 31061504, 31062010, 31062645
31063315, 31063380, 31063769, 31064025, 31065701, 31065838, 31066082
31066250, 31066265, 31066554, 31067456, 31067483, 31067892, 31067913
31069059, 31069872, 31070528, 31071080, 31073424, 31073440, 31073586
31074032, 31075323, 31075960, 31077117, 31077365, 31078391, 31078757
31079204, 31080474, 31081558, 31082719, 31082726, 31084778, 31084921
31086467, 31086869, 31086954, 31087361, 31087679, 31088115, 31088341
31089259, 31089270, 31090262, 31091402, 31091469, 31091868, 31092129
31092233, 31092581, 31092921, 31093712, 31094183, 31094228, 31094249
31094374, 31094625, 31094688, 31095972, 31096846, 31097760, 31097961
31098661, 31098870, 31099312, 31099926, 31099981, 31100172, 31101386
31101840, 31103065, 31103804, 31104809, 31105225, 31105733, 31105896
31106140, 31106577, 31107577, 31108603, 31108644, 31109506, 31109924
31110021, 31110225, 31110887, 31112088, 31112209, 31112530, 31112972
31113089, 31113177, 31113249, 31113426, 31113682, 31114116, 31114265
31114671, 31115201, 31115502, 31115653, 31117282, 31118486, 31118702
31118809, 31118844, 31119057, 31119368, 31119467, 31119846, 31120361
31121222, 31122876, 31123976, 31124213, 31124363, 31124821, 31124914
31125773, 31125849, 31125918, 31126053, 31126058, 31126362, 31127043
31127457, 31127961, 31127968, 31127969, 31128086, 31129851, 31130156
31132732, 31133839, 31134430, 31137765, 31138106, 31138371, 31139643
31140940, 31141792, 31142377, 31142749, 31142815, 31143146, 31143415
31143870, 31145389, 31145403, 31145525, 31145688, 31145804, 31146338
31146727, 31151483, 31153120, 31153485, 31154794, 31155085, 31155305
31155634, 31156301, 31156383, 31156767, 31156898, 31158151, 31158341
31158380, 31159382, 31161861, 31162457, 31162711, 31162915, 31163379
31163498, 31163534, 31165038, 31165577, 31165722, 31166083, 31166801
31168440, 31169366, 31170082, 31171096, 31171147, 31171631, 31171828
31172207, 31172233, 31172642, 31173887, 31174836, 31175365, 31176451
31176502, 31177193, 31177204, 31177221, 31178051, 31178058, 31178103
31180519, 31181375, 31181380, 31181989, 31182159, 31182451, 31182756
31182793, 31183413, 31184230, 31184370, 31185224, 31188038, 31188398
31189749, 31190624, 31191224, 31192039, 31192261, 31192739, 31193292
31193511, 31193695, 31193745, 31193936, 31194015, 31194049, 31194264
31195090, 31195430, 31195600, 31195838, 31196164, 31196272, 31196310
31196395, 31196812, 31197969, 31200057, 31200845, 31201001, 31201366
31201611, 31202536, 31204002, 31204412, 31204878, 31205834, 31206070
31206201, 31207446, 31208287, 31209735, 31211220, 31212282, 31213034
31214119, 31214928, 31215422, 31215438, 31215548, 31215854, 31216823
31216995, 31217946, 31218837, 31218904, 31219047, 31219975, 31220188
31220549, 31220837, 31220850, 31220881, 31220912, 31221251, 31221454
31222103, 31222780, 31223382, 31224819, 31225538, 31226448, 31226534
31228670, 31230250, 31230775, 31233170, 31233235, 31234765, 31234790
31234983, 31235797, 31236624, 31240626, 31240864, 31241124, 31242319

31242976, 31243859, 31244165, 31244968, 31245856, 31246583, 31247532
31247838, 31248496, 31249008, 31249406, 31249689, 31249696, 31250120
31250152, 31250221, 31251325, 31251489, 31252659, 31253451, 31254243
31254297, 31254535, 31254929, 31255369, 31255869, 31256383, 31257740
31257826, 31258101, 31258344, 31258697, 31258995, 31260692, 31261467
31261641, 31262275, 31262388, 31263980, 31265651, 31265773, 31266236
31266779, 31266843, 31268326, 31268557, 31270711, 31270847, 31271032
31274074, 31279605, 31279670, 31281708, 31282037, 31283557, 31287091
31287296, 31287741, 31287871, 31289115, 31290017, 31290300, 31290427
31291986, 31292298, 31293484, 31293791, 31293867, 31298871, 31301460
31303032, 31303249, 31304573, 31304945, 31304975, 31305114, 31305309
31305624, 31306248, 31306261, 31306470, 31306867, 31306927, 31307715
31309379, 31309867, 31310564, 31310624, 31311732, 31311830, 31312450
31312976, 31313117, 31313177, 31313214, 31313444, 31313812, 31314323
31314885, 31315441, 31315495, 31315876, 31315923, 31316250, 31317032
31321092, 31322720, 31323383, 31323484, 31324442, 31324507, 31325584
31326320, 31326608, 31326977, 31326998, 31327046, 31327259, 31327278
31327349, 31327391, 31327896, 31331265, 31331354, 31331372, 31333105
31333156, 31334338, 31334606, 31334961, 31335037, 31335142, 31336298
31336371, 31338249, 31338673, 31338686, 31338769, 31339457, 31339643
31339744, 31341138, 31341421, 31341746, 31343110, 31344046, 31344097
31346493, 31347878, 31348711, 31348922, 31349426, 31350348, 31352517
31353098, 31353610, 31354026, 31355339, 31356601, 31356954, 31357581
31357737, 31358308, 31358474, 31358511, 31359215, 31359366, 31360146
31360155, 31360214, 31360282, 31360314, 31360323, 31360469, 31360529
31362408, 31362692, 31364001, 31364383, 31366716, 31367188, 31367364
31368027, 31369444, 31370500, 31371071, 31372498, 31373825, 31373837
31373843, 31374283, 31374449, 31374738, 31375772, 31375865, 31376011
31376708, 31377129, 31377206, 31377487, 31377701, 31377808, 31377936
31380443, 31381174, 31381389, 31381701, 31382518, 31383049, 31383396
31383464, 31383814, 31384324, 31385668, 31386394, 31386696, 31387033
31387123, 31387426, 31387443, 31388201, 31388288, 31389006, 31390936
31390955, 31391991, 31393208, 31393600, 31393991, 31394341, 31394347
31394365, 31394544, 31395222, 31395247, 31396027, 31396609, 31396695
31396980, 31398505, 31398617, 31398663, 31398721, 31398761, 31399131
31399883, 31400754, 31401831, 31401919, 31402078, 31402598, 31403177
31403565, 31404014, 31404130, 31404263, 31404487, 31404550, 31405300
31405751, 31408636, 31408732, 31409483, 31409912, 31409964, 31410289
31410607, 31411163, 31412209, 31414023, 31414524, 31415324, 31416193
31416213, 31416250, 31417007, 31417192, 31417242, 31417336, 31417844
31417990, 31418442, 31419363, 31420295, 31420316, 31420320, 31420337
31421316, 31421471, 31422440, 31422620, 31423645, 31424838, 31425167
31425761, 31425800, 31427345, 31429020, 31429501, 31429590, 31429692
31429770, 31429784, 31429809, 31429844, 31429971, 31430722, 31430735

31430910, 31431005, 31431326, 31431771, 31431964, 31431969, 31431971
31431973, 31431975, 31431986, 31432906, 31433092, 31433579, 31433749
31434421, 31434805, 31434870, 31434915, 31435163, 31435308, 31435400
31435735, 31437030, 31437448, 31437886, 31439905, 31440252, 31440426
31440813, 31441916, 31441920, 31442332, 31442714, 31443030, 31444353
31444516, 31445356, 31446431, 31447733, 31448642, 31448680, 31448818
31449354, 31450392, 31450653, 31450942, 31451019, 31453375, 31453585
31454428, 31454972, 31454988, 31455051, 31455597, 31456383, 31456857
31457334, 31458049, 31458537, 31458634, 31458739, 31459231, 31459242
31459369, 31461990, 31462082, 31462940, 31462969, 31463613, 31464165
31465389, 31466433, 31468060, 31468705, 31469001, 31469418, 31471119
31471441, 31471589, 31471856, 31472077, 31473148, 31474315, 31475085
31475378, 31475635, 31476093, 31476603, 31476701, 31476736, 31477424
31477695, 31479072, 31479075, 31479106, 31479272, 31479772, 31481750
31481893, 31483466, 31483949, 31484385, 31484603, 31485340, 31485386
31485507, 31486061, 31486557, 31487441, 31487491, 31487775, 31487826
31487844, 31488085, 31488464, 31489032, 31489137, 31489481, 31489590
31489672, 31489731, 31489936, 31490604, 31491634, 31492171, 31492191
31492588, 31492655, 31492856, 31493153, 31493840, 31494095, 31494132
31494264, 31494420, 31494794, 31495254, 31495297, 31495564, 31496174
31497550, 31498559, 31499370, 31499700, 31500699, 31500719, 31500971
31501139, 31502301, 31503349, 31503674, 31503688, 31503934, 31504723
31505088, 31506095, 31507107, 31507129, 31508229, 31508460, 31508712
31509279, 31510891, 31510910, 31511142, 31511519, 31511771, 31511940
31512044, 31512262, 31513011, 31515163, 31515869, 31515879, 31515911
31515929, 31516164, 31516184, 31516255, 31516265, 31517395, 31517417
31517502, 31517652, 31518068, 31518371, 31521504, 31521701, 31522560
31522708, 31522866, 31523548, 31523578, 31523585, 31523620, 31523646
31523728, 31523736, 31523836, 31525310, 31525463, 31525609, 31525783
31526250, 31526903, 31527103, 31527199, 31527381, 31527726, 31528544
31528724, 31528738, 31528962, 31529594, 31529967, 31530985, 31530995
31531079, 31532084, 31532176, 31532308, 31532339, 31533050, 31533113
31533274, 31533799, 31533817, 31533833, 31534841, 31535073, 31535516
31535782, 31535870, 31535955, 31536401, 31536703, 31536731, 31537521
31537736, 31538274, 31538363, 31538891, 31539566, 31541805, 31541864
31541895, 31541905, 31542347, 31542356, 31542851, 31542956, 31543810
31544097, 31545400, 31545477, 31546864, 31547220, 31547445, 31547480
31548675, 31549221, 31549468, 31551142, 31552433, 31552563, 31552615
31552738, 31552755, 31553289, 31553674, 31553813, 31553968, 31554610
31555126, 31555173, 31555346, 31555539, 31555800, 31556139, 31556950
31557160, 31557518, 31557663, 31558194, 31559079, 31559085, 31559415
31559563, 31560323, 31560348, 31560592, 31561886, 31562484, 31563138
31564060, 31564760, 31564795, 31567124, 31567403, 31567441, 31567719
31568423, 31569057, 31569867, 31570054, 31570161, 31571415, 31571688

31571742, 31572006, 31572046, 31572267, 31573269, 31573457, 31574122
31574150, 31574244, 31574267, 31575529, 31575649, 31575665, 31576738
31577569, 31578202, 31578994, 31580079, 31580122, 31580374, 31580437
31581627, 31582179, 31582244, 31583865, 31584056, 31584555, 31584853
31585040, 31585319, 31585351, 31585491, 31585789, 31586381, 31586862
31587966, 31588631, 31588933, 31589785, 31590099, 31590826, 31591087
31591384, 31591400, 31591409, 31591421, 31592707, 31594725, 31595025
31595632, 31597104, 31597668, 31597727, 31598146, 31599215, 31599363
31599990, 31600023, 31600291, 31600894, 31601385, 31602782, 31603199
31603380, 31603625, 31605119, 31605370, 31605737, 31606474, 31607937
31608753, 31609974, 31610024, 31611125, 31612535, 31613275, 31613838
31615736, 31616101, 31616104, 31617492, 31617523, 31619276, 31620252
31620748, 31620829, 31620944, 31621569, 31622250, 31623413, 31623463
31625579, 31625618, 31625959, 31626438, 31626493, 31626528, 31626572
31627587, 31627856, 31628155, 31628311, 31628753, 31628975, 31629056
31630551, 31630794, 31630946, 31631985, 31632273, 31632534, 31632548
31632605, 31632663, 31633224, 31634510, 31634805, 31635875, 31635963
31635980, 31637094, 31637607, 31637680, 31638398, 31638733, 31638943
31639082, 31640139, 31640197, 31640240, 31642462, 31642556, 31642639
31643308, 31644775, 31645288, 31647304, 31647789, 31648120, 31648157
31649223, 31649447, 31649818, 31649819, 31649958, 31649962, 31650046
31650112, 31650202, 31652641, 31652763, 31653080, 31653167, 31653634
31653647, 31653758, 31653913, 31653916, 31653917, 31654116, 31654119
31654122, 31654125, 31654133, 31655807, 31656263, 31656601, 31657084
31657211, 31657324, 31657462, 31657483, 31657681, 31658464, 31658819
31658943, 31659065, 31660283, 31661369, 31661586, 31661865, 31661879
31662131, 31662143, 31662504, 31662625, 31662925, 31663189, 31663788
31664203, 31664399, 31665107, 31666449, 31666684, 31667096, 31667180
31667940, 31668033, 31668061, 31668065, 31668312, 31668694, 31668768
31668872, 31669064, 31670014, 31670263, 31670353, 31671512, 31671568
31672507, 31672605, 31673406, 31674380, 31674801, 31674947, 31675568
31675852, 31675860, 31676324, 31676927, 31676941, 31677345, 31677460
31677479, 31677587, 31678629, 31679900, 31680709, 31680713, 31680985
31682766, 31683044, 31683260, 31683311, 31683337, 31683373, 31683708
31684080, 31684494, 31685612, 31685882, 31685989, 31686545, 31686979
31688127, 31688241, 31688978, 31691030, 31691089, 31691480, 31694070
31695062, 31695693, 31696043, 31696577, 31696853, 31697741, 31699090
31699230, 31700234, 31700640, 31701239, 31701429, 31701517, 31701910
31703614, 31705178, 31705265, 31705356, 31705704, 31706000, 31706595
31706758, 31706956, 31707190, 31707557, 31708133, 31708175, 31708529
31709647, 31709739, 31709777, 31710272, 31710587, 31711155, 31711720
31711889, 31711997, 31712260, 31714645, 31715935, 31716510, 31716873
31717010, 31718000, 31718134, 31718346, 31718842, 31719167, 31720344
31720377, 31720839, 31720942, 31721557, 31721863, 31721880, 31722558

31722646, 31723226, 31723323, 31723651, 31725154, 31727229, 31727231
31727233, 31727560, 31728149, 31728160, 31728440, 31728444, 31728447
31728477, 31728486, 31728858, 31729557, 31730485, 31730766, 31731076
31731407, 31732095, 31732311, 31732672, 31734007, 31734012, 31734017
31734583, 31735662, 31736095, 31737059, 31737603, 31739198, 31739891
31740252, 31741359, 31741938, 31743771, 31744832, 31745130, 31745233
31745528, 31746054, 31747706, 31747818, 31747935, 31747989, 31748000
31748182, 31748233, 31748944, 31750577, 31750581, 31750889, 31752492
31752502, 31752633, 31753202, 31753425, 31753478, 31753582, 31753692
31754240, 31754546, 31754887, 31754980, 31755245, 31755451, 31756415
31756465, 31756568, 31756650, 31757357, 31757775, 31757824, 31758083
31758344, 31758846, 31758939, 31758960, 31759565, 31760278, 31760592
31760721, 31760738, 31761510, 31762819, 31763030, 31763356, 31763707
31763905, 31764089, 31764239, 31764866, 31764913, 31765068, 31765246
31765257, 31765296, 31766462, 31766499, 31766534, 31766675, 31766696
31767204, 31767237, 31767598, 31767852, 31768490, 31768497, 31768505
31768866, 31769267, 31769373, 31769511, 31769530, 31770289, 31771302
31771370, 31771410, 31771468, 31771745, 31771836, 31772002, 31772070
31773582, 31773909, 31774019, 31774132, 31775101, 31776121, 31776659
31776785, 31776994, 31777410, 31777489, 31779833, 31780567, 31781758
31781897, 31781944, 31783422, 31783451, 31783782, 31783872, 31783985
31783991, 31784352, 31785445, 31785572, 31786282, 31786697, 31786838
31787057, 31787236, 31787655, 31788104, 31788594, 31788704, 31788761
31788785, 31789167, 31789178, 31789335, 31790500, 31790757, 31792397
31792465, 31792615, 31793126, 31793691, 31793713, 31794336, 31794631
31794882, 31795231, 31795696, 31796208, 31796277, 31796882, 31798001
31798323, 31798669, 31798702, 31798742, 31799858, 31800053, 31800059
31800139, 31800757, 31804838, 31805303, 31805812, 31807179, 31807431
31807516, 31808296, 31809510, 31809729, 31810213, 31812352, 31812824
31813214, 31813662, 31815099, 31815227, 31816158, 31816343, 31816631
31817634, 31818080, 31820632, 31820662, 31820842, 31820859, 31820926
31821129, 31821701, 31821835, 31822026, 31822951, 31823051, 31823327
31823716, 31824504, 31824792, 31824934, 31825151, 31825324, 31825410
31827339, 31827605, 31827912, 31828378, 31828999, 31829366, 31829617
31829639, 31831950, 31832785, 31832901, 31833172, 31833585, 31833896
31833948, 31834191, 31834214, 31834611, 31834677, 31834871, 31835300
31835805, 31835854, 31836113, 31836454, 31839038, 31839779, 31839888
31840180, 31840490, 31840516, 31840992, 31841147, 31841210, 31841696
31842545, 31843028, 31843462, 31843476, 31843716, 31843842, 31843845
31844137, 31844357, 31844557, 31844560, 31845092, 31845403, 31845549
31845803, 31845955, 31846318, 31846454, 31847489, 31847541, 31848331
31848365, 31848391, 31848903, 31849859, 31850132, 31850227, 31851383
31851449, 31852482, 31852506, 31852574, 31854285, 31854692, 31855307
31855484, 31855526, 31855996, 31857143, 31858580, 31858621, 31858833

31859067, 31859143, 31860193, 31860406, 31860760, 31862359, 31862593
31862611, 31863118, 31863250, 31863890, 31864818, 31864947, 31865822
31866141, 31866159, 31866388, 31867037, 31867331, 31867351, 31869348
31869601, 31869944, 31869954, 31869966, 31870010, 31870150, 31870164
31870190, 31870196, 31871384, 31871692, 31872230, 31872320, 31873155
31875140, 31876138, 31876192, 31876368, 31876867, 31878256, 31878314
31878605, 31880154, 31881527, 31883124, 31883343, 31883739, 31883845
31886547, 31886695, 31886745, 31886848, 31887130, 31887709, 31888148
31888731, 31888964, 31889222, 31890230, 31890240, 31890516, 31892029
31892856, 31895670, 31897023, 31897178, 31897786, 31897854, 31898193
31898257, 31898326, 31900476, 31900585, 31902517, 31902662, 31903523
31903713, 31903786, 31903962, 31904739, 31904933, 31904960, 31905033
31905839, 31905861, 31907042, 31907137, 31907510, 31907565, 31907792
31907962, 31908308, 31908345, 31908482, 31908571, 31908750, 31909295
31909807, 31911290, 31912638, 31912834, 31913650, 31913828, 31913839
31914003, 31914943, 31915444, 31915968, 31916096, 31916644, 31917378
31917494, 31917856, 31917967, 31918462, 31919563, 31919952, 31921267
31922161, 31922580, 31923463, 31923622, 31925162, 31925462, 31925765
31926203, 31926811, 31926848, 31927078, 31927510, 31927930, 31928046
31930204, 31932042, 31932196, 31933451, 31933837, 31933842, 31933846
31933914, 31934254, 31934301, 31935336, 31935672, 31935717, 31935970
31936588, 31936983, 31938116, 31938288, 31939263, 31939461, 31939486
31939494, 31939767, 31940176, 31940458, 31941148, 31941948, 31942136
31942144, 31942258, 31942274, 31942473, 31943497, 31943691, 31944980
31945038, 31945407, 31945659, 31945701, 31945827, 31945928, 31946936
31947385, 31947732, 31947861, 31949490, 31949573, 31950145, 31950244
31950577, 31951599, 31951628, 31952046, 31952052, 31953394, 31953449
31953989, 31954223, 31956113, 31956435, 31956920, 31957152, 31957564
31957674, 31957683, 31958038, 31958958, 31959140, 31959253, 31960124
31960389, 31960603, 31961214, 31961578, 31961940, 31963193, 31964519
31964610, 31965012, 31965391, 31965542, 31965574, 31966094, 31968431
31969646, 31970188, 31971792, 31972615, 31972671, 31973203, 31974187
31974424, 31974597, 31974693, 31976303, 31977024, 31977257, 31980125
31980216, 31980296, 31981745, 31981751, 31982879, 31983029, 31985032
31985494, 31985738, 31985961, 31986808, 31986836, 31986905, 31986909
31987278, 31987922, 31988079, 31988833, 31990386, 31991705, 31992242
31992270, 31992428, 31992615, 31992953, 31993051, 31993795, 31994145
31994206, 31994298, 31995577, 31995937, 31996264, 31996331, 31997107
31997457, 31997611, 31997658, 31997660, 31998181, 31998189, 31998861
31999024, 31999453, 32000837, 32001851, 32002411, 32003551, 32003908
32004148, 32004299, 32004977, 32005046, 32005048, 32005053, 32005215
32005394, 32006467, 32006703, 32006824, 32006883, 32007076, 32007698
32008408, 32008586, 32008716, 32008819, 32009197, 32009334, 32009754
32010275, 32010593, 32010707, 32011107, 32011888, 32012137, 32012400

32012788, 32012891, 32012975, 32013253, 32013403, 32014520, 32015642
32015820, 32016340, 32016884, 32017215, 32017301, 32017422, 32017570
32017635, 32017671, 32018632, 32018953, 32020701, 32021877, 32022223
32022711, 32022814, 32022867, 32023471, 32025328, 32028155, 32028269
32032653, 32032733, 32032887, 32033795, 32034085, 32034137, 32034318
32034766, 32035268, 32035483, 32035536, 32035893, 32035899, 32035902
32036045, 32037237, 32037962, 32038054, 32038780, 32038812, 32038844
32038996, 32039059, 32040940, 32040971, 32041003, 32041799, 32042256
32042352, 32042706, 32042926, 32043743, 32044533, 32044767, 32044903
32045377, 32046125, 32046412, 32046587, 32047226, 32047444, 32048412
32048616, 32048921, 32049479, 32050048, 32051896, 32052587, 32052992
32053746, 32054806, 32055692, 32055733, 32056529, 32057291, 32057333
32057565, 32057639, 32057755, 32058260, 32060164, 32060577, 32061018
32061146, 32061173, 32061648, 32062227, 32064239, 32064593, 32064682
32064826, 32066061, 32067130, 32067356, 32067675, 32067937, 32068110
32068187, 32068190, 32068709, 32069160, 32069508, 32069696, 32069834
32070206, 32071183, 32071457, 32071582, 32072747, 32072944, 32073027
32073710, 32074450, 32074708, 32074728, 32075009, 32075020, 32075130
32075580, 32076305, 32076561, 32076599, 32077318, 32078078, 32079097
32079573, 32079739, 32080081, 32080655, 32081074, 32081381, 32082098
32084068, 32087287, 32087331, 32087597, 32087956, 32088132, 32088478
32089051, 32089820, 32090518, 32090725, 32092312, 32092797, 32093558
32094825, 32095097, 32095380, 32095610, 32095658, 32096252, 32096397
32097125, 32097387, 32097589, 32097604, 32097767, 32097882, 32097962
32098224, 32098237, 32098535, 32099153, 32099539, 32099580, 32101305
32101419, 32101499, 32102542, 32102722, 32102854, 32103383, 32103427
32103628, 32104324, 32104402, 32104578, 32104610, 32105135, 32105239
32105412, 32105468, 32107505, 32107621, 32107664, 32108094, 32108115
32108566, 32108576, 32109384, 32109796, 32111046, 32112798, 32112822
32113113, 32113530, 32113791, 32114541, 32114561, 32114572, 32114746
32115403, 32115642, 32116952, 32117115, 32117253, 32117490, 32118543
32118727, 32119144, 32119339, 32119565, 32120283, 32120453, 32121014
32121326, 32121673, 32121803, 32121885, 32122197, 32122574, 32123331
32123673, 32124176, 32124334, 32124570, 32124594, 32124607, 32124611
32125142, 32125160, 32125845, 32127227, 32127448, 32127911, 32128142
32129659, 32130083, 32130485, 32130504, 32131010, 32131401, 32131774
32132464, 32132504, 32133039, 32133898, 32138257, 32138478, 32138782
32139064, 32139432, 32139659, 32139728, 32140616, 32140800, 32142788
32143492, 32143562, 32143669, 32144917, 32147340, 32148419, 32148651
32148662, 32149848, 32150818, 32150854, 32151098, 32152341, 32153396
32153619, 32153909, 32156194, 32157050, 32157075, 32157078, 32158561
32159343, 32161260, 32161381, 32162391, 32164053, 32164112, 32164218
32165367, 32165759, 32165814, 32165887, 32166950, 32167592, 32167923
32168026, 32169151, 32170162, 32170190, 32171622, 32171791, 32172050

32172773, 32172777, 32172783, 32173142, 32173376, 32173543, 32174321
32174405, 32174492, 32174571, 32175329, 32175780, 32176303, 32176922
32177701, 32177869, 32178217, 32178966, 32179209, 32179306, 32180918
32181149, 32182097, 32182783, 32183102, 32183756, 32183809, 32184235
32184577, 32184844, 32184855, 32185296, 32186186, 32186983, 32187775
32189400, 32189869, 32189952, 32190132, 32190190, 32190284, 32190419
32190573, 32191427, 32191451, 32193431, 32195333, 32195815, 32195946
32196265, 32196492, 32196738, 32196943, 32197147, 32198292, 32198368
32198396, 32199681, 32200524, 32201743, 32201903, 32201936, 32202976
32203068, 32203354, 32205455, 32205514, 32205825, 32207088, 32207920
32208144, 32208326, 32208346, 32208691, 32209784, 32210660, 32211423
32212041, 32212062, 32212635, 32212916, 32213376, 32213696, 32214021
32214080, 32214195, 32214238, 32214654, 32214743, 32214782, 32215240
32215991, 32216027, 32216223, 32216841, 32216930, 32218369, 32218395
32218498, 32218552, 32219179, 32219318, 32219835, 32219988, 32220017
32220364, 32220709, 32221141, 32222473, 32223045, 32223654, 32223669
32224140, 32224583, 32225117, 32225353, 32225742, 32225899, 32227352
32228188, 32228677, 32229431, 32229625, 32229919, 32230213, 32230775
32230953, 32231049, 32231356, 32233406, 32234148, 32234161, 32234845
32235513, 32236601, 32236685, 32236798, 32237489, 32237778, 32238935
32239137, 32239730, 32240272, 32241889, 32242601, 32243007, 32243148
32243814, 32243882, 32243985, 32244187, 32245711, 32245850, 32246090
32246756, 32247141, 32247420, 32248131, 32248405, 32248649, 32248747
32249207, 32249371, 32249509, 32249640, 32249674, 32250232, 32250238
32251364, 32251671, 32252036, 32252213, 32252262, 32252294, 32253703
32253937, 32254063, 32254399, 32254686, 32255029, 32255073, 32255529
32255753, 32255762, 32257449, 32258021, 32258136, 32258388, 32258423
32259063, 32259322, 32259535, 32259785, 32260010, 32260290, 32263923
32264556, 32266406, 32266906, 32267171, 32267610, 32268669, 32268800
32269481, 32274403, 32277643, 32277793, 32279351, 32280901, 32281066
32283798, 32284241, 32284325, 32284485, 32284608, 32284725, 32285086
32285563, 32285717, 32285789, 32287797, 32287989, 32289552, 32289858
32290227, 32290313, 32290399, 32290754, 32290812, 32290949, 32290990
32291114, 32291139, 32292180, 32292805, 32293615, 32294031, 32294566
32294851, 32295794, 32296259, 32296941, 32297373, 32297469, 32297849
32298004, 32298173, 32298782, 32300098, 32300822, 32300849, 32301856
32302470, 32302561, 32303160, 32303657, 32304293, 32304712, 32305034
32305792, 32306556, 32307046, 32307586, 32307983, 32309046, 32309488
32309723, 32310880, 32311019, 32312131, 32312412, 32312586, 32312771
32315173, 32316070, 32316252, 32316326, 32317012, 32317306, 32318528
32318820, 32318914, 32319410, 32320789, 32321317, 32321319, 32321765
32322629, 32322738, 32323277, 32323488, 32323600, 32323816, 32324219
32325525, 32325574, 32325611, 32327201, 32327208, 32327690, 32328231
32329914, 32330269, 32330540, 32331889, 32332107, 32334745, 32335257

32335769, 32336990, 32338220, 32338476, 32338579, 32338736, 32338897
32338919, 32338953, 32339801, 32340392, 32340885, 32341217, 32341260
32341820, 32342172, 32342345, 32342750, 32342824, 32343092, 32343678
32344099, 32344168, 32344199, 32345001, 32345050, 32345178, 32345272
32345785, 32346649, 32346733, 32347957, 32350182, 32351767, 32353343
32355765, 32355912, 32356340, 32356545, 32356609, 32356628, 32357412
32357665, 32358760, 32359044, 32361175, 32361677, 32362016, 32362066
32362072, 32362698, 32363212, 32363549, 32363711, 32363981, 32364147
32366154, 32366303, 32366461, 32366536, 32367151, 32368161, 32368480
32368789, 32368792, 32369041, 32371828, 32372725, 32374050, 32374431
32374566, 32374616, 32375438, 32375493, 32376603, 32376614, 32376774
32376872, 32376922, 32377901, 32378953, 32379001, 32379140, 32379303
32379775, 32380591, 32380842, 32381403, 32381605, 32382021, 32382207
32382667, 32385068, 32385141, 32385832, 32386482, 32386683, 32386720
32386877, 32387555, 32387818, 32388247, 32389047, 32389497, 32390629
32390855, 32391021, 32392724, 32393137, 32393612, 32394623, 32394660
32394986, 32396085, 32396154, 32396326, 32397113, 32397350, 32398714
32400076, 32401086, 32401333, 32402243, 32402292, 32403509, 32403748
32404638, 32404933, 32405239, 32406222, 32406479, 32407783, 32408640
32409009, 32409344, 32409942, 32410175, 32412340, 32413042, 32413512
32414944, 32414996, 32415846, 32415989, 32416652, 32416655, 32417227
32417242, 32417274, 32417301, 32417438, 32417632, 32417766, 32417870
32419774, 32421958, 32422965, 32423100, 32423678, 32423985, 32424465
32425097, 32425124, 32425194, 32425205, 32425778, 32425862, 32426213
32426315, 32426900, 32427158, 32427173, 32427226, 32427583, 32427953
32428097, 32428189, 32428330, 32428919, 32430745, 32431049, 32431067
32431251, 32431290, 32431413, 32432078, 32432245, 32433687, 32434131
32435493, 32435911, 32436342, 32436460, 32436721, 32436757, 32437538
32439726, 32440067, 32440681, 32441128, 32441671, 32441834, 32442229
32442404, 32443087, 32443531, 32443744, 32443935, 32444159, 32446565
32446740, 32449622, 32449909, 32450344, 32453583, 32453611, 32453888
32455219, 32455516, 32455650, 32455742, 32455961, 32456625, 32457252
32457974, 32459153, 32459632, 32460136, 32460145, 32461726, 32462153
32464021, 32464584, 32465193, 32465209, 32465466, 32465495, 32465853
32465894, 32466474, 32467812, 32468643, 32468791, 32469004, 32469225
32471100, 32471251, 32471346, 32471642, 32472561, 32472589, 32473465
32474686, 32474827, 32474926, 32474997, 32475694, 32476437, 32477479
32478452, 32480419, 32480510, 32480528, 32480541, 32480873, 32481807
32482131, 32483115, 32483966, 32484945, 32485859, 32485961, 32486528
32486955, 32489206, 32490128, 32490416, 32490804, 32491443, 32492075
32492343, 32492382, 32492422, 32492452, 32495545, 32495572, 32497756
32498459, 32498569, 32498602, 32498752, 32498783, 32499155, 32500117
32501930, 32503790, 32504340, 32504786, 32505009, 32505439, 32505557
32505634, 32506166, 32506309, 32506473, 32506809, 32507542, 32508585

32509271, 32509318, 32509584, 32509606, 32509814, 32510116, 32512048
32512145, 32512438, 32512918, 32514516, 32515708, 32515850, 32516220
32516336, 32517405, 32517797, 32518029, 32518679, 32519995, 32520525
32520645, 32520691, 32520994, 32522300, 32522472, 32523206, 32523613
32523750, 32524841, 32525039, 32526118, 32526703, 32527621, 32529396
32529483, 32530202, 32531259, 32531627, 32531647, 32533019, 32533225
32533461, 32534925, 32535106, 32535156, 32535159, 32535520, 32536006
32538436, 32538824, 32539300, 32539322, 32539914, 32539936, 32540706
32540995, 32541049, 32542063, 32542641, 32544124, 32544464, 32544740
32544784, 32545415, 32546408, 32546937, 32547361, 32548580, 32548704
32549168, 32549277, 32549351, 32550051, 32550281, 32550589, 32550751
32550894, 32551177, 32551246, 32552043, 32552602, 32553241, 32555120
32555592, 32556165, 32556311, 32556891, 32557354, 32559543, 32561759
32561791, 32561841, 32562587, 32563106, 32563114, 32563151, 32563940
32565722, 32565870, 32567750, 32567788, 32568124, 32568163, 32568259
32569603, 32569745, 32573197, 32573703, 32573942, 32574796, 32576097
32576508, 32576534, 32577408, 32578113, 32578616, 32578792, 32579075
32579371, 32579529, 32580082, 32580378, 32580852, 32583315, 32583355
32583375, 32583692, 32584347, 32584375, 32584505, 32585832, 32586534
32587305, 32587472, 32587567, 32587721, 32587793, 32587994, 32588298
32588656, 32588691, 32589147, 32589819, 32589990, 32593590, 32593845
32593877, 32593886, 32593955, 32594965, 32595551, 32596355, 32596705
32597099, 32597637, 32598380, 32598406, 32601769, 32601882, 32602194
32602344, 32602599, 32602735, 32602871, 32602990, 32603092, 32603152
32603319, 32603564, 32603619, 32605116, 32605919, 32606093, 32606489
32606531, 32607812, 32607991, 32608297, 32608821, 32609394, 32609512
32609730, 32609886, 32610185, 32610271, 32613788, 32614157, 32614583
32615310, 32615776, 32616678, 32618819, 32619195, 32619298, 32619327
32620859, 32620919, 32621140, 32621309, 32622507, 32622612, 32625160
32625356, 32626384, 32626756, 32627140, 32628131, 32628221, 32628237
32629028, 32629772, 32629859, 32630060, 32631551, 32631787, 32633251
32634049, 32634996, 32635881, 32635931, 32636938, 32638991, 32639432
32639663, 32639860, 32639950, 32641593, 32641748, 32642587, 32642994
32643533, 32644392, 32645139, 32646025, 32646044, 32647170, 32648248
32649737, 32649749, 32651063, 32651769, 32651773, 32652143, 32652573
32652605, 32653470, 32653669, 32654962, 32655446, 32655691, 32656130
32656231, 32656275, 32657251, 32658076, 32658481, 32659438, 32659574
32659772, 32659930, 32659983, 32660528, 32661293, 32662165, 32663019
32664665, 32665550, 32665836, 32666862, 32668900, 32668907, 32669149
32670769, 32671437, 32671481, 32672057, 32674819, 32675095, 32675227
32675756, 32676084, 32676350, 32676659, 32677000, 32677702, 32678737
32682430, 32682586, 32682703, 32684009, 32684387, 32685743, 32685989
32686338, 32686850, 32689123, 32690400, 32690581, 32692372, 32693242
32695999, 32697157, 32697431, 32697781, 32697859, 32698508, 32698569

32700396, 32700455, 32700548, 32700675, 32700989, 32701048, 32702005
32703155, 32704013, 32704119, 32704231, 32704765, 32705734, 32705800
32706821, 32707007, 32707211, 32710053, 32710165, 32710534, 32710750
32711099, 32711741, 32712220, 32712791, 32712916, 32715346, 32715845
32715945, 32716726, 32718204, 32718316, 32718510, 32718547, 32718721
32719288, 32719310, 32720344, 32720458, 32722118, 32724505, 32724654
32725484, 32726772, 32727143, 32728216, 32728984, 32730701, 32731498
32732179, 32733671, 32733845, 32734021, 32734171, 32734299, 32734800
32735915, 32735980, 32736370, 32737774, 32737827, 32737969, 32738356
32739966, 32740421, 32740503, 32740506, 32740515, 32740694, 32740987
32743290, 32743511, 32746508, 32746515, 32746831, 32747680, 32747738
32748974, 32749028, 32750264, 32750940, 32751438, 32753371, 32753472
32753946, 32754044, 32754574, 32754845, 32755356, 32755493, 32755517
32755731, 32756125, 32756914, 32757219, 32758096, 32758260, 32759503
32760504, 32760795, 32760868, 32760906, 32761229, 32761294, 32761932
32762155, 32762231, 32763283, 32763544, 32763599, 32764690, 32765738
32766252, 32766397, 32766407, 32766916, 32768752, 32769786, 32769880
32770812, 32771735, 32775512, 32775526, 32776891, 32778725, 32780676
32781826, 32782851, 32783456, 32784393, 32784403, 32786308, 32786309
32788660, 32789228, 32790012, 32790255, 32793286, 32794120, 32794261
32795016, 32795712, 32797115, 32797486, 32800137, 32800539, 32801192
32801303, 32801337, 32802926, 32803416, 32803807, 32803850, 32804604
32804609, 32804760, 32806069, 32806112, 32806856, 32806915, 32807517
32809152, 32809234, 32810125, 32810668, 32811069, 32811131, 32813351
32813767, 32816003, 32817950, 32818019, 32818230, 32818242, 32818436
32818545, 32821107, 32822436, 32822847, 32823545, 32823692, 32827206
32828093, 32828636, 32828738, 32829060, 32829563, 32829937, 32830405
32831451, 32831855, 32831901, 32832521, 32833378, 32833812, 32834168
32834394, 32834426, 32835524, 32837435, 32838028, 32838533, 32841689
32841994, 32842415, 32842823, 32843576, 32843672, 32843754, 32844640
32846272, 32846876, 32847962, 32847975, 32848060, 32848531, 32848816
32850174, 32850514, 32851615, 32851841, 32852484, 32852504, 32853080
32855257, 32855878, 32856375, 32856546, 32856640, 32857370, 32857881
32857908, 32858446, 32863795, 32864241, 32864736, 32866089, 32867469
32868116, 32868344, 32868369, 32869560, 32870681, 32871988, 32872839
32874571, 32874995, 32875003, 32875118, 32875482, 32875931, 32877550
32878039, 32879447, 32879655, 32879990, 32880225, 32880390, 32880490
32881057, 32881462, 32881853, 32883252, 32883853, 32886951, 32887649
32888458, 32888472, 32889096, 32889434, 32890532, 32891500, 32892883
32893686, 32893951, 32894842, 32895105, 32897184, 32897679, 32898672
32898678, 32898971, 32899387, 32900165, 32900208, 32902635, 32903472
32903625, 32905994, 32907741, 32907975, 32908241, 32908249, 32908946
32909255, 32909292, 32909936, 32910846, 32912726, 32913527, 32913610
32913791, 32914508, 32914711, 32914795, 32915110, 32915747, 32915760

32915847, 32915909, 32916025, 32916080, 32917969, 32918041, 32918394
32920489, 32920547, 32921786, 32922090, 32922635, 32924796, 32925421
32925703, 32926513, 32926653, 32930360, 32930423, 32930665, 32931078
32931941, 32932487, 32933936, 32935932, 32936005, 32936402, 32936424
32936537, 32936859, 32936950, 32936961, 32936988, 32937167, 32937338
32939376, 32939883, 32940440, 32940714, 32940955, 32941096, 32941509
32941792, 32943694, 32945404, 32946347, 32946711, 32947264, 32947268
32951181, 32951258, 32952285, 32953258, 32955962, 32956092, 32956896
32957606, 32958616, 32959929, 32961142, 32961939, 32962162, 32965460
32966389, 32966688, 32967871, 32968221, 32968634, 32969466, 32969863
32970478, 32972633, 32972716, 32973035, 32973406, 32973518, 32976022
32977489, 32980826, 32982562, 32983419, 32983750, 32983871, 32984625
32984679, 32985908, 32986577, 32987004, 32987206, 32987308, 32988028
32991289, 32991527, 32992004, 32993522, 32993998, 32994080, 32995072
32995206, 32995242, 32995863, 32996071, 32996974, 32998659, 32999086
32999329, 32999541, 33000440, 33000516, 33000980, 33001094, 33001615
33003575, 33003817, 33004172, 33004888, 33005241, 33008265, 33009224
33009321, 33009351, 33010173, 33010444, 33011078, 33011198, 33012307
33012903, 33013379, 33015716, 33016007, 33018951, 33019726, 33020016
33020510, 33021036, 33021100, 33021642, 33022043, 33022140, 33022563
33022926, 33023671, 33025005, 33026533, 33026796, 33026949, 33027087
33027377, 33027525, 33027539, 33027553, 33028013, 33028286, 33028462
33030293, 33031619, 33032299, 33032400, 33032579, 33033425, 33034103
33034619, 33034642, 33034846, 33035201, 33035710, 33035954, 33036321
33037136, 33037150, 33037531, 33037895, 33038120, 33038422, 33038479
33038537, 33039277, 33040335, 33043590, 33043854, 33044062, 33045137
33046179, 33047645, 33047827, 33048074, 33048277, 33048591, 33049012
33049866, 33049915, 33049925, 33050205, 33050587, 33050622, 33050626
33052585, 33053538, 33055560, 33055827, 33056383, 33056579, 33058363
33059891, 33059924, 33060161, 33060212, 33060935, 33061152, 33061339
33061595, 33062419, 33063919, 33064324, 33064565, 33065089, 33065343
33065415, 33065437, 33065526, 33065979, 33066892, 33068672, 33069366
33069583, 33069889, 33069936, 33071321, 33072392, 33072854, 33075133
33075246, 33075452, 33076129, 33080651, 33082407, 33084064, 33084323
33085296, 33085361, 33088535, 33088863, 33089096, 33089130, 33089192
33090110, 33090127, 33090781, 33090848, 33092087, 33093144, 33093807
33095358, 33096609, 33097276, 33097433, 33099666, 33099872, 33100195
33100352, 33101055, 33101058, 33101334, 33102477, 33105276, 33105354
33105656, 33106822, 33106897, 33107872, 33108317, 33109335, 33109981
33110192, 33110642, 33110992, 33111729, 33113848, 33114640, 33115438
33115892, 33116125, 33116131, 33116481, 33117641, 33120284, 33120828
33120920, 33121866, 33121880, 33121934, 33123402, 33123404, 33123985
33125873, 33126216, 33126290, 33127032, 33127141, 33127312, 33129473
33131149, 33131335, 33131526, 33131742, 33132050, 33135083, 33136016

33136252, 33136601, 33137328, 33137554, 33139230, 33139277, 33140218
33141420, 33141890, 33142123, 33142479, 33142533, 33142739, 33142764
33144001, 33145153, 33145583, 33146001, 33146055, 33147065, 33148063
33149578, 33149850, 33150236, 33150645, 33151063, 33151089, 33151731
33152388, 33152652, 33152838, 33153797, 33157157, 33157547, 33159956
33161035, 33161424, 33161535, 33161726, 33163159, 33163187, 33164865
33165183, 33165391, 33166116, 33166242, 33167315, 33169254, 33172549
33172631, 33172679, 33174203, 33176523, 33176672, 33177660, 33178223
33178248, 33179718, 33180354, 33181281, 33181349, 33181881, 33182152
33182737, 33184467, 33185231, 33185773, 33186578, 33186650, 33187513
33188597, 33189199, 33190454, 33190694, 33190761, 33191073, 33191584
33192462, 33192939, 33193293, 33194363, 33195096, 33195330, 33195897
33196009, 33196035, 33196475, 33197296, 33198902, 33199431, 33201415
33203951, 33205229, 33205781, 33206160, 33206701, 33207143, 33207240
33207247, 33207342, 33208644, 33211160, 33211334, 33211942, 33212112
33214493, 33214554, 33214707, 33215225, 33216590, 33216667, 33218194
33218259, 33218392, 33218518, 33218694, 33219840, 33220466, 33221061
33221340, 33223248, 33224375, 33225584, 33225678, 33227044, 33227337
33228119, 33229327, 33230882, 33230975, 33232128, 33233560, 33234302
33235620, 33236729, 33237523, 33239083, 33239946, 33239980, 33240195
33240921, 33241118, 33241692, 33242408, 33242622, 33243077, 33244297
33245879, 33245940, 33246099, 33246700, 33247240, 33247372, 33247795
33247862, 33251111, 33251188, 33251482, 33252648, 33252911, 33253370
33253466, 33253504, 33254019, 33261707, 33261786, 33263108, 33266449
33268162, 33270427, 33270914, 33271941, 33273598, 33273638, 33273682
33274012, 33275880, 33276748, 33278133, 33278440, 33278509, 33279339
33279489, 33279810, 33280121, 33281287, 33281785, 33282110, 33282502
33282504, 33282605, 33282871, 33282971, 33283122, 33284571, 33287418
33288427, 33289442, 33289604, 33289734, 33290765, 33291305, 33292174
33292175, 33292429, 33292896, 33292950, 33294123, 33294139, 33294845
33295267, 33297275, 33299877, 33301277, 33301919, 33303419, 33303486
33303555, 33303725, 33304435, 33304775, 33304830, 33305150, 33305175
33305254, 33305995, 33306161, 33306852, 33307945, 33308107, 33308199
33308244, 33308736, 33309178, 33309324, 33311488, 33312823, 33312932
33313374, 33314115, 33314122, 33314422, 33314523, 33315230, 33315432
33315590, 33315801, 33315835, 33316711, 33316815, 33317279, 33317740
33317752, 33318311, 33318949, 33319065, 33319353, 33319802, 33320455
33322672, 33323634, 33323903, 33324226, 33325981, 33327118, 33329027
33329192, 33329493, 33329960, 33330508, 33331329, 33332612, 33332891
33333026, 33333616, 33334218, 33334340, 33334404, 33334945, 33334957
33334972, 33335941, 33337385, 33337620, 33337799, 33337807, 33338247
33338891, 33339868, 33340595, 33343993, 33344767, 33345269, 33346851
33347947, 33349744, 33349880, 33350643, 33351136, 33351978, 33352629
33352740, 33352794, 33353474, 33354011, 33354275, 33354662, 33354933

33354968, 33355007, 33355136, 33355766, 33356602, 33356612, 33357029
33357655, 33358233, 33358968, 33359279, 33360117, 33360246, 33362391
33362597, 33364012, 33364820, 33366942, 33367076, 33367184, 33367909
33369166, 33370332, 33371121, 33371641, 33373644, 33373693, 33375194
33376694, 33378856, 33379172, 33379714, 33380058, 33380472, 33380871
33381652, 33381775, 33381839, 33382108, 33382224, 33382529, 33382620
33382859, 33384092, 33384505, 33387120, 33387654, 33387767, 33388473
33388715, 33388927, 33389651, 33390561, 33390695, 33390717, 33390917
33390925, 33392926, 33392996, 33393503, 33393671, 33394330, 33395219
33397350, 33397495, 33397605, 33398383, 33398674, 33401519, 33402361
33402406, 33402456, 33402847, 33403040, 33403843, 33404069, 33406991
33407135, 33407139, 33408858, 33409163, 33409376, 33409759, 33409841
33410321, 33415279, 33416041, 33416405, 33417145, 33417828, 33417987
33418439, 33418443, 33420096, 33420249, 33420490, 33421125, 33421440
33421721, 33421972, 33422596, 33422675, 33422877, 33423728, 33423815
33424192, 33425046, 33425127, 33426135, 33427823, 33427991, 33428191
33429020, 33431382, 33434256, 33434602, 33434897, 33435012, 33435454
33437800, 33437802, 33440178, 33440442, 33440899, 33441073, 33441786
33443834, 33444647, 33446226, 33446788, 33447015, 33447602, 33447957
33448908, 33450599, 33450736, 33451134, 33452091, 33454288, 33454299
33454753, 33455225, 33455471, 33456516, 33456703, 33456848, 33457235
33457584, 33457842, 33458082, 33458732, 33459161, 33460265, 33460450
33460521, 33460870, 33462620, 33463044, 33464061, 33464358, 33464378
33464843, 33466822, 33467243, 33467715, 33469785, 33470077, 33470092
33470254, 33471858, 33473564, 33473583, 33473795, 33473815, 33473989
33474080, 33474386, 33474769, 33474916, 33476482, 33476928, 33479415
33479703, 33480124, 33480392, 33480765, 33482137, 33482590, 33483222
33484230, 33484387, 33485134, 33485207, 33488913, 33489699, 33490023
33490031, 33490293, 33491676, 33492066, 33492136, 33493957, 33495024
33495575, 33495588, 33496433, 33497160, 33498037, 33499125, 33499867
33500486, 33501425, 33503732, 33504158, 33504432, 33504626, 33504902
33505158, 33507610, 33507953, 33510062, 33510077, 33510171, 33510735
33511329, 33511523, 33512062, 33513037, 33513434, 33513447, 33513526
33513906, 33514038, 33514172, 33514179, 33514440, 33514881, 33515115
33516571, 33517445, 33517703, 33520658, 33521864, 33522170, 33522372
33522799, 33522941, 33523189, 33523393, 33523831, 33523982, 33524097
33525014, 33525448, 33527359, 33527630, 33527663, 33527739, 33528779
33531067, 33531364, 33531929, 33532136, 33532470, 33532517, 33532755
33533239, 33533269, 33534589, 33534891, 33536140, 33536640, 33537225
33537630, 33537652, 33538009, 33538063, 33538767, 33538807, 33539504
33540746, 33541736, 33541865, 33542695, 33544375, 33544836, 33545633
33545698, 33546789, 33546839, 33547527, 33548186, 33548709, 33548869
33549008, 33549281, 33550827, 33551931, 33553452, 33553902, 33555482
33555673, 33556254, 33556394, 33557278, 33557344, 33558058, 33558087

33558251, 33558317, 33558391, 33558960, 33559245, 33559316, 33559848
33560308, 33561671, 33561708, 33561845, 33562255, 33563137, 33563167
33563718, 33564109, 33564809, 33566611, 33566851, 33566856, 33567156
33568355, 33570800, 33571225, 33572061, 33573142, 33574722, 33575022
33575100, 33576132, 33578015, 33580079, 33580212, 33580595, 33580746
33582466, 33583859, 33584585, 33584637, 33585244, 33585591, 33587171
33589647, 33589667, 33590420, 33590551, 33590607, 33591046, 33596056
33596361, 33596874, 33598703, 33598728, 33598840, 33599665, 33599734
33600479, 33601195, 33601538, 33601673, 33601849, 33603291, 33604939
33606850, 33607081, 33607127, 33607613, 33611438, 33613169, 33613512
33613829, 33613833, 33615198, 33615478, 33615505, 33616923, 33617587
33617685, 33618962, 33621739, 33621871, 33621893, 33621993, 33622325
33622575, 33622927, 33624052, 33624356, 33625059, 33625559, 33625597
33625822, 33627360, 33627820, 33627879, 33628258, 33628304, 33628592
33628693, 33630464, 33631068, 33631337, 33631562, 33631820, 33631959
33632051, 33632754, 33633469, 33633875, 33633883, 33635094, 33635886
33636280, 33636345, 33637219, 33641592, 33645932, 33646203, 33647498
33647716, 33647739, 33647820, 33648273, 33649782, 33651003, 33651993
33652008, 33652234, 33652291, 33653008, 33653695, 33655399, 33656104
33656406, 33656608, 33656679, 33657553, 33658696, 33660093, 33660782
33660816, 33660838, 33661960, 33662079, 33662706, 33663113, 33663305
33663444, 33664959, 33664976, 33666228, 33666803, 33667166, 33667505
33667548, 33667790, 33668078, 33668496, 33670617, 33670793, 33674035
33674065, 33674755, 33676061, 33676296, 33676842, 33677163, 33677196
33677721, 33679665, 33679838, 33681238, 33682799, 33684125, 33684377
33684692, 33687039, 33689330, 33689561, 33690169, 33690676, 33692669
33695048, 33695100, 33696508, 33698504, 33699798, 33702035, 33702922
33703196, 33704431, 33704635, 33705050, 33706074, 33706800, 33708795
33708879, 33708958, 33709660, 33710568, 33711151, 33711724, 33711938
33713578, 33714000, 33714495, 33715183, 33715322, 33718837, 33718848
33720017, 33723325, 33725523, 33726388, 33726590, 33726682, 33726788
33726841, 33727390, 33727406, 33727922, 33727983, 33729692, 33729789
33730024, 33731488, 33733810, 33735790, 33736618, 33737627, 33738135
33738702, 33741444, 33741730, 33742827, 33743745, 33744512, 33745199
33745318, 33746114, 33748852, 33749367, 33749626, 33749984, 33750344
33750791, 33751080, 33751431, 33754410, 33755161, 33755486, 33757064
33758069, 33759204, 33760298, 33761538, 33763570, 33763679, 33764147
33764761, 33766130, 33766686, 33766937, 33767425, 33768567, 33770079
33770883, 33770960, 33771433, 33773883, 33774856, 33775072, 33775544
33775825, 33776598, 33777176, 33777718, 33779360, 33779364, 33779494
33779786, 33780182, 33780312, 33782200, 33783365, 33783710, 33784447
33785175, 33786005, 33786208, 33787325, 33787804, 33787884, 33788643
33789142, 33790553, 33792885, 33792937, 33794088, 33794290, 33796040
33797504, 33797970, 33798328, 33799368, 33800450, 33800460, 33800471

33800500, 33801197, 33801237, 33803836, 33804758, 33805155, 33805836
33807727, 33808041, 33808204, 33808574, 33808955, 33809062, 33809642
33810107, 33810130, 33810360, 33811111, 33811601, 33811659, 33812475
33813801, 33813849, 33814415, 33816129, 33816674, 33817457, 33817717
33817746, 33818252, 33819404, 33821129, 33821145, 33821234, 33821569
33822187, 33822881, 33823203, 33824185, 33824830, 33825303, 33826285
33827120, 33827191, 33827202, 33828137, 33828243, 33828570, 33828982
33832499, 33832583, 33833554, 33833783, 33834239, 33835379, 33835574
33836203, 33837343, 33837484, 33838019, 33840343, 33840911, 33840932
33840940, 33841610, 33841850, 33842364, 33842953, 33843368, 33843512
33845824, 33846103, 33846146, 33846662, 33847898, 33848060, 33848148
33848294, 33849209, 33849726, 33850434, 33850437, 33850535, 33851855
33852315, 33852881, 33853330, 33858183, 33858700, 33860501, 33860895
33860900, 33862262, 33862735, 33862860, 33863150, 33863597, 33864784
33865116, 33865165, 33865495, 33865537, 33866472, 33866585, 33867451
33867491, 33868507, 33870133, 33870373, 33870702, 33871591, 33871761
33871795, 33872487, 33872610, 33874274, 33874455, 33875167, 33876296
33876730, 33876739, 33877868, 33878003, 33878970, 33879044, 33879054
33880474, 33882024, 33883017, 33883347, 33884314, 33886297, 33886487
33886862, 33886871, 33888856, 33888932, 33889459, 33890066, 33890586
33891059, 33891752, 33893127, 33895721, 33896341, 33896412, 33896423
33896760, 33897055, 33898336, 33899027, 33899867, 33899902, 33900564
33900807, 33901118, 33902235, 33902465, 33902539, 33904512, 33904798
33904963, 33906515, 33906897, 33906975, 33907094, 33907659, 33907663
33907815, 33907942, 33909666, 33909729, 33909838, 33909842, 33910272
33912833, 33912872, 33913103, 33913384, 33915586, 33916081, 33916206
33916249, 33916311, 33917203, 33918190, 33919778, 33921410, 33921441
33921860, 33922026, 33922061, 33925702, 33926252, 33927256, 33927405
33927483, 33928325, 33929317, 33931668, 33932721, 33932921, 33933784
33934979, 33935707, 33936939, 33937333, 33937866, 33939477, 33940540
33941905, 33941967, 33942062, 33943313, 33945728, 33945794, 33949153
33950698, 33951799, 33952245, 33952532, 33952588, 33952976, 33953054
33953568, 33954999, 33955060, 33955371, 33956182, 33957025, 33957705
33960379, 33960464, 33960647, 33961800, 33963458, 33964258, 33964671
33964867, 33964963, 33965211, 33967599, 33969303, 33969309, 33970659
33970841, 33972204, 33973155, 33973593, 33973695, 33973908, 33973922
33974068, 33974560, 33974788, 33974835, 33975649, 33976016, 33976581
33976796, 33976856, 33980195, 33981298, 33982111, 33982392, 33982541
33983204, 33985986, 33986030, 33987063, 33987170, 33987911, 33987976
33988339, 33988388, 33988926, 33988974, 33989017, 33990166, 33990559
33992920, 33993028, 33993386, 33994084, 33994833, 33997092, 33997202
33997826, 33998060, 33998365, 33998441, 33998706, 34001147, 34001406
34001696, 34003077, 34003270, 34003643, 34004063, 34006614, 34006650
34007432, 34009154, 34009751, 34010877, 34011029, 34011657, 34012165

34013753, 34013946, 34017363, 34018423, 34019478, 34020888, 34020905
34022133, 34022834, 34023045, 34023117, 34023644, 34024924, 34027056
34027199, 34027770, 34027791, 34027965, 34028486, 34031036, 34034279
34034799, 34038365, 34039170, 34039802, 34039805, 34042084, 34042088
34042759, 34042949, 34043824, 34045021, 34045081, 34045429, 34045719
34048056, 34048076, 34048685, 34049216, 34050156, 34051355, 34051770
34052378, 34052471, 34052869, 34053296, 34053514, 34054814, 34055289
34056235, 34056691, 34056918, 34058858, 34058951, 34060122, 34060268
34060829, 34062228, 34064415, 34066286, 34066652, 34069804, 34070318
34070446, 34070561, 34071111, 34071627, 34072143, 34072411, 34075499
34078255, 34078687, 34079542, 34080081, 34080691, 34083290, 34083697
34085116, 34086300, 34088194, 34088299, 34088989, 34089934, 34090927
34091587, 34092979, 34094476, 34096200, 34096213, 34097324, 34097491
34098840, 34098862, 34099185, 34100909, 34100969, 34101724, 34101781
34101785, 34102850, 34103647, 34103857, 34104105, 34104403, 34104747
34105531, 34105578, 34105851, 34106567, 34106830, 34107143, 34107171
34110342, 34111239, 34111708, 34113634, 34113754, 34115338, 34115571
34115674, 34115836, 34116531, 34116534, 34117188, 34117618, 34118219
34119621, 34119948, 34120395, 34122000, 34123350, 34125814, 34126068
34126600, 34127787, 34128961, 34129587, 34129689, 34129964, 34130289
34131435, 34131640, 34132089, 34132182, 34132256, 34132318, 34135867
34136552, 34136598, 34136651, 34137325, 34137360, 34137400, 34137513
34137936, 34139110, 34139217, 34141328, 34142034, 34142701, 34142725
34142884, 34145178, 34145715, 34146833, 34146985, 34146987, 34147169
34148591, 34149263, 34149515, 34151061, 34153098, 34153238, 34153367
34154060, 34154847, 34155072, 34157133, 34157543, 34158902, 34159409
34160874, 34161298, 34162108, 34162325, 34162335, 34162419, 34162936
34163576, 34164486, 34164828, 34166857, 34167090, 34167286, 34168185
34171382, 34171631, 34171779, 34172434, 34172950, 34172951, 34173003
34173450, 34173655, 34174125, 34174543, 34175766, 34175987, 34176645
34177012, 34177162, 34177216, 34177554, 34182054, 34182692, 34183461
34183998, 34186437, 34186556, 34187150, 34188859, 34191370, 34191733
34191990, 34193022, 34194445, 34195569, 34195583, 34196203, 34197142
34198944, 34200295, 34201566, 34202065, 34202285, 34203331, 34203704
34203713, 34204673, 34205962, 34207008, 34207506, 34207825, 34208572
34208822, 34210475, 34210478, 34211059, 34211843, 34212105, 34212743
34214908, 34215091, 34215118, 34215356, 34215503, 34216177, 34216873
34219168, 34219478, 34219756, 34219922, 34220568, 34220609, 34220943
34220961, 34220991, 34221484, 34221568, 34221772, 34222165, 34224381
34224955, 34225479, 34226067, 34226553, 34226596, 34229104, 34229250
34229833, 34233694, 34234394, 34235520, 34236849, 34236850, 34236929
34237240, 34238278, 34238326, 34238452, 34239023, 34239253, 34239708
34239739, 34240339, 34241948, 34242857, 34243634, 34244123, 34244448
34245547, 34248685, 34248786, 34250357, 34250510, 34256822, 34256867

34257221, 34257821, 34259077, 34259505, 34260455, 34261458, 34261536
34261947, 34262719, 34262797, 34263456, 34264633, 34269674, 34270419
34271046, 34271144, 34271261, 34271831, 34272249, 34272626, 34272942
34276007, 34276035, 34276149, 34278993, 34279907, 34280456, 34281503
34281636, 34281906, 34282948, 34284147, 34284415, 34284480, 34286049
34286361, 34286896, 34287904, 34288172, 34289040, 34289391, 34291104
34291231, 34292131, 34296307, 34296882, 34299775, 34299927, 34300648
34301118, 34303814, 34305015, 34305086, 34305465, 34306996, 34308796
34309486, 34309870, 34310304, 34310878, 34314448, 34314510, 34317656
34318537, 34320078, 34320104, 34320607, 34322521, 34328460, 34329645
34329853, 34330060, 34330202, 34331370, 34333986, 34339279, 34339332
34339511, 34340632, 34343228, 34346865, 34347024, 34348856, 34349149
34349276, 34349447, 34349515, 34350364, 34351706, 34352389, 34352605
34358131, 34358718, 34358785, 34363214, 34363828, 34364656, 34366429
34366627, 34367505, 34368448, 34368509, 34369008, 34369015, 34369457
34370261, 34370607, 34371061, 34373053, 34373173, 34373784, 34376103
34376468, 34376629, 34377917, 34379814, 34381597, 34382203, 34382212
34383066, 34383726, 34385931, 34386836, 34387451, 34387852, 34392047
34394126, 34394707, 34394887, 34395591, 34396087, 34396210, 34396450
34397170, 34400193, 34400514, 34400786, 34401276, 34401444, 34405224
34405413, 34406030, 34406120, 34406370, 34408490, 34410488, 34411019
34411060, 34411587, 34413701, 34414246, 34414328, 34415933, 34416002
34417794, 34420046, 34420448, 34421053, 34422617, 34423163, 34424661
34424728, 34425846, 34426849, 34428819, 34430514, 34430618, 34432402
34436025, 34443644, 34444824, 34444997, 34445728, 34446152, 34446545
34447012, 34448189, 34448235, 34449511, 34450366, 34450853, 34451554
34452628, 34453303, 34453468, 34453799, 34453970, 34454035, 34455245
34456728, 34457911, 34458786, 34460273, 34461154, 34461697, 34462113
34462893, 34464036, 34465619, 34465871, 34466767, 34467295, 34468807
34469934, 34470389, 34470542, 34470753, 34471029, 34472508, 34473578
34475838, 34476155, 34477555, 34481187, 34481738, 34482043, 34484622
34485380, 34485525, 34485657, 34485723, 34487786, 34489508, 34491739
34492025, 34492379, 34494444, 34495234, 34496630, 34497838, 34498028
34499374, 34502032, 34504292, 34505752, 34509388, 34510828, 34511443
34511846, 34511870, 34512077, 34513107, 34517973, 34519783, 34520519
34521072, 34521241, 34523306, 34523596, 34524704, 34524915, 34525391
34525691, 34525806, 34530272, 34530839, 34532111, 34532831, 34533061
34533150, 34533431, 34534178, 34535189, 34535190, 34536480, 34538232
34539284, 34539633, 34539998, 34542994, 34543854, 34543938, 34545238
34547912, 34548830, 34549471, 34549588, 34549620, 34551005, 34551359
34552065, 34552940, 34555251, 34556258, 34557307, 34557355, 34557500
34557851, 34558586, 34559114, 34559432, 34559964, 34560327, 34561380
34561402, 34562023, 34562346, 34562513, 34564274, 34567061, 34567240
34567246, 34567785, 34569338, 34570620, 34572347, 34572899, 34574048

34574650, 34575765, 34575784, 34576656, 34577339, 34580665, 34580955
34583967, 34585151, 34587326, 34588265, 34588563, 34588602, 34589443
34589885, 34591645, 34592878, 34595033, 34596388, 34596863, 34598617
34599377, 34599777, 34600007, 34600477, 34600757, 34601469, 34603342
34604941, 34605269, 34605306, 34605643, 34606514, 34609482, 34609883
34611735, 34612360, 34614081, 34615359, 34617503, 34619587, 34619921
34624814, 34627724, 34627975, 34630604, 34632426, 34633291, 34634012
34635564, 34638404, 34639116, 34641746, 34645605, 34647902, 34648006
34648786, 34649403, 34651385, 34651785, 34653168, 34653621, 34655977
34658262, 34658861, 34659006, 34659326, 34664941, 34667496, 34670162
34670941, 34671488, 34671630, 34672044, 34672192, 34673162, 34677014
34680126, 34681314, 34681779, 34682800, 34684300, 34684487, 34685578
34687204, 34687665, 34691455, 34691800, 34692403, 34695366, 34696015
34696043, 34696612, 34697338, 34697861, 34698179, 34699616, 34700228
34700255, 34700643, 34700660, 34701323, 34704162, 34705215, 34706625
34709158, 34710427, 34710569, 34711434, 34711897, 34713413, 34713951
34714760, 34715072, 34715158, 34715960, 34716391, 34718643, 34719772
34720677, 34720762, 34720854, 34724125, 34724535, 34724582, 34724986
34725039, 34726380, 34729397, 34729755, 34730930, 34731121, 34732383
34733234, 34736787, 34737946, 34738737, 34739733, 34740434, 34742578
34743170, 34743331, 34743869, 34744334, 34744980, 34747517, 34748613
34749799, 34752011, 34752186, 34754028, 34761284, 34761787, 34762290
34763780, 34765046, 34765783, 34769588, 34769939, 34771499, 34773273
34773547, 34774426, 34775460, 34775863, 34777391, 34778310, 34782365
34782556, 34783802, 34784422, 34785211, 34786432, 34787623, 34793099
34794246, 34797143, 34797666, 34797733, 34798577, 34800180, 34801889
34804060, 34804845, 34806060, 34808536, 34809715, 34810252, 34810533
34810987, 34813568, 34814154, 34816203, 34816423, 34816446, 34820088
34821386, 34822118, 34825329, 34827391, 34829425, 34830056, 34830523
34831677, 34832629, 34832725, 34833503, 34837452, 34837737, 34839112
34841743, 34844505, 34845369, 34845920, 34847038, 34848229, 34850178
34851191, 34851345, 34852202, 34855224, 34855355, 34855777, 34858818
34859550, 34860551, 34861159, 34861493, 34862366, 34863611, 34865504
34866621, 34870095, 34871935, 34873139, 34874803, 34875355, 34875817
34878842, 34879016, 34879878, 34884137, 34884598, 34885986, 34888945
34891346, 34892381, 34894430, 34894796, 34896800, 34898860, 34899985
34901118, 34904610, 34906779, 34907142, 34910877, 34922162, 34922278
34922345, 34925412, 34927892, 34931856, 34933484, 34944894, 34951381
34953532, 34958012, 34961049, 34962223, 34965881, 34969920, 34974052
34975490, 34978108, 34986710, 34987218, 34988484, 34993018, 34993116
34993572, 34996911, 34998034, 34999123, 35001525, 35001950, 35001966
35004974, 35011038, 35011794, 35012562, 35012866, 35013485, 35019861
35020339, 35020686, 35021301, 35022351, 35023651, 35024528, 35028559
35034357, 35037368, 35037877, 35038887, 35046819, 35047664, 35047747

35054513, 35061730, 35065501, 35066263, 35067685, 35074697, 35075794
35079707, 35080170, 35089117, 35092748, 35095186, 35095748, 35096413
35098094, 35099667, 35099674, 35100889, 35111766, 35114002, 35116794
35116995, 35119957, 35123499, 35126657, 35133091, 35146774, 35150992
35154281, 35154926, 35156936, 35157812, 35160800, 35162446, 35167216
35169842, 35170600, 35176667, 35177450, 35192409, 35196527, 35200616
35220732, 35225526, 35239280, 35242133, 35243199, 35246710, 35254297
35256214, 35256970, 35257945, 35261641, 35279084, 35282519, 35284198
35285519, 35285795, 35286006, 35309432, 35313797, 35314366, 35320081
35320424, 35331461, 35336918, 35354098, 35378997, 35383562, 35399131
35406065, 35406883, 35412130, 35412492, 35412607, 35414664, 35429800
35432001, 35471762, 35486570, 35500783, 35511113, 35516861, 35519977

Version 19.0.0.0.ru-2023-04.rur-2023-04.r1

Version 19.0.0.0.ru-2023-04.rur-2023-04.r1 includes the following:

- Patch [35239280](#): DSTV42 UPDATE - TZDATA2023C - NEED OJVM FIX
- Patch [35220732](#): RDBMS - DSTV42 UPDATE - TZDATA2023C
- Patch [33125873](#): MAKE CACHE GLOBAL OBJECT INVALIDATION CIC NON-SERIALIZE FOR BETTER PERFORMANCE
- Patch [29213893](#): DBMS_STATS FAILING WITH ERROR ORA-01422 WHEN GATHERING STATS FOR USER\$ TABLE
- Patch [28730253](#): SUPPORT NEW ERA REIWA FOR JAPANESE IMPERIAL CALENDAR
- Patch [35050341](#): OJVM RELEASE UPDATE: 19.19.0.0.230418 (35050341)
- Patch [35042068](#): Database Release Update : 19.19.0.0.230418 (35042068)
- Patch [29585399](#): OCW RELEASE UPDATE 19.3.0.0.0 (29585399)
- PreUpgrade Jar: preupgrade_19_cbuild_13_lf.zip

Combined patches for version 19.0.0.0.ru-2023-04.rur-2023-04.r1, released April 2023

Bugs fixed:

1297945, 7391838, 8460502, 8476681, 9002767, 10123661, 12565410
12949919, 14112098, 14570574, 14735102, 15897884, 15931756, 15959416
16662822, 16664572, 16750494, 16799766, 17275499, 17395507, 17428816

17443054, 17468475, 17562236, 17777718, 18534283, 18697534, 18759260
18943905, 19080742, 19138896, 19147630, 19397646, 19630878, 19697993
19884953, 19958239, 20007421, 20083476, 20289608, 20313356, 20319830
20479545, 20661314, 20721183, 20867658, 20875943, 20922160, 21119541
21232786, 21245711, 21374587, 21528318, 21533734, 21629064, 21639146
21888352, 21965541, 22037067, 22066547, 22252368, 22325312, 22387320
22553815, 22580355, 22725871, 22729345, 22748979, 22813401, 22873666
23020668, 23066463, 23094775, 23125587, 23220873, 23294761, 23296836
23311885, 23606241, 23614160, 23645975, 23734075, 23734111, 23763462
24336782, 24356932, 24559425, 24561942, 24596874, 24597536, 24669730
24687075, 24701882, 24833686, 24916492, 24957575, 24971456, 25030027
25033515, 25092651, 25093917, 25148135, 25173172, 25404117, 25415139
25416731, 25467237, 25541233, 25560538, 25562258, 25607406, 25607716
25632308, 25655012, 25661172, 25675134, 25677036, 25756945, 25792962
25804387, 25804908, 25806201, 25809128, 25869323, 25881271, 25883179
25905368, 25913778, 25979242, 25986062, 25997810, 26001677, 26003708
26108369, 26127355, 26139817, 26173091, 26203132, 26247450, 26256280
26280704, 26284288, 26352569, 26352615, 26440142, 26476244, 26476323
26497655, 26499997, 26500553, 26516556, 26577716, 26587659, 26611353
26621826, 26668264, 26716835, 26739322, 26758837, 26777814, 26785852
26789742, 26800890, 26819036, 26860844, 26872233, 26897528, 26951566
26957541, 26960568, 26963540, 26978857, 27004798, 27004828, 27015468
27019512, 27036163, 27044169, 27044246, 27063461, 27086374, 27091809
27101798, 27126122, 27126938, 27130348, 27131416, 27155644, 27162036
27166935, 27175854, 27195575, 27195935, 27207214, 27207959, 27221350
27222128, 27243840, 27244999, 27254335, 27260704, 27261477, 27275126
27277677, 27302372, 27329690, 27359766, 27359770, 27362994, 27369515
27378053, 27381279, 27392968, 27406105, 27411022, 27423500, 27428898
27439716, 27453490, 27458357, 27458493, 27460010, 27489107, 27497101
27525303, 27572040, 27582210, 27589260, 27595082, 27597359, 27604329
27614573, 27622946, 27627811, 27629928, 27636387, 27639208, 27654410
27658166, 27661222, 27666312, 27684864, 27691701, 27692173, 27697886
27700413, 27710072, 27722357, 27729678, 27742354, 27745728, 27751111
27751518, 27760043, 27764052, 27768096, 27782078, 27785931, 27786168
27801144, 27825962, 27828892, 27829722, 27841399, 27846298, 27860754
27873364, 27877830, 27880025, 27897090, 27899093, 27907898, 27908460
27917890, 27929509, 27933036, 27934711, 27935464, 27941110, 27950978
27951757, 27957203, 27957963, 27962025, 27967484, 27979632, 27989365
27998559, 28001632, 28007516, 28023467, 28031385, 28044739, 28052648
28064977, 28072567, 28078186, 28089605, 28092783, 28104176, 28109326
28112563, 28125947, 28127287, 28127569, 28129791, 28133903, 28138566
28138847, 28144569, 28145995, 28156781, 28167557, 28173612, 28181021
28185286, 28187837, 28189466, 28193268, 28198802, 28201045, 28204104
28204262, 28205555, 28209601, 28209985, 28210681, 28215483, 28234255

28248841, 28263142, 28271258, 28271693, 28276054, 28279176, 28279456
28279612, 28294439, 28294563, 28298401, 28302580, 28303692, 28313275
28319114, 28322973, 28326928, 28337860, 28338211, 28350595, 28351919
28362187, 28364580, 28370061, 28371123, 28373960, 28375383, 28379065
28381939, 28383667, 28386259, 28387185, 28387574, 28390177, 28390273
28392179, 28395302, 28397317, 28402823, 28403019, 28406374, 28410431
28414968, 28430240, 28431445, 28432345, 28435333, 28436173, 28436414
28442896, 28451312, 28452123, 28454215, 28461031, 28461789, 28463226
28470673, 28475242, 28479352, 28482048, 28482049, 28484299, 28487818
28489419, 28492006, 28498976, 28499269, 28502773, 28503081, 28504631
28505321, 28513129, 28513333, 28521330, 28522750, 28523644, 28526715
28530171, 28530697, 28534475, 28534493, 28535127, 28537481, 28538439
28541606, 28542455, 28544270, 28546290, 28547068, 28547926, 28553649
28553981, 28558489, 28558645, 28561704, 28564479, 28565296, 28567417
28567819, 28569897, 28570589, 28572165, 28572407, 28572533, 28572544
28572667, 28572834, 28578945, 28587723, 28589194, 28589509, 28589644
28591817, 28592647, 28593127, 28593682, 28594086, 28597221, 28598022
28600107, 28601957, 28602253, 28604647, 28605066, 28606598, 28607316
28607632, 28608211, 28612239, 28618343, 28620697, 28621543, 28621781
28622202, 28625580, 28625862, 28625873, 28627033, 28628592, 28630381
28632796, 28632799, 28636532, 28639299, 28640772, 28642469, 28642551
28642899, 28643583, 28643654, 28643718, 28644549, 28645570, 28646200
28646939, 28647544, 28649388, 28651078, 28652776, 28655209, 28657026
28658263, 28659098, 28661333, 28661362, 28663289, 28663782, 28670402
28672124, 28672457, 28673945, 28674263, 28681153, 28682182, 28682796
28689483, 28690694, 28692103, 28692275, 28692282, 28693954, 28694526
28694639, 28694872, 28694877, 28696373, 28697526, 28698087, 28699321
28700945, 28703812, 28704412, 28705231, 28707931, 28708400, 28708585
28709063, 28710385, 28710469, 28710663, 28710734, 28714461, 28714720
28715655, 28715727, 28717406, 28718302, 28718469, 28719348, 28720204
28720418, 28721497, 28722229, 28729900, 28730079, 28730253, 28734355
28734910, 28740708, 28740799, 28740863, 28741374, 28742555, 28745367
28747846, 28749853, 28751498, 28752923, 28755011, 28755084, 28755309
28755846, 28757960, 28758722, 28760206, 28760662, 28763291, 28765983
28767240, 28769456, 28770865, 28771022, 28771947, 28772390, 28772816
28774416, 28776431, 28776811, 28777073, 28777214, 28777478, 28778754
28781599, 28781754, 28785273, 28785321, 28785531, 28788272, 28789531
28789533, 28791576, 28791852, 28793062, 28794230, 28795452, 28795551
28795563, 28795734, 28800508, 28802066, 28802734, 28804517, 28805242
28806517, 28807247, 28808314, 28808652, 28808656, 28810381, 28811560
28811592, 28813317, 28813931, 28815123, 28815355, 28815557, 28816871
28817449, 28818063, 28819640, 28820669, 28821847, 28824482, 28826113
28827682, 28828390, 28831971, 28833912, 28835937, 28836716, 28837979
28838385, 28839869, 28842408, 28844656, 28844738, 28845346, 28846759

28847541, 28847572, 28849494, 28849776, 28850084, 28851458, 28851467
28852325, 28852334, 28854004, 28854212, 28854733, 28855520, 28855922
28857364, 28857552, 28861861, 28862532, 28863263, 28863432, 28863487
28865544, 28865569, 28867698, 28867992, 28869215, 28870496, 28871040
28872645, 28872829, 28873575, 28874416, 28875089, 28876253, 28876639
28876926, 28877252, 28878865, 28880218, 28880864, 28881191, 28881848
28882146, 28882751, 28882784, 28884931, 28887305, 28888083, 28888327
28889389, 28889730, 28891867, 28891941, 28892794, 28896556, 28897123
28897512, 28898967, 28899663, 28900506, 28901126, 28902135, 28904380
28905312, 28905390, 28905457, 28905615, 28907196, 28909769, 28909992
28910498, 28910586, 28911140, 28912691, 28914144, 28915561, 28917080
28918429, 28919145, 28921844, 28922227, 28922485, 28922532, 28922608
28922767, 28925250, 28925460, 28925634, 28925880, 28927452, 28928462
28930944, 28932914, 28933079, 28933158, 28935293, 28935956, 28936114
28937717, 28938167, 28938422, 28938698, 28940179, 28940281, 28940472
28941901, 28942118, 28942455, 28942694, 28945421, 28945994, 28946233
28946574, 28948554, 28949888, 28950868, 28951332, 28951493, 28951533
28952168, 28954762, 28955606, 28955883, 28956145, 28956908, 28957260
28957292, 28957723, 28958088, 28958094, 28958590, 28959493, 28960863
28962271, 28962775, 28963036, 28965084, 28965095, 28965231, 28965376
28966444, 28968211, 28968779, 28970122, 28971177, 28974083, 28974902
28974999, 28977322, 28978664, 28979289, 28980448, 28980910, 28981871
28983095, 28983486, 28984313, 28985114, 28985272, 28985362, 28985478
28986207, 28986231, 28986257, 28986326, 28986481, 28986696, 28988482
28988864, 28989306, 28990681, 28993295, 28993353, 28994307, 28994542
28994721, 28994783, 28995287, 28996376, 28998369, 28999046, 29000000
29001305, 29001888, 29002273, 29002488, 29002784, 29002927, 29003207
29003407, 29003617, 29003738, 29004934, 29005748, 29006318, 29006621
29007321, 29007353, 29007775, 29008035, 29008669, 29009513, 29010126
29010517, 29011936, 29012609, 29013475, 29013832, 29014076, 29014385
29015118, 29015273, 29016294, 29017265, 29018655, 29018680, 29019121
29020147, 29020271, 29020423, 29021063, 29021352, 29022986, 29024028
29024054, 29024448, 29024552, 29024732, 29024795, 29024876, 29026154
29026582, 29026606, 29027456, 29027694, 29027914, 29027933, 29027940
29030184, 29030927, 29031575, 29031600, 29032234, 29032276, 29032457
29032607, 29033052, 29033145, 29033164, 29033200, 29033280, 29033655
29034331, 29034587, 29036278, 29037290, 29038528, 29038728, 29038730
29039089, 29039510, 29040032, 29040739, 29041739, 29041775, 29043554
29043651, 29043725, 29044086, 29044763, 29044954, 29046482, 29047127
29047850, 29048178, 29048289, 29048498, 29048605, 29048728, 29048792
29048858, 29049014, 29049673, 29050357, 29050560, 29050765, 29050886
29051263, 29051702, 29051953, 29052726, 29052850, 29053783, 29053902
29055644, 29056024, 29056270, 29056560, 29056767, 29056894, 29058476
29059011, 29060216, 29061016, 29061959, 29062692, 29062848, 29062860

29062868, 29110526, 29110783, 29110790, 29110797, 29110802, 29110805
29111598, 29111631, 29112455, 29113282, 29113305, 29115794, 29115857
29116779, 29117337, 29117526, 29117642, 29118543, 29119077, 29119733
29120223, 29122224, 29122254, 29122367, 29123297, 29123324, 29123432
29123444, 29123482, 29124104, 29124368, 29125036, 29125374, 29125380
29125708, 29125786, 29126345, 29127957, 29128693, 29128935, 29129450
29129476, 29129497, 29129691, 29129712, 29130219, 29131539, 29131772
29132456, 29132869, 29132938, 29133470, 29134447, 29135383, 29135649
29136111, 29138641, 29139070, 29139727, 29139761, 29139780, 29139956
29141316, 29141341, 29141685, 29141886, 29142609, 29142667, 29143516
29144995, 29145214, 29145730, 29146077, 29146157, 29146810, 29147849
29148799, 29149170, 29149829, 29150338, 29151520, 29152357, 29152603
29152752, 29154057, 29154631, 29154636, 29154725, 29154829, 29155099
29155208, 29157051, 29157389, 29158139, 29158680, 29158899, 29158990
29159216, 29159661, 29159909, 29159936, 29160174, 29160462, 29160824
29161597, 29161923, 29162095, 29162749, 29163073, 29163156, 29163415
29163437, 29163524, 29163567, 29164376, 29164446, 29165682, 29167111
29167342, 29167374, 29167940, 29168137, 29168219, 29168433, 29169073
29169215, 29169540, 29169739, 29170232, 29170717, 29171683, 29171942
29172618, 29172826, 29173140, 29173373, 29173618, 29173817, 29174004
29174753, 29175638, 29175765, 29175829, 29176318, 29177466, 29177543
29177886, 29178385, 29179097, 29180313, 29180455, 29180559, 29180721
29180893, 29181078, 29181153, 29181231, 29181568, 29181620, 29181743
29181923, 29182019, 29182517, 29182535, 29182901, 29182920, 29183298
29183912, 29184297, 29184666, 29185193, 29186091, 29186456, 29186605
29188255, 29189302, 29189307, 29189889, 29190235, 29190474, 29190663
29190740, 29191541, 29191827, 29192419, 29192468, 29192685, 29193207
29193681, 29194205, 29194367, 29194493, 29194827, 29194981, 29195279
29195337, 29195758, 29196151, 29196725, 29198092, 29198913, 29199163
29199635, 29199733, 29200316, 29200700, 29201143, 29201494, 29201539
29201695, 29201787, 29202104, 29202461, 29202850, 29203041, 29203122
29203166, 29203227, 29203425, 29203443, 29203604, 29205281, 29205323
29205419, 29205463, 29205767, 29205918, 29206109, 29206605, 29206631
29207073, 29208260, 29208732, 29209545, 29210455, 29210577, 29210610
29210624, 29210683, 29211457, 29211724, 29211895, 29212012, 29212433
29212611, 29213320, 29213351, 29213613, 29213641, 29213775, 29213850
29213879, 29213893, 29214561, 29214960, 29215658, 29216312, 29216723
29216746, 29216984, 29217294, 29217472, 29217828, 29217848, 29217856
29218570, 29219205, 29219273, 29219627, 29220079, 29221248, 29221745
29221891, 29221942, 29222031, 29222534, 29222784, 29222892, 29223110
29223833, 29223859, 29223967, 29224065, 29224294, 29224605, 29224710
29225076, 29225168, 29225758, 29225861, 29227602, 29228869, 29229164
29229754, 29229839, 29229844, 29229955, 29230252, 29230565, 29231133
29232117, 29232154, 29232449, 29232533, 29232653, 29233415, 29233810

29233953, 29234123, 29235934, 29236573, 29237538, 29237575, 29237744
29240307, 29240668, 29240759, 29241345, 29241651, 29242017, 29242561
29242884, 29242906, 29243749, 29243958, 29244495, 29244766, 29244968
29245063, 29245137, 29245160, 29246163, 29246337, 29247183, 29247415
29247712, 29247906, 29248012, 29248495, 29248552, 29248723, 29248835
29248858, 29249289, 29249412, 29249583, 29249991, 29250059, 29250317
29251259, 29251564, 29252218, 29252510, 29252790, 29253184, 29253871
29254031, 29254177, 29254623, 29254930, 29255178, 29255273, 29255431
29255435, 29255616, 29255705, 29255718, 29255973, 29256279, 29256426
29259119, 29259320, 29260224, 29260407, 29260452, 29260956, 29261547
29261548, 29261695, 29261906, 29262143, 29262512, 29262887, 29265446
29265448, 29265780, 29266248, 29266899, 29267292, 29268412, 29269171
29269228, 29269825, 29270585, 29271019, 29273168, 29273360, 29273539
29273570, 29273735, 29273812, 29273847, 29274428, 29274564, 29274623
29274627, 29275461, 29276272, 29277317, 29278218, 29278684, 29279658
29279751, 29279854, 29281112, 29281527, 29281691, 29281796, 29282090
29282233, 29282666, 29282898, 29285197, 29285453, 29285503, 29285621
29285788, 29285956, 29286037, 29286220, 29286229, 29287130, 29287705
29290110, 29290235, 29292232, 29292253, 29292378, 29292837, 29293072
29293574, 29293806, 29294382, 29294753, 29296257, 29297863, 29297915
29298220, 29299049, 29299082, 29299830, 29299844, 29301139, 29301463
29301566, 29302565, 29302614, 29302963, 29303712, 29303918, 29304314
29304640, 29304692, 29304781, 29304853, 29305093, 29306226, 29306478
29306713, 29306790, 29307090, 29307109, 29307638, 29309698, 29311336
29311528, 29311588, 29311927, 29312310, 29312672, 29312734, 29312753
29312889, 29313347, 29313417, 29313525, 29314539, 29314636, 29314867
29314949, 29317756, 29318410, 29319441, 29319558, 29320900, 29321489
29321689, 29323946, 29323999, 29324568, 29324735, 29325087, 29325105
29325257, 29325356, 29325497, 29325765, 29325993, 29326233, 29327044
29327892, 29327972, 29328305, 29329042, 29329087, 29329675, 29329807
29329848, 29330361, 29330791, 29331066, 29331209, 29331380, 29331493
29332292, 29332395, 29332763, 29332771, 29332966, 29333500, 29336843
29336899, 29337294, 29337310, 29337742, 29338315, 29338348, 29338453
29338780, 29338913, 29339101, 29339155, 29339299, 29339452, 29340333
29341209, 29341782, 29342099, 29343086, 29343156, 29343861, 29344541
29345382, 29345937, 29346057, 29346138, 29346211, 29346943, 29347620
29348176, 29348358, 29350052, 29350712, 29350762, 29350868, 29351044
29351386, 29351662, 29351708, 29351716, 29351735, 29351749, 29351771
29351786, 29352298, 29352724, 29352867, 29352947, 29353271, 29353389
29353432, 29353718, 29353821, 29353960, 29355654, 29355913, 29356547
29356634, 29356698, 29356704, 29356711, 29356752, 29356782, 29357424
29357821, 29358509, 29358828, 29360252, 29360285, 29360467, 29360672
29360775, 29360911, 29360950, 29361319, 29361472, 29361801, 29362596
29363090, 29363151, 29364171, 29364177, 29366406, 29366818, 29366940

29367019, 29367561, 29367971, 29368253, 29368310, 29368725, 29372069
29372541, 29372562, 29373418, 29373588, 29374179, 29374604, 29374627
29375355, 29375941, 29375984, 29376346, 29377804, 29377986, 29378029
29378287, 29378834, 29378913, 29379299, 29379381, 29379552, 29379750
29379978, 29380527, 29381000, 29382296, 29382641, 29382784, 29382815
29383695, 29384740, 29384781, 29384854, 29384864, 29384960, 29385339
29385429, 29385652, 29385774, 29386125, 29386502, 29386557, 29386635
29386660, 29386835, 29387073, 29387274, 29387310, 29387329, 29387337
29388020, 29388072, 29388094, 29388524, 29388830, 29389408, 29389889
29390011, 29390435, 29390501, 29390785, 29391030, 29391237, 29391301
29391438, 29391849, 29391925, 29392554, 29392966, 29393291, 29393649
29394014, 29394140, 29394749, 29394761, 29395657, 29396481, 29397841
29397954, 29397996, 29398192, 29398488, 29398863, 29399046, 29399100
29399121, 29399336, 29399938, 29399959, 29402110, 29402131, 29403307
29404425, 29404483, 29405012, 29405462, 29405651, 29405996, 29407488
29407637, 29407804, 29407932, 29408853, 29409149, 29409455, 29410311
29410834, 29411037, 29411427, 29411469, 29411931, 29412066, 29412269
29413205, 29413360, 29413382, 29413517, 29413544, 29413634, 29413956
29415493, 29415774, 29416339, 29416688, 29416700, 29417084, 29417113
29417173, 29417719, 29417884, 29418165, 29418341, 29420254, 29420834
29421059, 29423003, 29423016, 29423156, 29423227, 29423491, 29423826
29424094, 29424999, 29426241, 29426320, 29426521, 29428230, 29429017
29429087, 29429264, 29429336, 29429466, 29429566, 29429895, 29430524
29430866, 29431192, 29431402, 29431485, 29431985, 29432176, 29434301
29434777, 29434869, 29435474, 29435652, 29435966, 29436454, 29436514
29436522, 29436727, 29437029, 29437379, 29437594, 29437712, 29438150
29438277, 29438736, 29439522, 29440651, 29441196, 29442400, 29442936
29443187, 29443250, 29443559, 29444072, 29444275, 29444282, 29444524
29444602, 29444906, 29445548, 29445707, 29446319, 29446669, 29447460
29448498, 29449477, 29449845, 29449852, 29450162, 29450193, 29450273
29450421, 29450812, 29450936, 29451085, 29451224, 29451386, 29451660
29452251, 29452576, 29452736, 29452739, 29452809, 29452813, 29452864
29452936, 29452953, 29452977, 29453104, 29453105, 29453109, 29453681
29453682, 29454450, 29454467, 29454468, 29454469, 29454470, 29454471
29454978, 29455424, 29455773, 29456538, 29456714, 29457312, 29457319
29457370, 29457502, 29457807, 29457978, 29458132, 29460252, 29461420
29461791, 29461971, 29462594, 29462767, 29462957, 29463047, 29463528
29463553, 29463798, 29464616, 29464779, 29465047, 29465177, 29466674
29466707, 29467622, 29469563, 29469565, 29470059, 29470205, 29470291
29470636, 29470814, 29470880, 29471633, 29471832, 29471857, 29471860
29472170, 29472172, 29472176, 29472204, 29472235, 29472319, 29472402
29472404, 29472405, 29472408, 29472411, 29472446, 29472618, 29473708
29474348, 29475386, 29476473, 29476702, 29477015, 29481584, 29482021
29483452, 29483532, 29483626, 29483672, 29483685, 29483712, 29483723

29483771, 29485099, 29485731, 29485877, 29486181, 29486848, 29487150
29487189, 29487407, 29488894, 29488996, 29489436, 29489546, 29490032
29490256, 29491784, 29492127, 29492939, 29493122, 29493821, 29494101
29494245, 29494788, 29494934, 29495057, 29495171, 29495684, 29496977
29497053, 29497311, 29497588, 29497696, 29497778, 29498198, 29499077
29500257, 29500826, 29500963, 29501218, 29502561, 29503543, 29503631
29503827, 29504103, 29504492, 29504682, 29505225, 29505589, 29505668
29506942, 29507270, 29507616, 29508681, 29508751, 29508998, 29509777
29510278, 29511064, 29511611, 29511771, 29511980, 29512125, 29512773
29512890, 29514284, 29514479, 29515134, 29515240, 29515476, 29515534
29515766, 29515834, 29516300, 29516727, 29516766, 29516943, 29517168
29517443, 29517883, 29518604, 29518767, 29519131, 29521187, 29521688
29521748, 29521862, 29522358, 29522561, 29522662, 29523055, 29523216
29523511, 29524043, 29524599, 29524985, 29525366, 29525467, 29525886
29526966, 29527595, 29527610, 29528184, 29528368, 29529147, 29529436
29530414, 29530440, 29530515, 29530812, 29530909, 29531654, 29531836
29532112, 29532532, 29534218, 29536342, 29536445, 29536794, 29537829
29538631, 29539027, 29539413, 29540327, 29540831, 29540862, 29541517
29541742, 29541769, 29541973, 29542084, 29542449, 29542474, 29542580
29542643, 29543034, 29543956, 29544552, 29546817, 29547010, 29547867
29548413, 29548427, 29548592, 29548687, 29548722, 29549040, 29549071
29549104, 29549154, 29549730, 29550530, 29552402, 29552773, 29553141
29554092, 29554351, 29554554, 29554997, 29555105, 29555239, 29557144
29557261, 29557336, 29557556, 29558238, 29558452, 29558926, 29558975
29559187, 29559395, 29559446, 29559908, 29559981, 29560019, 29564592
29564593, 29565611, 29579919, 29580394, 29580983, 29581460, 29581771
29583018, 29584261, 29584693, 29586143, 29587299, 29587488, 29587720
29587765, 29588580, 29588732, 29589544, 29590666, 29591311, 29591343
29591641, 29591661, 29592011, 29592215, 29592433, 29592595, 29592946
29593820, 29597158, 29597536, 29597716, 29597754, 29598039, 29598040
29598046, 29598226, 29598233, 29598338, 29598981, 29599008, 29599243
29599300, 29599552, 29601461, 29602831, 29603460, 29603884, 29604002
29604257, 29606261, 29607136, 29607797, 29608000, 29608023, 29608888
29609434, 29609468, 29609603, 29610506, 29611020, 29611991, 29613733
29614206, 29614931, 29614987, 29615824, 29616244, 29616414, 29617414
29618074, 29618190, 29620042, 29620564, 29622936, 29623323, 29623592
29624124, 29624408, 29625065, 29625804, 29625827, 29625876, 29626154
29626732, 29628200, 29628647, 29629430, 29629650, 29629681, 29629745
29630221, 29631749, 29632095, 29632265, 29632611, 29632751, 29633697
29633753, 29633936, 29634643, 29635427, 29635717, 29635990, 29637362
29637526, 29637560, 29638285, 29638928, 29641373, 29641736, 29642451
29643721, 29644426, 29644464, 29645167, 29645349, 29647176, 29647770
29648928, 29649694, 29651183, 29651517, 29651520, 29652809, 29653132
29653246, 29655164, 29655416, 29655668, 29655855, 29655895, 29656400

29656819, 29656843, 29657399, 29657422, 29657744, 29657960, 29657973
29658056, 29661028, 29661065, 29661722, 29663191, 29663368, 29663494
29663601, 29663813, 29664087, 29664161, 29665168, 29665940, 29666451
29667527, 29667994, 29668005, 29668253, 29669241, 29669413, 29670713
29670782, 29671363, 29672507, 29675446, 29676089, 29676921, 29677051
29677173, 29677733, 29677927, 29678217, 29679856, 29680700, 29681987
29683039, 29683189, 29683211, 29684518, 29685137, 29685276, 29687214
29687220, 29687459, 29687718, 29687727, 29687763, 29688867, 29689145
29689255, 29690795, 29690806, 29692115, 29692694, 29693847, 29694869
29695425, 29695821, 29695841, 29695964, 29695987, 29696242, 29696310
29697928, 29700125, 29700460, 29700770, 29701425, 29701720, 29701755
29701937, 29703932, 29704426, 29705793, 29706141, 29706160, 29707099
29707493, 29707896, 29708324, 29708353, 29708876, 29708915, 29710188
29710858, 29713810, 29715220, 29715647, 29715703, 29716029, 29716194
29716227, 29716491, 29716602, 29716871, 29717659, 29717901, 29718198
29719146, 29720133, 29720373, 29721418, 29721576, 29722026, 29722092
29722167, 29722389, 29723113, 29724497, 29724658, 29725115, 29725421
29725425, 29725476, 29725781, 29726695, 29737941, 29738374, 29738400
29739576, 29741319, 29741976, 29742223, 29742926, 29743448, 29744225
29744400, 29744637, 29745288, 29745624, 29746003, 29746962, 29747493
29747648, 29747653, 29748285, 29748325, 29748336, 29748513, 29749469
29749471, 29750673, 29751094, 29753244, 29754196, 29754640, 29754951
29755821, 29756274, 29756444, 29757099, 29757264, 29757651, 29757687
29758203, 29758217, 29758661, 29761678, 29761837, 29761911, 29763158
29764644, 29765035, 29765219, 29765347, 29765393, 29765493, 29766207
29766435, 29766503, 29766679, 29768487, 29768899, 29769549, 29769695
29769901, 29770750, 29771032, 29771242, 29772514, 29772761, 29773185
29773197, 29773205, 29773459, 29773633, 29773842, 29774362, 29775393
29775473, 29779196, 29779368, 29779793, 29779901, 29780140, 29780459
29780507, 29780633, 29782211, 29782284, 29782501, 29782823, 29782866
29783142, 29784106, 29785169, 29785239, 29785251, 29785311, 29785544
29785550, 29785831, 29787292, 29787766, 29788820, 29789911, 29791152
29791880, 29791916, 29792213, 29792433, 29793141, 29793151, 29793318
29794174, 29794462, 29795712, 29795957, 29796335, 29796378, 29796916
29797209, 29797726, 29801164, 29802382, 29802695, 29803593, 29803948
29804875, 29805368, 29805772, 29806390, 29806964, 29807964, 29809792
29809837, 29810012, 29810013, 29811616, 29811720, 29812084, 29812166
29812489, 29813503, 29813650, 29813671, 29814455, 29814995, 29815341
29815713, 29816887, 29817278, 29817547, 29817784, 29818794, 29819753
29820341, 29821130, 29821582, 29822714, 29825525, 29827647, 29827792
29827852, 29828644, 29829339, 29829453, 29830374, 29831196, 29831404
29831567, 29833406, 29833984, 29834506, 29836096, 29836424, 29838337
29838485, 29838740, 29838773, 29839481, 29839715, 29840619, 29841267
29841687, 29842369, 29843238, 29843277, 29843692, 29843831, 29844131

29844226, 29844275, 29845449, 29845530, 29845691, 29846126, 29846525
29846645, 29846688, 29847627, 29848084, 29848849, 29849100, 29849139
29850083, 29850552, 29850566, 29850930, 29851020, 29851308, 29851401
29851474, 29851733, 29853485, 29856420, 29856506, 29856859, 29856890
29858121, 29858376, 29858420, 29858929, 29859068, 29860022, 29860028
29860994, 29861075, 29864203, 29864261, 29865188, 29865590, 29865658
29867728, 29868639, 29868736, 29869052, 29869086, 29869149, 29869404
29869857, 29869877, 29869887, 29869906, 29870065, 29870533, 29871098
29871312, 29871360, 29872401, 29872720, 29872937, 29872983, 29873206
29873665, 29873751, 29874090, 29874761, 29875200, 29875459, 29875565
29875919, 29876358, 29876989, 29877608, 29878076, 29879723, 29881050
29881478, 29881575, 29881643, 29881839, 29882427, 29882454, 29882729
29884958, 29885182, 29885781, 29885890, 29886809, 29887045, 29887111
29887840, 29888621, 29889184, 29889358, 29890740, 29891075, 29891383
29891533, 29891853, 29891857, 29891916, 29892388, 29892604, 29892634
29892973, 29892982, 29893132, 29893197, 29893287, 29894021, 29896510
29897418, 29897720, 29897863, 29899384, 29900186, 29900203, 29900824
29901021, 29901025, 29901419, 29901961, 29902299, 29902327, 29902330
29902659, 29903190, 29903299, 29903357, 29903454, 29904002, 29906678
29907870, 29907942, 29908389, 29908639, 29908777, 29909658, 29910218
29910402, 29912135, 29912286, 29913805, 29913934, 29913966, 29914449
29914544, 29915182, 29915217, 29915848, 29916198, 29916975, 29919782
29919789, 29920025, 29920376, 29920804, 29921214, 29921318, 29921559
29922225, 29922435, 29922461, 29923452, 29924147, 29924181, 29924479
29925177, 29926466, 29927360, 29927756, 29928040, 29928210, 29928340
29928427, 29928564, 29930457, 29931230, 29931956, 29932202, 29932310
29932430, 29932780, 29932953, 29933718, 29934048, 29934052, 29934158
29934557, 29935685, 29936841, 29937565, 29937655, 29937956, 29938063
29938225, 29939075, 29939400, 29939795, 29940373, 29941062, 29942096
29942275, 29942554, 29943670, 29943879, 29944035, 29944159, 29944660
29944963, 29945645, 29946101, 29946388, 29947145, 29947242, 29947428
29948154, 29948165, 29950018, 29950220, 29951620, 29951759, 29952700
29955625, 29956016, 29956222, 29957412, 29957493, 29958925, 29960325
29960884, 29961353, 29961360, 29961609, 29961847, 29962160, 29962248
29962590, 29962834, 29962927, 29962939, 29965052, 29965207, 29965603
29965888, 29966768, 29966778, 29967223, 29967386, 29967911, 29967980
29968085, 29968703, 29969557, 29969985, 29970081, 29970261, 29970273
29970298, 29970587, 29970861, 29971027, 29971481, 29971888, 29971936
29971951, 29972134, 29972176, 29973012, 29989783, 29989845, 29990779
29991257, 29992299, 29993717, 29997326, 29997553, 29997937, 29997959
30000518, 30000664, 30001105, 30001331, 30003187, 30003356, 30004660
30004856, 30006159, 30006280, 30006411, 30006472, 30006705, 30006985
30007450, 30007536, 30007797, 30008035, 30008125, 30008198, 30008214
30008456, 30009528, 30009710, 30010995, 30012181, 30012235, 30012737

30013243, 30013535, 30014200, 30015070, 30017836, 30018017, 30018126
30018903, 30019864, 30021830, 30024618, 30025814, 30026016, 30026596
30027614, 30027638, 30027649, 30028182, 30028599, 30028649, 30029519
30029806, 30031027, 30031613, 30032233, 30032376, 30032484, 30033040
30033547, 30034456, 30035444, 30035598, 30036258, 30038392, 30038576
30039796, 30039800, 30039959, 30040157, 30040511, 30041501, 30041514
30042490, 30043398, 30043610, 30043930, 30044108, 30044507, 30045242
30045273, 30045389, 30045484, 30045983, 30046497, 30047510, 30047531
30047702, 30047765, 30047931, 30048688, 30049966, 30051176, 30051783
30051804, 30052740, 30052928, 30053036, 30053501, 30053748, 30054980
30055640, 30056058, 30057718, 30057799, 30058149, 30058453, 30059106
30059109, 30059821, 30060267, 30060330, 30062364, 30062429, 30062736
30062819, 30064268, 30066352, 30067565, 30068101, 30068384, 30068792
30068871, 30070064, 30070506, 30071446, 30072018, 30072038, 30072905
30073314, 30073422, 30073744, 30074250, 30074296, 30074349, 30074469
30074472, 30074820, 30075037, 30076058, 30076197, 30076253, 30076604
30078675, 30078934, 30079495, 30079949, 30080111, 30080266, 30080297
30080988, 30081055, 30081546, 30081580, 30082145, 30082402, 30083100
30083216, 30083488, 30083807, 30084458, 30084606, 30084971, 30085897
30086596, 30086992, 30087165, 30087509, 30088229, 30088421, 30090568
30092254, 30092280, 30092859, 30094929, 30094948, 30095499, 30095591
30095952, 30096138, 30096570, 30097092, 30097115, 30098251, 30098719
30099302, 30099420, 30099454, 30099852, 30100354, 30101090, 30101186
30101541, 30101847, 30102774, 30103551, 30103553, 30104348, 30104378
30104555, 30104722, 30104850, 30105458, 30106748, 30106901, 30108012
30109365, 30109839, 30110224, 30110370, 30110518, 30114477, 30114489
30114534, 30116085, 30116203, 30116753, 30116854, 30117209, 30117220
30117335, 30117469, 30117593, 30118261, 30118279, 30120608, 30121009
30122523, 30122583, 30123138, 30124026, 30125765, 30126145, 30126470
30127145, 30127522, 30127805, 30127904, 30128047, 30128231, 30130240
30131253, 30131286, 30131645, 30132708, 30132989, 30133841, 30134103
30134746, 30135396, 30135731, 30135899, 30135942, 30136102, 30136346
30137792, 30138600, 30138948, 30139392, 30140425, 30141240, 30142527
30142802, 30142812, 30142815, 30142907, 30143470, 30143593, 30145712
30146593, 30146969, 30147195, 30147307, 30147308, 30147473, 30147928
30148343, 30148929, 30148966, 30148999, 30149035, 30149658, 30150606
30150710, 30151636, 30153533, 30153552, 30153885, 30154633, 30155241
30155320, 30155388, 30155489, 30155814, 30155837, 30155999, 30156569
30157526, 30158313, 30159329, 30159488, 30159511, 30159536, 30159690
30159752, 30159760, 30160025, 30160625, 30161094, 30163243, 30164238
30164714, 30165493, 30165503, 30165876, 30165892, 30165897, 30166257
30166352, 30167787, 30169254, 30169841, 30170104, 30172925, 30173113
30173370, 30173556, 30174102, 30174394, 30174401, 30175180, 30175291
30175478, 30175587, 30177597, 30178250, 30178839, 30178990, 30179012

30179038, 30179644, 30179894, 30180195, 30180208, 30180643, 30181756
30182498, 30183367, 30183696, 30183715, 30183920, 30184102, 30185852
30186319, 30186476, 30186706, 30187627, 30187866, 30188215, 30188631
30189516, 30189535, 30190090, 30191274, 30192691, 30192729, 30192853
30193165, 30193262, 30193505, 30193506, 30193584, 30193736, 30194612
30194710, 30194972, 30195667, 30195668, 30195684, 30195773, 30196195
30196358, 30196629, 30198239, 30198598, 30198861, 30198905, 30199890
30200034, 30200132, 30200237, 30200680, 30200758, 30202349, 30202388
30202407, 30203929, 30204042, 30204542, 30206220, 30206493, 30206675
30207473, 30207519, 30208327, 30208690, 30208723, 30209222, 30209736
30210027, 30210429, 30210753, 30210884, 30211567, 30213031, 30213540
30213590, 30214769, 30214826, 30215130, 30215302, 30215351, 30217206
30217562, 30217982, 30218044, 30218317, 30218956, 30219222, 30220932
30221115, 30221237, 30221298, 30222187, 30222512, 30222669, 30222975
30223712, 30223847, 30223990, 30224544, 30224650, 30224725, 30224868
30224950, 30225265, 30225439, 30225443, 30225718, 30225837, 30225844
30226244, 30227400, 30228422, 30228567, 30229030, 30229126, 30229683
30230183, 30232638, 30233105, 30233536, 30233934, 30234132, 30234227
30235878, 30235919, 30235979, 30236092, 30236399, 30236554, 30236746
30236883, 30236964, 30237477, 30237640, 30238211, 30238715, 30239480
30240010, 30240547, 30240858, 30240930, 30240972, 30241567, 30241807
30241829, 30241920, 30242120, 30242724, 30243216, 30243720, 30244340
30244831, 30246053, 30246179, 30247305, 30248520, 30248531, 30248564
30249432, 30249738, 30249927, 30251003, 30251130, 30252005, 30252098
30252156, 30252458, 30252977, 30253035, 30253090, 30253608, 30253705
30253761, 30253835, 30254206, 30254525, 30254576, 30254726, 30255143
30255528, 30256542, 30257412, 30257908, 30259120, 30259469, 30260523
30260595, 30261244, 30262248, 30263013, 30263377, 30264405, 30265523
30265608, 30265615, 30265703, 30266791, 30267155, 30269428, 30269748
30270647, 30270744, 30271114, 30272329, 30273212, 30274090, 30274188
30274324, 30274662, 30275434, 30275548, 30275569, 30275578, 30275784
30276144, 30276243, 30277120, 30277451, 30277589, 30277648, 30277733
30277884, 30277887, 30278402, 30281428, 30281615, 30282501, 30282591
30282918, 30283296, 30283577, 30283579, 30283581, 30283832, 30283932
30284219, 30284369, 30284751, 30285026, 30285166, 30285251, 30285341
30285457, 30285540, 30285843, 30286961, 30288343, 30288491, 30289074
30289458, 30290700, 30291536, 30292305, 30293345, 30293935, 30294267
30294465, 30294671, 30294865, 30295110, 30295137, 30295549, 30295790
30295808, 30297905, 30299367, 30299817, 30299934, 30300030, 30300342
30300363, 30300523, 30300538, 30304037, 30305163, 30305264, 30305395
30305568, 30305603, 30305880, 30306407, 30307814, 30307883, 30308368
30308578, 30308624, 30308772, 30308947, 30309098, 30309798, 30310195
30311826, 30312094, 30312546, 30313749, 30313848, 30313989, 30314079
30314198, 30314837, 30316667, 30316897, 30317005, 30317209, 30317386

30317397, 30318638, 30318943, 30319080, 30319099, 30320029, 30321076
30321398, 30322980, 30323219, 30323658, 30323820, 30323849, 30324059
30324180, 30324466, 30324649, 30325407, 30325786, 30326115, 30326882
30327149, 30327581, 30327678, 30327810, 30328168, 30328209, 30328690
30329209, 30329737, 30329751, 30330123, 30331254, 30331356, 30331759
30332505, 30332893, 30333443, 30334484, 30334563, 30335127, 30335832
30335987, 30336032, 30336383, 30336530, 30336742, 30336996, 30337245
30338434, 30338591, 30339049, 30339103, 30339605, 30340540, 30341713
30342371, 30342878, 30343370, 30343750, 30344614, 30345201, 30345432
30345593, 30345809, 30345926, 30345950, 30346330, 30346729, 30346847
30346867, 30347215, 30347410, 30349714, 30350177, 30350543, 30351059
30352278, 30352532, 30352581, 30352623, 30352715, 30354034, 30355490
30356060, 30356461, 30357463, 30357698, 30357897, 30358416, 30359614
30360383, 30360653, 30361070, 30361635, 30362003, 30362850, 30363088
30363193, 30363311, 30363658, 30363716, 30364329, 30364481, 30364613
30364835, 30365265, 30365745, 30367193, 30368048, 30368482, 30368534
30368668, 30368917, 30371264, 30371623, 30371909, 30372081, 30372782
30373419, 30373541, 30373550, 30374345, 30374570, 30374739, 30375109
30376986, 30377347, 30377692, 30377729, 30379468, 30379537, 30380511
30380907, 30381207, 30381525, 30381614, 30382364, 30382646, 30382982
30383286, 30384121, 30384152, 30387628, 30387666, 30388341, 30388853
30389229, 30389414, 30389507, 30389821, 30390279, 30390382, 30390635
30391272, 30391794, 30392011, 30392870, 30392987, 30393110, 30393317
30393653, 30393944, 30394509, 30394738, 30394974, 30395132, 30396120
30396946, 30396974, 30397100, 30398099, 30398251, 30398257, 30398422
30398770, 30399906, 30402386, 30403284, 30403412, 30403763, 30403877
30403881, 30403902, 30403989, 30404117, 30404153, 30404357, 30404639
30406227, 30406709, 30408128, 30408443, 30408515, 30408808, 30408872
30409207, 30409339, 30409469, 30409472, 30409590, 30412188, 30412772
30412863, 30412885, 30412921, 30413137, 30413294, 30414491, 30414679
30414714, 30414725, 30416034, 30416603, 30417648, 30417732, 30418926
30419024, 30419196, 30419450, 30420105, 30420452, 30421009, 30421026
30421204, 30421439, 30421476, 30421706, 30422487, 30423135, 30423218
30424347, 30430921, 30431235, 30431274, 30431504, 30431582, 30431698
30431703, 30431717, 30431867, 30432101, 30432470, 30433177, 30434793
30436326, 30436399, 30436406, 30437003, 30437149, 30438224, 30439985
30440651, 30440712, 30441277, 30441687, 30441959, 30442266, 30442749
30442805, 30442874, 30442884, 30443393, 30446436, 30446583, 30446820
30447060, 30447498, 30447589, 30447994, 30448182, 30448348, 30448355
30448917, 30449194, 30449837, 30450787, 30453442, 30454090, 30455427
30457633, 30457697, 30458080, 30458233, 30458568, 30458593, 30460095
30460558, 30460842, 30460922, 30461123, 30461458, 30462439, 30463938
30464250, 30464655, 30466081, 30466214, 30469579, 30469777, 30470402
30470495, 30470947, 30472891, 30473634, 30474167, 30474386, 30474497

30474774, 30475041, 30475115, 30475813, 30476768, 30477588, 30477685
30477691, 30477767, 30479252, 30479647, 30479715, 30480591, 30480872
30481004, 30483065, 30483140, 30483217, 30483521, 30484042, 30484623
30484801, 30485255, 30486436, 30486896, 30487387, 30487697, 30489582
30490014, 30490578, 30490671, 30491456, 30492380, 30492786, 30493331
30493518, 30493656, 30494087, 30494259, 30494900, 30495035, 30495078
30495133, 30495483, 30496957, 30497057, 30497120, 30497765, 30498824
30500224, 30500297, 30500344, 30500582, 30501574, 30502415, 30503943
30505029, 30505497, 30506794, 30506991, 30506996, 30507032, 30507313
30508100, 30509112, 30509277, 30510347, 30510527, 30510718, 30512690
30513285, 30513353, 30513480, 30513848, 30515886, 30516868, 30517214
30517516, 30517635, 30518114, 30518349, 30518447, 30518923, 30519188
30520662, 30521788, 30522285, 30522998, 30523137, 30523538, 30523601
30523750, 30524736, 30527198, 30527275, 30528547, 30528637, 30528687
30528704, 30528731, 30528935, 30529790, 30529915, 30529940, 30530585
30532811, 30533132, 30533580, 30534351, 30534549, 30534662, 30534827
30535905, 30536237, 30537403, 30537405, 30537533, 30537584, 30538141
30538818, 30539519, 30539866, 30540109, 30540407, 30544247, 30544595
30544629, 30544752, 30545040, 30545281, 30545556, 30549223, 30549255
30549368, 30549637, 30549789, 30549881, 30549883, 30551000, 30551123
30554178, 30556326, 30556523, 30556581, 30556807, 30557386, 30557803
30558561, 30559129, 30559218, 30559252, 30560365, 30560513, 30561404
30561590, 30561737, 30564139, 30564343, 30564898, 30565004, 30565595
30565699, 30565805, 30566054, 30567372, 30568514, 30568896, 30570083
30571306, 30572816, 30573236, 30573703, 30575243, 30575697, 30576112
30576393, 30576853, 30577071, 30577591, 30578221, 30579051, 30580813
30580887, 30581448, 30582035, 30582221, 30582500, 30584767, 30585141
30585407, 30586493, 30587001, 30588738, 30589914, 30591028, 30591475
30592859, 30593046, 30593104, 30593863, 30593899, 30594167, 30595114
30595408, 30595860, 30596024, 30596320, 30596488, 30596694, 30598682
30598746, 30598919, 30599377, 30599405, 30599407, 30600173, 30600184
30600230, 30602230, 30602828, 30603211, 30605215, 30605676, 30606345
30606451, 30608583, 30609737, 30609799, 30610052, 30610097, 30610406
30610667, 30611527, 30611603, 30612199, 30613035, 30613937, 30613971
30614411, 30614497, 30616406, 30616738, 30616776, 30617002, 30617626
30618056, 30618230, 30618406, 30619112, 30619138, 30619383, 30619414
30619525, 30619665, 30619728, 30619787, 30620805, 30621255, 30621910
30622393, 30622528, 30622755, 30623138, 30623142, 30624243, 30624792
30624864, 30624874, 30625121, 30626046, 30628834, 30628899, 30629139
30629643, 30629799, 30630391, 30630829, 30630930, 30631393, 30631523
30633259, 30633395, 30633938, 30634026, 30634548, 30634559, 30635183
30635302, 30635326, 30635360, 30637270, 30637319, 30637841, 30638712
30639996, 30640436, 30641541, 30641755, 30641900, 30642124, 30644358
30644530, 30644766, 30644889, 30645590, 30645896, 30645938, 30646077

30647133, 30649310, 30649766, 30650297, 30650404, 30651231, 30651570
30651621, 30651674, 30652515, 30652595, 30652813, 30652853, 30654131
30654558, 30655504, 30655906, 30656839, 30657196, 30657365, 30657566
30657624, 30657706, 30657875, 30657906, 30657940, 30658421, 30658533
30658555, 30658702, 30659940, 30660412, 30661000, 30661939, 30662634
30662651, 30662736, 30662803, 30663591, 30663646, 30664266, 30665036
30665399, 30665720, 30666902, 30668407, 30668754, 30670096, 30670328
30670369, 30670584, 30671606, 30671720, 30671813, 30671958, 30674373
30674959, 30675651, 30676209, 30677633, 30679595, 30679707, 30679771
30679804, 30681085, 30681222, 30681462, 30681516, 30681521, 30681697
30682289, 30684902, 30685163, 30686017, 30686131, 30686809, 30687047
30689557, 30689988, 30690686, 30691604, 30691731, 30691857, 30692462
30692473, 30692760, 30693791, 30694947, 30695670, 30696566, 30696821
30698289, 30699770, 30702732, 30703610, 30704826, 30705448, 30706073
30707740, 30708735, 30710088, 30710506, 30710783, 30710807, 30710917
30711370, 30711386, 30712670, 30713133, 30714151, 30714715, 30716001
30716863, 30718841, 30718862, 30719327, 30719419, 30720736, 30720844
30722105, 30722705, 30723671, 30724679, 30724881, 30726204, 30727629
30727701, 30727759, 30728196, 30729278, 30729604, 30729839, 30730026
30732711, 30733270, 30733563, 30734242, 30734362, 30734707, 30735091
30735153, 30735624, 30735736, 30736718, 30737970, 30739013, 30739876
30740115, 30740250, 30740440, 30740444, 30740669, 30740997, 30741263
30747820, 30748411, 30748707, 30749181, 30749644, 30749722, 30750219
30750991, 30751171, 30751521, 30751527, 30751639, 30751968, 30753432
30755348, 30758836, 30758854, 30758943, 30759573, 30760739, 30761871
30761878, 30763272, 30763305, 30763639, 30763754, 30763970, 30764405
30764663, 30764706, 30764976, 30765486, 30765995, 30767277, 30767654
30768636, 30769312, 30769454, 30770717, 30771009, 30772069, 30773164
30773696, 30773797, 30776416, 30776676, 30776929, 30777519, 30777759
30778855, 30779240, 30781032, 30781041, 30781461, 30781970, 30782266
30782300, 30782414, 30783395, 30783551, 30785101, 30786237, 30786641
30786655, 30787365, 30788973, 30789427, 30789904, 30790047, 30790441
30796980, 30801050, 30801296, 30801510, 30803210, 30804646, 30806757
30806984, 30807723, 30807888, 30808109, 30808364, 30808869, 30809087
30809267, 30810418, 30810680, 30810765, 30812574, 30814266, 30814285
30815204, 30815269, 30815495, 30815852, 30815994, 30816760, 30816938
30819340, 30819629, 30819756, 30820155, 30821297, 30822207, 30822502
30822919, 30823744, 30825391, 30825419, 30825656, 30826474, 30827849
30828205, 30828350, 30829779, 30829844, 30830555, 30832466, 30832775
30833454, 30834068, 30834110, 30834705, 30835184, 30835219, 30835853
30836129, 30838605, 30839253, 30839315, 30839451, 30839836, 30839961
30840150, 30840791, 30840793, 30841241, 30842277, 30843271, 30844839
30845806, 30846063, 30846159, 30846263, 30846782, 30847442, 30847871
30848028, 30848097, 30848773, 30851448, 30851951, 30852945, 30852954

30855101, 30856358, 30856923, 30857501, 30857721, 30858444, 30858810
30858877, 30858919, 30860741, 30860768, 30860803, 30861988, 30862285
30863115, 30864607, 30865346, 30865805, 30866141, 30866988, 30867685
30868010, 30868186, 30869131, 30870043, 30870248, 30870439, 30870513
30871716, 30871792, 30873527, 30874084, 30874270, 30874337, 30874660
30876666, 30879169, 30879708, 30880774, 30880913, 30881161, 30881407
30883715, 30883785, 30883877, 30886188, 30887435, 30887501, 30887777
30887976, 30887989, 30889443, 30889607, 30889723, 30890720, 30890752
30890971, 30891760, 30891792, 30892319, 30893601, 30894554, 30895426
30895577, 30896615, 30896620, 30896685, 30898131, 30898366, 30898381
30898748, 30898939, 30901889, 30902655, 30903129, 30904672, 30905604
30906274, 30906407, 30909329, 30909596, 30909907, 30909918, 30910255
30910264, 30910267, 30913399, 30914272, 30914411, 30914674, 30915781
30917976, 30919403, 30919587, 30919691, 30919804, 30920082, 30920427
30921136, 30921259, 30922450, 30922936, 30922996, 30923514, 30923517
30923597, 30923732, 30923940, 30925316, 30925419, 30925828, 30927440
30927821, 30929206, 30930149, 30930339, 30931068, 30931311, 30931981
30932330, 30932674, 30932923, 30933117, 30936251, 30936831, 30936942
30937340, 30937391, 30937410, 30938413, 30939307, 30939317, 30939934
30940259, 30940382, 30940868, 30940869, 30941056, 30942353, 30944643
30945005, 30945772, 30946072, 30946141, 30946595, 30946768, 30946843
30946876, 30946896, 30947294, 30948278, 30950326, 30950786, 30952104
30952191, 30953157, 30953266, 30953836, 30954062, 30954071, 30955702
30956374, 30956571, 30956647, 30957739, 30958493, 30960314, 30960356
30960590, 30960736, 30961566, 30961824, 30963567, 30964194, 30965111
30965554, 30965649, 30966205, 30967084, 30968737, 30968781, 30970518
30972817, 30972841, 30972887, 30972947, 30972951, 30972959, 30972966
30973085, 30973113, 30973127, 30973137, 30973143, 30973197, 30973698
30973715, 30973877, 30974207, 30974813, 30976603, 30977294, 30977411
30978554, 30978747, 30978868, 30979701, 30980023, 30980115, 30980280
30980317, 30980733, 30981182, 30981240, 30983064, 30985027, 30985906
30986423, 30987088, 30987105, 30987243, 30987717, 30987724, 30988444
30989951, 30990034, 30992120, 30992330, 30992477, 30992597, 30992670
30993198, 30993518, 30993604, 30994996, 30996945, 30996991, 30997375
30997960, 30998035, 30998475, 30998662, 30998759, 30998847, 30999219
31000312, 31001017, 31001455, 31001490, 31001859, 31002223, 31002346
31002923, 31003137, 31003659, 31003759, 31004077, 31004719, 31004844
31004871, 31005003, 31006011, 31006259, 31006792, 31006953, 31008240
31008858, 31008907, 31009032, 31009271, 31009545, 31009590, 31009680
31010218, 31010554, 31010976, 31011361, 31011690, 31013127, 31013531
31014323, 31015330, 31016413, 31018218, 31019249, 31019407, 31021068
31021109, 31021157, 31021324, 31021542, 31021780, 31022858, 31025267
31025520, 31025531, 31025859, 31026220, 31026591, 31026860, 31026870
31027747, 31028883, 31028986, 31029936, 31030898, 31031240, 31031955

31032463, 31032725, 31032904, 31032913, 31034794, 31035287, 31035916
31037421, 31038220, 31038447, 31038817, 31039337, 31039618, 31039627
31039928, 31040847, 31041540, 31042208, 31042337, 31043483, 31043630
31043695, 31043747, 31044145, 31044460, 31044504, 31044951, 31045929
31046188, 31046619, 31046830, 31047022, 31047169, 31047333, 31047697
31047740, 31048025, 31048741, 31049215, 31049995, 31050103, 31050433
31050557, 31051056, 31051075, 31052735, 31052809, 31053669, 31054031
31054177, 31054874, 31055142, 31056909, 31057402, 31058548, 31061482
31061504, 31062010, 31062645, 31063315, 31063380, 31063769, 31064025
31065701, 31065838, 31066082, 31066250, 31066265, 31066554, 31067456
31067483, 31067892, 31067913, 31069059, 31069872, 31070528, 31071080
31073424, 31073440, 31073586, 31074032, 31075323, 31075960, 31077117
31077365, 31078391, 31078757, 31079204, 31080474, 31081558, 31082719
31082726, 31084778, 31084921, 31086467, 31086869, 31086954, 31087361
31087679, 31088115, 31088341, 31089259, 31089270, 31090262, 31091402
31091469, 31091868, 31092129, 31092233, 31092581, 31092921, 31093712
31094183, 31094228, 31094249, 31094374, 31094625, 31094688, 31095972
31096846, 31097760, 31097961, 31098661, 31098870, 31099312, 31099926
31099981, 31100172, 31101386, 31101840, 31103065, 31103804, 31104809
31105225, 31105733, 31105896, 31106140, 31106577, 31107577, 31108603
31108644, 31109506, 31109924, 31110021, 31110225, 31110887, 31112088
31112209, 31112530, 31112972, 31113089, 31113177, 31113249, 31113426
31113682, 31114116, 31114265, 31114671, 31115201, 31115502, 31115653
31117282, 31118486, 31118702, 31118809, 31118844, 31119057, 31119368
31119467, 31119846, 31120361, 31122876, 31123976, 31124213, 31124363
31124821, 31124914, 31125773, 31125849, 31125918, 31126053, 31126058
31127043, 31127457, 31127961, 31127968, 31127969, 31128086, 31129851
31130156, 31132732, 31133839, 31134430, 31137765, 31138106, 31138371
31139643, 31140940, 31141792, 31142377, 31142749, 31142815, 31143146
31143415, 31143870, 31145389, 31145403, 31145525, 31145804, 31146338
31146727, 31151483, 31153120, 31153485, 31154794, 31155085, 31155305
31155634, 31156301, 31156383, 31156767, 31156898, 31158151, 31158341
31158380, 31159382, 31161861, 31162457, 31162711, 31162915, 31163379
31163498, 31163534, 31165038, 31165577, 31165722, 31166083, 31166801
31168440, 31169366, 31170082, 31171096, 31171147, 31171631, 31171828
31172207, 31172233, 31172642, 31173887, 31174836, 31175365, 31176451
31176502, 31177193, 31177204, 31177221, 31178051, 31178058, 31178103
31180519, 31181375, 31181380, 31181989, 31182159, 31182451, 31182756
31182793, 31183413, 31184230, 31184370, 31185224, 31188038, 31188398
31189749, 31190624, 31191224, 31192039, 31192261, 31192739, 31193292
31193511, 31193695, 31193745, 31193936, 31194015, 31194049, 31194264
31195090, 31195430, 31195600, 31195838, 31196164, 31196272, 31196310
31196395, 31196812, 31197969, 31200057, 31200845, 31201001, 31201366
31201611, 31202536, 31204002, 31204412, 31204878, 31205834, 31206070

31206201, 31207446, 31208287, 31209735, 31211220, 31212282, 31213034
31214119, 31214928, 31215422, 31215438, 31215548, 31215854, 31216823
31216995, 31217946, 31218837, 31218904, 31219047, 31219975, 31220188
31220549, 31220837, 31220850, 31220881, 31220912, 31221454, 31222103
31222780, 31223382, 31224819, 31225538, 31226448, 31226534, 31228670
31230250, 31230775, 31233170, 31233235, 31234765, 31234790, 31234983
31235797, 31236624, 31240626, 31240864, 31242319, 31242976, 31243859
31244165, 31244968, 31245856, 31246583, 31247532, 31247838, 31248496
31249008, 31249406, 31249689, 31249696, 31250120, 31250152, 31250221
31251325, 31251489, 31252659, 31253451, 31254243, 31254297, 31254535
31254929, 31255369, 31255869, 31256383, 31257740, 31257826, 31258101
31258344, 31258697, 31258995, 31260692, 31261467, 31261641, 31262275
31262388, 31263980, 31265651, 31265773, 31266236, 31266779, 31268557
31270711, 31270847, 31271032, 31274074, 31279605, 31279670, 31281708
31282037, 31283557, 31287091, 31287296, 31287741, 31287871, 31289115
31290017, 31290300, 31290427, 31291986, 31292298, 31293484, 31293791
31293867, 31298871, 31301460, 31303032, 31303249, 31304573, 31304945
31304975, 31305114, 31305309, 31305624, 31306248, 31306261, 31306470
31306867, 31306927, 31307715, 31309379, 31309867, 31310564, 31310624
31311732, 31311830, 31312450, 31312976, 31313117, 31313177, 31313214
31313444, 31313812, 31314323, 31314885, 31315441, 31315495, 31315876
31315923, 31316250, 31317032, 31321092, 31322720, 31323383, 31323484
31324442, 31324507, 31325584, 31326320, 31326608, 31326977, 31326998
31327046, 31327259, 31327278, 31327349, 31327391, 31327896, 31331265
31331354, 31331372, 31333105, 31333156, 31334606, 31334961, 31335037
31335142, 31336298, 31336371, 31338249, 31338673, 31338686, 31338769
31339457, 31339643, 31339744, 31341138, 31341746, 31343110, 31344046
31344097, 31346493, 31348711, 31348922, 31349426, 31350348, 31352517
31353098, 31353610, 31354026, 31355339, 31356601, 31356954, 31357581
31357737, 31358308, 31358474, 31358511, 31359215, 31359366, 31360146
31360155, 31360214, 31360282, 31360314, 31360323, 31360469, 31360529
31362408, 31362692, 31364001, 31364383, 31366716, 31367188, 31367364
31368027, 31369444, 31370500, 31371071, 31372498, 31373825, 31373837
31373843, 31374283, 31374449, 31374738, 31375772, 31375865, 31376011
31376708, 31377129, 31377206, 31377487, 31377701, 31377808, 31377936
31380443, 31381174, 31381389, 31381701, 31382518, 31383049, 31383396
31383464, 31383814, 31384324, 31385668, 31386394, 31386696, 31387033
31387123, 31387426, 31387443, 31388201, 31388288, 31389006, 31390936
31390955, 31391991, 31393208, 31393600, 31393991, 31394341, 31394347
31394365, 31394544, 31395222, 31395247, 31396027, 31396609, 31396695
31396980, 31398505, 31398617, 31398663, 31398721, 31398761, 31399131
31399883, 31400754, 31401831, 31401919, 31402078, 31402598, 31403177
31403565, 31404014, 31404130, 31404263, 31404487, 31404550, 31405300
31405751, 31408636, 31408732, 31409483, 31409912, 31409964, 31410289

31410607, 31411163, 31412209, 31414023, 31414524, 31415324, 31416193
31416213, 31416250, 31417007, 31417192, 31417242, 31417336, 31417844
31417990, 31418442, 31419363, 31420295, 31420316, 31420320, 31420337
31421316, 31422440, 31422620, 31423645, 31424838, 31425167, 31425761
31425800, 31427345, 31429020, 31429501, 31429590, 31429692, 31429770
31429784, 31429809, 31429844, 31429971, 31430722, 31430735, 31430910
31431005, 31431326, 31431771, 31431964, 31431969, 31431971, 31431973
31431975, 31431986, 31432906, 31433092, 31433579, 31433749, 31434421
31434805, 31434870, 31434915, 31435163, 31435308, 31435735, 31437030
31437448, 31437886, 31439905, 31440252, 31440426, 31440813, 31441916
31441920, 31442332, 31442714, 31443030, 31444353, 31444516, 31445356
31446431, 31447733, 31448642, 31448680, 31449354, 31450392, 31450653
31450942, 31451019, 31453375, 31453585, 31454428, 31454972, 31454988
31455051, 31455597, 31456383, 31456857, 31457334, 31458049, 31458537
31458634, 31458739, 31459231, 31459242, 31459369, 31461990, 31462082
31462940, 31462969, 31463613, 31464165, 31465389, 31466433, 31468060
31468705, 31469001, 31469418, 31471119, 31471441, 31471589, 31471856
31472077, 31473148, 31474315, 31475085, 31475378, 31475635, 31476093
31476603, 31476701, 31476736, 31477424, 31477695, 31479072, 31479075
31479106, 31479272, 31479772, 31481750, 31481893, 31483466, 31483949
31484385, 31484603, 31485340, 31485386, 31485507, 31486061, 31486557
31487441, 31487491, 31487775, 31487826, 31487844, 31488085, 31488464
31489032, 31489137, 31489481, 31489590, 31489672, 31489731, 31489936
31490604, 31491634, 31492171, 31492191, 31492588, 31492655, 31492856
31493153, 31493840, 31494095, 31494132, 31494264, 31494420, 31494794
31495254, 31495297, 31495564, 31496174, 31497550, 31498559, 31499370
31499700, 31500699, 31500719, 31500971, 31501139, 31502301, 31503349
31503674, 31503688, 31503934, 31504723, 31505088, 31506095, 31507107
31507129, 31508229, 31508460, 31508712, 31509279, 31510891, 31510910
31511142, 31511519, 31511771, 31511940, 31512044, 31512262, 31513011
31515163, 31515869, 31515879, 31515911, 31515929, 31516164, 31516184
31516255, 31516265, 31517395, 31517417, 31517502, 31517652, 31518068
31518371, 31521504, 31521701, 31522560, 31522708, 31523548, 31523578
31523585, 31523620, 31523646, 31523728, 31523736, 31523836, 31525310
31525463, 31525609, 31525783, 31526250, 31526903, 31527103, 31527199
31527381, 31527726, 31528724, 31528738, 31528962, 31529594, 31529967
31530985, 31530995, 31531079, 31532084, 31532176, 31532308, 31532339
31533050, 31533113, 31533274, 31533799, 31533817, 31533833, 31534841
31535073, 31535516, 31535782, 31535870, 31535955, 31536401, 31536703
31536731, 31537521, 31537736, 31538274, 31538363, 31538891, 31539566
31541805, 31541864, 31541895, 31541905, 31542347, 31542356, 31542851
31542956, 31543810, 31544097, 31545400, 31545477, 31546864, 31547220
31547445, 31547480, 31548675, 31549221, 31549468, 31551142, 31552563
31552615, 31552738, 31552755, 31553289, 31553674, 31553813, 31553968

31554610, 31555126, 31555173, 31555346, 31555539, 31555800, 31556139
31556950, 31557160, 31557518, 31557663, 31558194, 31559079, 31559085
31559415, 31559563, 31560323, 31560348, 31560592, 31561886, 31562484
31563138, 31564060, 31564760, 31564795, 31567124, 31567403, 31567441
31567719, 31568423, 31569057, 31569867, 31570054, 31570161, 31571415
31571688, 31571742, 31572006, 31572046, 31572267, 31573269, 31573457
31574122, 31574150, 31574244, 31574267, 31575529, 31575649, 31575665
31576738, 31577569, 31578202, 31578994, 31580079, 31580122, 31580374
31580437, 31581627, 31582179, 31582244, 31583865, 31584056, 31584555
31584853, 31585040, 31585319, 31585351, 31585491, 31585789, 31586381
31586862, 31587966, 31588631, 31588933, 31590099, 31590826, 31591384
31591400, 31591409, 31591421, 31592707, 31594725, 31595025, 31595632
31597104, 31597668, 31597727, 31598146, 31599215, 31599363, 31599990
31600023, 31600291, 31600894, 31601385, 31602782, 31603199, 31603380
31603625, 31605119, 31605370, 31605737, 31606474, 31607937, 31608753
31609974, 31610024, 31611125, 31612535, 31613275, 31613838, 31615736
31616101, 31616104, 31617492, 31617523, 31619276, 31620252, 31620748
31620829, 31620944, 31621569, 31622250, 31623413, 31623463, 31625579
31625618, 31625959, 31626438, 31626493, 31626528, 31626572, 31627587
31627856, 31628155, 31628311, 31628753, 31628975, 31629056, 31630551
31630794, 31630946, 31631985, 31632273, 31632534, 31632605, 31632663
31633224, 31634510, 31634805, 31635875, 31635963, 31635980, 31637094
31637607, 31637680, 31638398, 31638733, 31638943, 31639082, 31640139
31640197, 31640240, 31642462, 31642556, 31642639, 31643308, 31644775
31645288, 31647304, 31647789, 31648120, 31648157, 31649223, 31649447
31649818, 31649819, 31649958, 31649962, 31650046, 31650112, 31650202
31652641, 31652763, 31653080, 31653167, 31653634, 31653647, 31653758
31653913, 31653916, 31653917, 31654116, 31654119, 31654122, 31654125
31654133, 31655807, 31656263, 31656601, 31657084, 31657211, 31657324
31657462, 31657483, 31657681, 31658464, 31658819, 31658943, 31659065
31660283, 31661369, 31661586, 31661865, 31661879, 31662131, 31662143
31662504, 31662625, 31662925, 31663189, 31663788, 31664203, 31664399
31665107, 31666449, 31666684, 31667096, 31667180, 31667940, 31668033
31668061, 31668065, 31668312, 31668694, 31668768, 31668872, 31669064
31670014, 31670263, 31670353, 31671512, 31671568, 31672507, 31672605
31673406, 31674380, 31674801, 31675568, 31675852, 31675860, 31676324
31676927, 31676941, 31677345, 31677460, 31677479, 31677587, 31678629
31679900, 31680709, 31680713, 31680985, 31682766, 31683044, 31683260
31683311, 31683337, 31683373, 31683708, 31684080, 31684494, 31685612
31685882, 31685989, 31686979, 31688127, 31688241, 31688978, 31691030
31691089, 31691480, 31694070, 31695062, 31695693, 31696043, 31696577
31696853, 31697741, 31699090, 31699230, 31700234, 31701239, 31701429
31701517, 31701910, 31703614, 31705178, 31705265, 31705356, 31705704
31706000, 31706595, 31706758, 31706956, 31707190, 31708133, 31708175

31708529, 31709647, 31709739, 31709777, 31710272, 31710587, 31711155
31711720, 31711889, 31711997, 31712260, 31714645, 31715935, 31716510
31716873, 31717010, 31718000, 31718134, 31718346, 31718842, 31719167
31720344, 31720377, 31720839, 31720942, 31721557, 31721863, 31721880
31722558, 31722646, 31723226, 31723323, 31723651, 31725154, 31727229
31727231, 31727233, 31727560, 31728149, 31728160, 31728440, 31728444
31728447, 31728477, 31728486, 31728858, 31729557, 31730485, 31730766
31731076, 31731407, 31732095, 31732311, 31732672, 31734007, 31734012
31734017, 31734583, 31735662, 31736095, 31737059, 31737603, 31739198
31739891, 31740252, 31741359, 31741938, 31743771, 31744832, 31745130
31745233, 31745528, 31746054, 31747706, 31747818, 31747935, 31747989
31748000, 31748182, 31748233, 31748944, 31750577, 31750581, 31750889
31752492, 31752502, 31752633, 31753202, 31753425, 31753478, 31753582
31753692, 31754240, 31754546, 31754887, 31754980, 31755245, 31755451
31756415, 31756465, 31756568, 31756650, 31757357, 31757775, 31757824
31758083, 31758344, 31758846, 31758939, 31758960, 31759565, 31760278
31760592, 31760721, 31760738, 31761510, 31762819, 31763030, 31763356
31763707, 31763905, 31764089, 31764239, 31764866, 31764913, 31765068
31765246, 31765257, 31765296, 31766462, 31766499, 31766534, 31766675
31766696, 31767204, 31767237, 31767598, 31767852, 31768490, 31768497
31768505, 31768866, 31769267, 31769373, 31769511, 31769530, 31770289
31771302, 31771370, 31771410, 31771468, 31771745, 31771836, 31772002
31772070, 31773582, 31773909, 31774019, 31774132, 31775101, 31776121
31776659, 31776785, 31776994, 31777410, 31777489, 31779833, 31780567
31781897, 31781944, 31783422, 31783451, 31783782, 31783872, 31783985
31783991, 31784352, 31785445, 31785572, 31786282, 31786697, 31786838
31787057, 31787655, 31788104, 31788594, 31788704, 31788761, 31788785
31789167, 31789178, 31789335, 31790500, 31790757, 31792397, 31792465
31792615, 31793126, 31793691, 31793713, 31794336, 31794631, 31794882
31795231, 31795696, 31796208, 31796277, 31796882, 31798001, 31798323
31798669, 31798702, 31798742, 31799858, 31800053, 31800059, 31800139
31800757, 31804838, 31805303, 31805812, 31807179, 31807431, 31807516
31809510, 31809729, 31810213, 31812352, 31812824, 31813214, 31813662
31815099, 31815227, 31816158, 31816343, 31816631, 31817634, 31818080
31820632, 31820662, 31820842, 31820859, 31820926, 31821129, 31821701
31821835, 31822026, 31822951, 31823051, 31823327, 31823716, 31824504
31824792, 31824934, 31825151, 31825324, 31825410, 31827339, 31827605
31827912, 31828378, 31828999, 31829366, 31829617, 31829639, 31831950
31832785, 31832901, 31833172, 31833585, 31833896, 31833948, 31834191
31834214, 31834611, 31834677, 31834871, 31835300, 31835805, 31835854
31836113, 31836454, 31839038, 31839779, 31839888, 31840180, 31840490
31840516, 31840992, 31841147, 31841210, 31841696, 31842545, 31843028
31843462, 31843476, 31843716, 31843842, 31843845, 31844137, 31844357
31844557, 31844560, 31845092, 31845403, 31845803, 31845955, 31846318

31846454, 31847489, 31847541, 31848331, 31848365, 31848391, 31848903
31849859, 31850132, 31850227, 31851383, 31851449, 31852482, 31852506
31852574, 31854285, 31854692, 31855307, 31855484, 31855526, 31855996
31857143, 31858580, 31858621, 31858833, 31859067, 31859143, 31860193
31860406, 31860760, 31862359, 31862593, 31862611, 31863118, 31863250
31863890, 31864818, 31864947, 31865822, 31866141, 31866159, 31866388
31867037, 31867331, 31867351, 31869348, 31869601, 31869944, 31869954
31869966, 31870010, 31870150, 31870164, 31870190, 31870196, 31871384
31871692, 31872230, 31872320, 31873155, 31875140, 31876138, 31876192
31876368, 31876867, 31878256, 31878314, 31878605, 31880154, 31881527
31883124, 31883343, 31883739, 31883845, 31886547, 31886695, 31886745
31886848, 31887130, 31887709, 31888148, 31888731, 31888964, 31889222
31890230, 31890516, 31892029, 31892856, 31895670, 31897023, 31897178
31897786, 31897854, 31898193, 31898257, 31898326, 31900476, 31900585
31902517, 31902662, 31903523, 31903713, 31903786, 31903962, 31904739
31904933, 31904960, 31905033, 31905839, 31905861, 31907042, 31907137
31907510, 31907565, 31907792, 31907962, 31908345, 31908482, 31908571
31908750, 31909295, 31909807, 31912638, 31912834, 31913650, 31913828
31913839, 31914003, 31914943, 31915444, 31915968, 31916096, 31916644
31917378, 31917494, 31917856, 31917967, 31918462, 31919563, 31919952
31921267, 31922161, 31922580, 31923463, 31923622, 31925162, 31925462
31925765, 31926203, 31926811, 31926848, 31927078, 31927510, 31927930
31930204, 31932042, 31932196, 31933451, 31933837, 31933842, 31933846
31933914, 31934254, 31934301, 31935336, 31935672, 31935717, 31935970
31936588, 31936983, 31938116, 31938288, 31939263, 31939461, 31939486
31939494, 31939767, 31940176, 31940458, 31941148, 31941948, 31942136
31942144, 31942258, 31942274, 31942473, 31943497, 31943691, 31944980
31945038, 31945407, 31945659, 31945701, 31945827, 31945928, 31946936
31947385, 31947732, 31947861, 31949490, 31950145, 31950244, 31950577
31951599, 31951628, 31952046, 31952052, 31953394, 31953449, 31953989
31954223, 31956113, 31956435, 31956920, 31957152, 31957564, 31957674
31957683, 31958038, 31958958, 31959140, 31959253, 31960124, 31960389
31960603, 31961578, 31961940, 31964519, 31964610, 31965012, 31965391
31965542, 31965574, 31966094, 31968431, 31969646, 31970188, 31971792
31972615, 31972671, 31973203, 31974187, 31974424, 31974597, 31974693
31976303, 31977024, 31977257, 31980125, 31980216, 31980296, 31981745
31981751, 31982879, 31983029, 31985032, 31985494, 31985738, 31985961
31986808, 31986836, 31986905, 31987278, 31987922, 31988079, 31988833
31990386, 31991705, 31992242, 31992270, 31992428, 31992615, 31992953
31993051, 31993795, 31994145, 31994206, 31994298, 31995577, 31995937
31996264, 31996331, 31997107, 31997457, 31997611, 31997658, 31997660
31998181, 31998189, 31998861, 31999024, 31999453, 32000837, 32001851
32002411, 32003551, 32003908, 32004148, 32004299, 32004977, 32005046
32005048, 32005053, 32005215, 32006467, 32006703, 32006824, 32006883

32007076, 32007698, 32008408, 32008586, 32008716, 32008819, 32009197
32009334, 32009754, 32010275, 32010593, 32010707, 32011107, 32011888
32012137, 32012400, 32012788, 32012891, 32012975, 32013253, 32013403
32014520, 32015642, 32015820, 32016340, 32016884, 32017215, 32017301
32017422, 32017570, 32017635, 32017671, 32018632, 32018953, 32020701
32021877, 32022223, 32022711, 32022814, 32022867, 32023471, 32025328
32028155, 32028269, 32032653, 32032733, 32032887, 32033795, 32034085
32034318, 32034766, 32035268, 32035483, 32035536, 32035893, 32035899
32035902, 32036045, 32037237, 32037962, 32038054, 32038780, 32038812
32038844, 32038996, 32039059, 32040940, 32040971, 32041003, 32041799
32042256, 32042352, 32042706, 32042926, 32043743, 32044533, 32044767
32044903, 32045377, 32046125, 32046412, 32046587, 32047226, 32048412
32048616, 32048921, 32050048, 32051896, 32052587, 32052992, 32053746
32054806, 32055692, 32055733, 32056529, 32057291, 32057333, 32057565
32057639, 32057755, 32058260, 32060164, 32060577, 32061018, 32061146
32061173, 32061648, 32062227, 32064239, 32064682, 32064826, 32066061
32067130, 32067356, 32067675, 32067937, 32068110, 32068187, 32068190
32068709, 32069160, 32069508, 32069696, 32069834, 32070206, 32071183
32071457, 32071582, 32072747, 32072944, 32073027, 32073710, 32074450
32074708, 32074728, 32075009, 32075020, 32075130, 32075580, 32076305
32076561, 32076599, 32077318, 32078078, 32079097, 32079573, 32079739
32080081, 32080655, 32081074, 32081381, 32082098, 32084068, 32087287
32087331, 32087597, 32087956, 32088132, 32088478, 32089051, 32089820
32090518, 32090725, 32092312, 32092797, 32093558, 32094825, 32095097
32095380, 32095610, 32095658, 32096252, 32096397, 32097125, 32097387
32097589, 32097604, 32097767, 32097882, 32097962, 32098224, 32098237
32098535, 32099153, 32099539, 32099580, 32101305, 32101419, 32101499
32102542, 32102722, 32102854, 32103383, 32103427, 32103628, 32104324
32104402, 32104578, 32104610, 32105135, 32105239, 32105412, 32105468
32107505, 32107621, 32107664, 32108094, 32108115, 32108566, 32108576
32109384, 32109796, 32111046, 32112798, 32112822, 32113113, 32113530
32113791, 32114541, 32114561, 32114572, 32114746, 32115403, 32115642
32116952, 32117115, 32117253, 32117490, 32118543, 32118727, 32119144
32119339, 32119565, 32120283, 32120453, 32121014, 32121326, 32121673
32121803, 32121885, 32122197, 32122574, 32123331, 32123673, 32124176
32124334, 32124570, 32124594, 32124607, 32124611, 32125142, 32125160
32125845, 32127227, 32127448, 32127911, 32128142, 32129659, 32130083
32130485, 32130504, 32131010, 32131401, 32131774, 32132464, 32132504
32133039, 32133898, 32138257, 32138478, 32138782, 32139432, 32139659
32139728, 32140616, 32140800, 32142788, 32143492, 32143562, 32143669
32144917, 32147340, 32148419, 32148662, 32149848, 32150818, 32150854
32151098, 32152341, 32153396, 32153619, 32153909, 32156194, 32157050
32157075, 32157078, 32158561, 32159343, 32161260, 32161381, 32162391
32164053, 32164112, 32164218, 32165367, 32165759, 32165814, 32165887

32166950, 32167592, 32167923, 32169151, 32170162, 32170190, 32171622
32171791, 32172050, 32172773, 32172777, 32172783, 32173142, 32173376
32173543, 32174321, 32174405, 32174492, 32174571, 32175329, 32175780
32176303, 32176922, 32177701, 32177869, 32178217, 32178966, 32179209
32179306, 32180918, 32181149, 32182097, 32182783, 32183102, 32183756
32183809, 32184235, 32184577, 32184844, 32184855, 32185296, 32186186
32186983, 32187775, 32189400, 32189869, 32189952, 32190132, 32190190
32190284, 32190419, 32190573, 32191427, 32191451, 32193431, 32195333
32195815, 32195946, 32196265, 32196492, 32196738, 32196943, 32197147
32198292, 32198368, 32198396, 32199681, 32200524, 32201743, 32201903
32201936, 32202976, 32203068, 32203354, 32205455, 32205514, 32205825
32207088, 32207920, 32208144, 32208326, 32208346, 32208691, 32209784
32210660, 32211423, 32212041, 32212062, 32212635, 32212916, 32213376
32213696, 32214021, 32214080, 32214195, 32214654, 32214743, 32214782
32215240, 32215991, 32216027, 32216841, 32216930, 32218369, 32218395
32218498, 32218552, 32219179, 32219318, 32219835, 32219988, 32220017
32220364, 32220709, 32221141, 32222473, 32223045, 32223654, 32223669
32224140, 32224583, 32225117, 32225353, 32225742, 32225899, 32227352
32228188, 32228677, 32229431, 32229625, 32229919, 32230213, 32230775
32230953, 32231049, 32231356, 32233406, 32234148, 32234161, 32235513
32236601, 32236685, 32236798, 32237489, 32237778, 32238935, 32239137
32239730, 32240272, 32241889, 32242601, 32243007, 32243148, 32243814
32243882, 32243985, 32244187, 32245711, 32245850, 32246090, 32246756
32247141, 32247420, 32248131, 32248405, 32248649, 32249207, 32249371
32249509, 32249640, 32249674, 32250232, 32250238, 32251364, 32251671
32252036, 32252213, 32252262, 32252294, 32253703, 32253937, 32254063
32254399, 32254686, 32255029, 32255073, 32255529, 32255753, 32255762
32257449, 32258021, 32258136, 32258388, 32258423, 32259063, 32259322
32259535, 32259785, 32260010, 32260290, 32263923, 32264556, 32266406
32266906, 32267171, 32267610, 32268669, 32268800, 32274403, 32277643
32277793, 32279351, 32280901, 32281066, 32283798, 32284241, 32284325
32284485, 32284608, 32284725, 32285086, 32285563, 32285717, 32285789
32287797, 32287989, 32289552, 32289858, 32290227, 32290313, 32290399
32290812, 32290949, 32290990, 32291114, 32291139, 32292180, 32292805
32293615, 32294031, 32294566, 32294851, 32295794, 32296259, 32296941
32297373, 32297469, 32297849, 32298004, 32298173, 32298782, 32300098
32300822, 32300849, 32301856, 32302470, 32302561, 32303160, 32303657
32304293, 32304712, 32305034, 32305792, 32306556, 32307046, 32307586
32307983, 32309046, 32309488, 32309723, 32311019, 32312131, 32312412
32312586, 32315173, 32316070, 32316252, 32316326, 32317012, 32317306
32318528, 32318820, 32318914, 32319410, 32321317, 32321319, 32321765
32322629, 32322738, 32323277, 32323488, 32323600, 32323816, 32324219
32325525, 32325574, 32325611, 32327201, 32327208, 32327690, 32328231
32329914, 32330269, 32330540, 32331889, 32332107, 32334745, 32335257

32335769, 32336990, 32338220, 32338476, 32338579, 32338736, 32338897
32338919, 32338953, 32339801, 32340392, 32340885, 32341217, 32341260
32341820, 32342172, 32342345, 32342750, 32342824, 32343092, 32343678
32344099, 32344168, 32344199, 32345001, 32345050, 32345178, 32345272
32345785, 32346649, 32346733, 32347957, 32350182, 32351767, 32353343
32355765, 32355912, 32356340, 32356545, 32356609, 32356628, 32357412
32357665, 32358760, 32359044, 32361175, 32361677, 32362016, 32362066
32362072, 32362698, 32363212, 32363549, 32363711, 32363981, 32364147
32366154, 32366303, 32366461, 32366536, 32367151, 32368161, 32368480
32368789, 32368792, 32369041, 32371828, 32372725, 32374050, 32374431
32374566, 32374616, 32375438, 32375493, 32376603, 32376614, 32376774
32376872, 32376922, 32377901, 32378953, 32379001, 32379140, 32379303
32379775, 32380591, 32380842, 32381403, 32381605, 32382021, 32382207
32382667, 32385068, 32385141, 32385832, 32386482, 32386683, 32386720
32386877, 32387555, 32387818, 32388247, 32389047, 32389497, 32390629
32390855, 32391021, 32392724, 32393137, 32393612, 32394623, 32394660
32394986, 32396085, 32396154, 32396326, 32397113, 32397350, 32398714
32400076, 32401086, 32401333, 32402243, 32402292, 32403509, 32403748
32404638, 32404933, 32405239, 32406222, 32406479, 32407783, 32408640
32409009, 32409344, 32409942, 32410175, 32412340, 32413042, 32413512
32414944, 32414996, 32415846, 32415989, 32416652, 32416655, 32417227
32417242, 32417274, 32417301, 32417438, 32417632, 32417766, 32417870
32419774, 32421958, 32422965, 32423100, 32423678, 32423985, 32424465
32425097, 32425124, 32425194, 32425205, 32425778, 32425862, 32426213
32426315, 32426900, 32427158, 32427173, 32427226, 32427583, 32427953
32428097, 32428189, 32428330, 32430745, 32431049, 32431067, 32431251
32431290, 32431413, 32432078, 32432245, 32433687, 32434131, 32435493
32435911, 32436342, 32436460, 32436721, 32436757, 32437538, 32439726
32440067, 32440681, 32441128, 32441671, 32441834, 32442229, 32442404
32443087, 32443531, 32443744, 32443935, 32444159, 32446565, 32449622
32449909, 32450344, 32453583, 32453611, 32453888, 32455219, 32455516
32455650, 32455742, 32455961, 32456625, 32457252, 32457974, 32459153
32459632, 32460136, 32460145, 32461726, 32462153, 32464021, 32464584
32465193, 32465209, 32465466, 32465495, 32465853, 32465894, 32466474
32467812, 32468643, 32468791, 32469004, 32469225, 32471100, 32471251
32471346, 32471642, 32472561, 32472589, 32473465, 32474686, 32474827
32474926, 32474997, 32475694, 32476437, 32477479, 32478452, 32480419
32480510, 32480528, 32480541, 32481807, 32482131, 32483115, 32483966
32484945, 32485859, 32485961, 32486528, 32486955, 32489206, 32490128
32490416, 32490804, 32491443, 32492075, 32492343, 32492382, 32492422
32492452, 32495545, 32495572, 32497756, 32498459, 32498569, 32498602
32498752, 32498783, 32499155, 32500117, 32501930, 32503790, 32504340
32504786, 32505009, 32505439, 32505557, 32505634, 32506166, 32506309
32506473, 32506809, 32507542, 32508585, 32509271, 32509318, 32509584

32509606, 32509814, 32510116, 32512048, 32512145, 32512438, 32512918
32514516, 32515708, 32515850, 32516220, 32516336, 32517405, 32517797
32518029, 32518679, 32519995, 32520525, 32520645, 32520691, 32520994
32522300, 32522472, 32523206, 32523613, 32523750, 32524841, 32525039
32526118, 32526703, 32527621, 32529396, 32529483, 32530202, 32531259
32531627, 32531647, 32533019, 32533225, 32533461, 32534925, 32535106
32535156, 32535159, 32535520, 32536006, 32538436, 32538824, 32539300
32539322, 32539914, 32539936, 32540706, 32541049, 32542063, 32542641
32544124, 32544464, 32544740, 32544784, 32545415, 32546408, 32546937
32548580, 32548704, 32549168, 32549277, 32549351, 32550051, 32550281
32550589, 32550751, 32550894, 32551177, 32551246, 32552043, 32552602
32553241, 32555120, 32555592, 32556165, 32556311, 32556891, 32557354
32559543, 32561759, 32561791, 32561841, 32562587, 32563106, 32563114
32563151, 32563940, 32565722, 32565870, 32567750, 32567788, 32568124
32568163, 32568259, 32569603, 32569745, 32573197, 32573703, 32573942
32574796, 32576097, 32576508, 32576534, 32577408, 32578113, 32578616
32578792, 32579075, 32579371, 32579529, 32580082, 32580378, 32580852
32583315, 32583355, 32583375, 32583692, 32584347, 32584375, 32584505
32585832, 32586534, 32587305, 32587472, 32587567, 32587721, 32587793
32587994, 32588298, 32588656, 32588691, 32589147, 32589819, 32589990
32593590, 32593845, 32593877, 32593886, 32593955, 32594965, 32595551
32596355, 32596705, 32597099, 32597637, 32598380, 32598406, 32601769
32601882, 32602194, 32602344, 32602599, 32602735, 32602871, 32602990
32603092, 32603152, 32603319, 32603564, 32603619, 32605116, 32606093
32606489, 32606531, 32607812, 32607991, 32608297, 32608821, 32609394
32609512, 32609730, 32609886, 32610185, 32610271, 32613788, 32614157
32614583, 32615310, 32615776, 32616678, 32618819, 32619195, 32619298
32619327, 32620859, 32620919, 32621140, 32621309, 32622507, 32622612
32625160, 32625356, 32626384, 32626756, 32627140, 32628131, 32628221
32628237, 32629028, 32629772, 32629859, 32630060, 32631551, 32631787
32633251, 32634049, 32634996, 32635881, 32635931, 32636938, 32638991
32639432, 32639663, 32639860, 32639950, 32641593, 32641748, 32642587
32642994, 32643533, 32644392, 32645139, 32646025, 32646044, 32647170
32648248, 32649737, 32649749, 32651063, 32651769, 32651773, 32652143
32652573, 32652605, 32653470, 32653669, 32654962, 32655446, 32655691
32656130, 32656231, 32656275, 32657251, 32658481, 32659438, 32659574
32659930, 32659983, 32660528, 32661293, 32662165, 32663019, 32664665
32665550, 32665836, 32666862, 32668900, 32668907, 32669149, 32670769
32671437, 32671481, 32672057, 32674819, 32675095, 32675227, 32675756
32676084, 32676350, 32676659, 32677000, 32677702, 32678737, 32682430
32682586, 32682703, 32684009, 32684387, 32685743, 32685989, 32686338
32686850, 32689123, 32690400, 32690581, 32692372, 32693242, 32695999
32697157, 32697431, 32697781, 32697859, 32698508, 32698569, 32700396
32700455, 32700548, 32700675, 32700989, 32701048, 32702005, 32703155

32704013, 32704119, 32704231, 32704765, 32705734, 32705800, 32706821
32707007, 32707211, 32710165, 32710534, 32710750, 32711099, 32711741
32712220, 32712791, 32712916, 32715346, 32715845, 32715945, 32716726
32718204, 32718316, 32718547, 32718721, 32719288, 32720344, 32720458
32722118, 32724505, 32724654, 32725484, 32726772, 32727143, 32728216
32728984, 32730701, 32731498, 32732179, 32733671, 32733845, 32734021
32734171, 32734299, 32734800, 32735915, 32735980, 32736370, 32737774
32737827, 32737969, 32738356, 32739966, 32740421, 32740503, 32740506
32740515, 32740694, 32740987, 32743290, 32743511, 32746508, 32746515
32746831, 32747680, 32747738, 32748974, 32749028, 32750264, 32750940
32751438, 32753371, 32753472, 32753946, 32754044, 32754574, 32754845
32755356, 32755493, 32755517, 32755731, 32756125, 32756914, 32757219
32758096, 32758260, 32759503, 32760795, 32760868, 32760906, 32761229
32761294, 32761932, 32762155, 32762231, 32763283, 32763544, 32764690
32765738, 32766252, 32766397, 32766407, 32766916, 32768752, 32769786
32769880, 32770812, 32771735, 32775512, 32775526, 32776891, 32778725
32780676, 32781826, 32782851, 32783456, 32784393, 32784403, 32786308
32786309, 32788660, 32789228, 32790012, 32793286, 32794120, 32794261
32795016, 32795712, 32797115, 32797486, 32800137, 32800539, 32801192
32801303, 32801337, 32802926, 32803416, 32803807, 32803850, 32804604
32804609, 32804760, 32806069, 32806112, 32806856, 32806915, 32807517
32809152, 32809234, 32810125, 32810668, 32811069, 32811131, 32813351
32813767, 32816003, 32817950, 32818019, 32818230, 32818242, 32818436
32818545, 32821107, 32822436, 32822847, 32823545, 32823692, 32827206
32828636, 32828738, 32829060, 32829563, 32829937, 32830405, 32831451
32831855, 32831901, 32832521, 32833378, 32833812, 32834168, 32834394
32834426, 32835524, 32837435, 32838028, 32838533, 32841689, 32841994
32842415, 32842823, 32843576, 32843672, 32843754, 32844640, 32846272
32846876, 32847962, 32847975, 32848060, 32848531, 32848816, 32850174
32850514, 32851615, 32851841, 32852484, 32852504, 32853080, 32855257
32855878, 32856375, 32856546, 32856640, 32857370, 32857881, 32857908
32858446, 32863795, 32864241, 32864736, 32866089, 32867469, 32868116
32868344, 32868369, 32869560, 32870681, 32872839, 32874571, 32874995
32875003, 32875118, 32875482, 32875931, 32877550, 32878039, 32879447
32879655, 32879990, 32880225, 32880390, 32880490, 32881057, 32881462
32881853, 32883252, 32883853, 32887649, 32888458, 32888472, 32889096
32889434, 32890532, 32891500, 32892883, 32893686, 32893951, 32894842
32895105, 32897184, 32897679, 32898672, 32898678, 32898971, 32899387
32900165, 32900208, 32902635, 32903472, 32903625, 32905994, 32907741
32907975, 32908241, 32908249, 32908946, 32909255, 32909292, 32909936
32910846, 32912726, 32913527, 32913610, 32913791, 32914508, 32914711
32914795, 32915110, 32915747, 32915760, 32915847, 32915909, 32916025
32916080, 32917969, 32918041, 32918394, 32920489, 32920547, 32921786
32922090, 32922635, 32924796, 32925421, 32925703, 32926513, 32926653

32930360, 32930423, 32930665, 32931078, 32931941, 32933936, 32935932
32936005, 32936402, 32936424, 32936537, 32936859, 32936950, 32936961
32936988, 32937167, 32937338, 32939376, 32939883, 32940440, 32940714
32940955, 32941096, 32941509, 32941792, 32943694, 32945404, 32946347
32946711, 32947264, 32947268, 32951181, 32951258, 32952285, 32953258
32955962, 32956092, 32956896, 32957606, 32958616, 32961142, 32961939
32962162, 32965460, 32966389, 32966688, 32967871, 32968221, 32968634
32969466, 32969863, 32970478, 32972633, 32972716, 32973035, 32973406
32976022, 32977489, 32980826, 32982562, 32983419, 32983750, 32983871
32984625, 32984679, 32985908, 32986577, 32987004, 32987206, 32987308
32988028, 32991289, 32991527, 32992004, 32993522, 32993998, 32994080
32995072, 32995206, 32995242, 32995863, 32996071, 32996974, 32998659
32999086, 32999329, 32999541, 33000440, 33000516, 33000980, 33001094
33001615, 33003575, 33003817, 33004172, 33004888, 33005241, 33008265
33009224, 33009321, 33009351, 33010173, 33010444, 33011078, 33011198
33012307, 33013379, 33015716, 33016007, 33018951, 33019726, 33020016
33020510, 33021036, 33021100, 33021642, 33022043, 33022140, 33022563
33022926, 33023671, 33025005, 33026533, 33026796, 33026949, 33027087
33027377, 33027525, 33027539, 33027553, 33028013, 33028286, 33028462
33030293, 33031619, 33032299, 33032400, 33032579, 33033425, 33034103
33034619, 33034642, 33034846, 33035201, 33035710, 33035954, 33036321
33037136, 33037150, 33037531, 33037895, 33038120, 33038422, 33038479
33038537, 33039277, 33040335, 33043590, 33043854, 33044062, 33045137
33046179, 33047645, 33047827, 33048074, 33048277, 33048591, 33049012
33049866, 33049915, 33049925, 33050205, 33050587, 33050622, 33050626
33052585, 33053538, 33055560, 33055827, 33056383, 33056579, 33058363
33059891, 33059924, 33060161, 33060212, 33061152, 33061339, 33061595
33062419, 33063919, 33064324, 33064565, 33065089, 33065343, 33065415
33065437, 33065526, 33065979, 33066892, 33068672, 33069366, 33069583
33069889, 33071321, 33072392, 33072854, 33075133, 33075246, 33075452
33076129, 33080651, 33082407, 33084064, 33084323, 33085296, 33085361
33088535, 33088863, 33089096, 33089130, 33089192, 33090110, 33090127
33090781, 33090848, 33092087, 33093807, 33095358, 33096609, 33097276
33097433, 33099666, 33099872, 33100195, 33100352, 33101055, 33101058
33101334, 33102477, 33105276, 33105354, 33105656, 33106822, 33106897
33107872, 33108317, 33109335, 33109981, 33110192, 33110642, 33110992
33111729, 33113848, 33114640, 33115438, 33115892, 33116125, 33116131
33116481, 33117641, 33120284, 33120828, 33120920, 33121866, 33121880
33121934, 33123402, 33123404, 33123985, 33125873, 33126216, 33126290
33127032, 33127141, 33127312, 33129473, 33131149, 33131335, 33131526
33131742, 33132050, 33135083, 33136016, 33136252, 33136601, 33137328
33139230, 33139277, 33140218, 33141420, 33141890, 33142123, 33142479
33142533, 33142739, 33142764, 33144001, 33145153, 33145583, 33146001
33146055, 33147065, 33148063, 33149578, 33150236, 33150645, 33151063

33151089, 33152388, 33152652, 33153797, 33157157, 33157547, 33159956
33161035, 33161424, 33161535, 33161726, 33163159, 33163187, 33164865
33165183, 33165391, 33166116, 33166242, 33169254, 33172549, 33172631
33172679, 33174203, 33176523, 33176672, 33177660, 33178223, 33178248
33179718, 33180354, 33181281, 33181349, 33181881, 33182152, 33184467
33185231, 33185773, 33186578, 33186650, 33187513, 33188597, 33189199
33190454, 33190694, 33190761, 33191073, 33191584, 33192462, 33192939
33193293, 33194363, 33195096, 33195330, 33195897, 33196009, 33196035
33196475, 33197296, 33198902, 33199431, 33201415, 33203951, 33205229
33205781, 33206160, 33206701, 33207143, 33207240, 33207247, 33207342
33208644, 33211160, 33211334, 33211942, 33212112, 33214493, 33214554
33214707, 33215225, 33216590, 33216667, 33218194, 33218259, 33218392
33218518, 33218694, 33219840, 33220466, 33221061, 33221340, 33223248
33224375, 33225584, 33225678, 33227044, 33227337, 33228119, 33229327
33230882, 33230975, 33232128, 33233560, 33234302, 33235620, 33236729
33237523, 33239083, 33239946, 33239980, 33240195, 33240921, 33241118
33241692, 33242408, 33242622, 33243077, 33244297, 33245879, 33245940
33246099, 33246700, 33247240, 33247372, 33247795, 33247862, 33251111
33251188, 33251482, 33252648, 33253370, 33253466, 33253504, 33254019
33261707, 33261786, 33263108, 33266449, 33268162, 33270427, 33270914
33271941, 33273598, 33273638, 33273682, 33274012, 33275880, 33276748
33278133, 33278440, 33278509, 33279339, 33279489, 33279810, 33280121
33281287, 33281785, 33282110, 33282502, 33282504, 33282605, 33282871
33282971, 33283122, 33284571, 33287418, 33288427, 33289442, 33289604
33289734, 33290765, 33291305, 33292174, 33292175, 33292429, 33292896
33292950, 33294123, 33294139, 33294845, 33295267, 33297275, 33299877
33301919, 33303419, 33303486, 33303555, 33303725, 33304435, 33304775
33304830, 33305150, 33305175, 33305254, 33305995, 33306161, 33306852
33307945, 33308107, 33308199, 33308244, 33308736, 33309178, 33309324
33311488, 33312823, 33312932, 33313374, 33314115, 33314122, 33314422
33314523, 33315230, 33315432, 33315590, 33315801, 33315835, 33316711
33316815, 33317279, 33317740, 33317752, 33318311, 33318949, 33319065
33319353, 33319802, 33320455, 33322672, 33323634, 33323903, 33324226
33325981, 33327118, 33329027, 33329192, 33329493, 33329960, 33330508
33331329, 33332612, 33332891, 33333616, 33334218, 33334340, 33334404
33334945, 33334957, 33334972, 33335941, 33337385, 33337799, 33337807
33338247, 33338891, 33339868, 33340595, 33343993, 33344767, 33345269
33346851, 33347947, 33349744, 33349880, 33350643, 33351136, 33351978
33352629, 33352740, 33352794, 33353474, 33354011, 33354275, 33354662
33354933, 33354968, 33355007, 33355136, 33355766, 33356602, 33356612
33357029, 33357655, 33358233, 33358968, 33359279, 33360117, 33360246
33362391, 33364012, 33364820, 33366942, 33367076, 33367184, 33367909
33370332, 33371121, 33373644, 33373693, 33375194, 33376694, 33378856
33379172, 33379714, 33380058, 33380472, 33380871, 33381652, 33381775

33381839, 33382108, 33382224, 33382529, 33382620, 33384092, 33384505
33387120, 33387654, 33387767, 33388473, 33388715, 33388927, 33389651
33390561, 33390695, 33390717, 33390917, 33390925, 33392926, 33392996
33393503, 33393671, 33394330, 33395219, 33397350, 33397495, 33397605
33398383, 33398674, 33401519, 33402361, 33402406, 33402456, 33402847
33403040, 33403843, 33404069, 33406991, 33407135, 33407139, 33408858
33409163, 33409376, 33409759, 33409841, 33410321, 33415279, 33416041
33416405, 33417145, 33417828, 33417987, 33418439, 33418443, 33420096
33420249, 33420490, 33421125, 33421440, 33421721, 33421972, 33422596
33422675, 33422877, 33423728, 33423815, 33424192, 33425046, 33425127
33426135, 33427823, 33427991, 33428191, 33429020, 33431382, 33434256
33434602, 33434897, 33435012, 33435454, 33437800, 33440178, 33440442
33440899, 33441073, 33441786, 33443834, 33444647, 33446226, 33446788
33447015, 33447602, 33447957, 33448908, 33450599, 33450736, 33451134
33452091, 33454288, 33454299, 33454753, 33455225, 33456516, 33456703
33456848, 33457235, 33457584, 33457842, 33458082, 33458732, 33459161
33460265, 33460450, 33460521, 33460870, 33462620, 33463044, 33464061
33464358, 33464378, 33464843, 33466822, 33467243, 33467715, 33469785
33470077, 33470092, 33470254, 33471858, 33473564, 33473583, 33473795
33473815, 33473989, 33474080, 33474386, 33474769, 33474916, 33476482
33476928, 33479415, 33479703, 33480124, 33480392, 33480765, 33482137
33482590, 33484230, 33484387, 33485134, 33488913, 33489699, 33490023
33490031, 33490293, 33491676, 33492066, 33492136, 33493957, 33495024
33495575, 33496433, 33497160, 33498037, 33499125, 33499867, 33500486
33501425, 33503732, 33504158, 33504432, 33504626, 33504902, 33505158
33507610, 33507953, 33510062, 33510077, 33510171, 33510735, 33511329
33511523, 33512062, 33513037, 33513434, 33513447, 33513526, 33513906
33514038, 33514172, 33514179, 33514440, 33515115, 33516571, 33517445
33517703, 33520658, 33521864, 33522170, 33522372, 33522799, 33522941
33523189, 33523393, 33523831, 33523982, 33524097, 33525014, 33525448
33527359, 33527630, 33527663, 33527739, 33528779, 33531067, 33531364
33531929, 33532136, 33532470, 33532517, 33532755, 33533239, 33533269
33534589, 33534891, 33536140, 33536640, 33537225, 33537630, 33537652
33538009, 33538063, 33538767, 33538807, 33539504, 33540746, 33541736
33541865, 33542695, 33544375, 33544836, 33545633, 33545698, 33546789
33546839, 33547527, 33548186, 33548709, 33548869, 33549008, 33549281
33550827, 33551931, 33553452, 33553902, 33555482, 33555673, 33556254
33557278, 33557344, 33558058, 33558087, 33558251, 33558317, 33558391
33558960, 33559245, 33559316, 33559848, 33560308, 33561671, 33561708
33561845, 33562255, 33563137, 33563167, 33563718, 33564109, 33564809
33566611, 33566851, 33566856, 33567156, 33568355, 33570800, 33571225
33572061, 33573142, 33574722, 33575022, 33575100, 33576132, 33578015
33580079, 33580212, 33580595, 33580746, 33583859, 33584585, 33584637
33585244, 33585591, 33589647, 33589667, 33590420, 33590551, 33590607

33591046, 33596056, 33596361, 33596874, 33598703, 33598728, 33598840
33599665, 33599734, 33600479, 33601195, 33601538, 33601673, 33601849
33603291, 33604939, 33606850, 33607081, 33607127, 33607613, 33611438
33613169, 33613512, 33613829, 33613833, 33615198, 33615478, 33615505
33616923, 33617587, 33617685, 33618962, 33621739, 33621871, 33621893
33621993, 33622325, 33622575, 33622927, 33624052, 33624356, 33625059
33625559, 33625597, 33625822, 33627360, 33627820, 33628258, 33628304
33628592, 33628693, 33630464, 33631068, 33631337, 33631562, 33631820
33631959, 33632051, 33632754, 33633469, 33633875, 33633883, 33635094
33635886, 33636280, 33636345, 33637219, 33641592, 33645932, 33646203
33647498, 33647716, 33647739, 33647820, 33648273, 33649782, 33651003
33651993, 33652008, 33652234, 33652291, 33653008, 33653695, 33655399
33656104, 33656608, 33656679, 33657553, 33660093, 33660782, 33660816
33660838, 33661960, 33662079, 33662706, 33663113, 33663305, 33663444
33664959, 33664976, 33666228, 33666803, 33667166, 33667505, 33667548
33667790, 33668078, 33668496, 33670617, 33670793, 33674035, 33674065
33674755, 33676061, 33676296, 33676842, 33677163, 33677196, 33677721
33679665, 33679838, 33681238, 33682799, 33684125, 33684377, 33684692
33687039, 33689330, 33689561, 33690676, 33692669, 33695048, 33695100
33696508, 33698504, 33699798, 33702035, 33702922, 33703196, 33704431
33704635, 33705050, 33706074, 33706800, 33708795, 33708879, 33708958
33709660, 33710568, 33711151, 33711938, 33713578, 33714000, 33714495
33715183, 33715322, 33718837, 33718848, 33720017, 33723325, 33725523
33726388, 33726590, 33726682, 33726788, 33726841, 33727390, 33727406
33727922, 33727983, 33729692, 33729789, 33730024, 33731488, 33735790
33736618, 33737627, 33738135, 33738702, 33741444, 33741730, 33742827
33743745, 33744512, 33745318, 33746114, 33748852, 33749367, 33749626
33749984, 33750344, 33750791, 33751080, 33751431, 33754410, 33755161
33755486, 33757064, 33758069, 33759204, 33760298, 33761538, 33763570
33763679, 33764147, 33764761, 33766130, 33766686, 33766937, 33767425
33768567, 33770079, 33770883, 33770960, 33771433, 33773883, 33774856
33775544, 33775825, 33776598, 33777176, 33777718, 33779360, 33779364
33779494, 33779786, 33780182, 33780312, 33782200, 33783365, 33783710
33784447, 33785175, 33786208, 33787325, 33787804, 33787884, 33788643
33789142, 33790553, 33792885, 33794088, 33794290, 33796040, 33797504
33797970, 33798328, 33799368, 33800450, 33800460, 33801197, 33801237
33803836, 33804758, 33805155, 33807727, 33808041, 33808204, 33808574
33808955, 33809062, 33809642, 33810107, 33810130, 33810360, 33811111
33811601, 33811659, 33812475, 33813801, 33813849, 33814415, 33816129
33816674, 33817457, 33817717, 33817746, 33819404, 33821129, 33821145
33821234, 33821569, 33822187, 33822881, 33823203, 33824185, 33824830
33825303, 33826285, 33827120, 33827191, 33827202, 33828137, 33828243
33832499, 33832583, 33833554, 33833783, 33834239, 33835379, 33835574
33836203, 33837343, 33837484, 33838019, 33840911, 33840932, 33840940

33841610, 33841850, 33842364, 33842953, 33843368, 33843512, 33845824
33846103, 33846146, 33846662, 33847898, 33848060, 33848148, 33848294
33849209, 33849726, 33850434, 33850437, 33850535, 33852315, 33852881
33853330, 33858183, 33858700, 33860501, 33860895, 33860900, 33862262
33862735, 33862860, 33863150, 33863597, 33864784, 33865116, 33865165
33865495, 33865537, 33866472, 33866585, 33867451, 33867491, 33868507
33870133, 33870373, 33870702, 33871591, 33871761, 33871795, 33872487
33872610, 33874274, 33874455, 33875167, 33876296, 33876739, 33877868
33878003, 33878970, 33879044, 33879054, 33880474, 33882024, 33883017
33883347, 33884314, 33886297, 33886487, 33886862, 33886871, 33888856
33888932, 33889459, 33890586, 33891059, 33891752, 33893127, 33895721
33896341, 33896412, 33896423, 33896760, 33897055, 33898336, 33899027
33899867, 33899902, 33900807, 33902235, 33902465, 33902539, 33904512
33904798, 33904963, 33906515, 33906897, 33906975, 33907094, 33907659
33907663, 33907815, 33907942, 33909666, 33909729, 33909838, 33909842
33910272, 33912833, 33912872, 33913103, 33913384, 33915586, 33916081
33916206, 33916249, 33916311, 33917203, 33918190, 33921410, 33921441
33921860, 33922026, 33922061, 33925702, 33926252, 33927256, 33927405
33927483, 33929317, 33931668, 33932721, 33932921, 33933784, 33934979
33935707, 33936939, 33937333, 33937866, 33939477, 33940540, 33941905
33941967, 33942062, 33943313, 33945728, 33945794, 33949153, 33950698
33951799, 33952245, 33952532, 33952976, 33954999, 33955060, 33955371
33956182, 33957025, 33957705, 33960379, 33960464, 33960647, 33961800
33963458, 33964258, 33964867, 33964963, 33965211, 33967599, 33969303
33969309, 33970659, 33970841, 33972204, 33973155, 33973593, 33973695
33973908, 33973922, 33974068, 33974560, 33974788, 33974835, 33975649
33976016, 33976581, 33976796, 33976856, 33981298, 33982111, 33982392
33982541, 33983204, 33985986, 33986030, 33987170, 33987911, 33987976
33988339, 33988388, 33988926, 33988974, 33989017, 33990166, 33990559
33992920, 33993386, 33994084, 33994833, 33997092, 33997202, 33997826
33998060, 33998365, 33998441, 33998706, 34001147, 34001406, 34001696
34003077, 34003643, 34004063, 34006614, 34006650, 34007432, 34009154
34009751, 34010877, 34011029, 34011657, 34012165, 34013753, 34013946
34017363, 34018423, 34019478, 34020888, 34020905, 34022834, 34023045
34023117, 34023644, 34024924, 34027056, 34027199, 34027770, 34027791
34027965, 34028486, 34031036, 34034279, 34034799, 34038365, 34039170
34039802, 34039805, 34042084, 34042088, 34042759, 34042949, 34043824
34045021, 34045081, 34045429, 34045719, 34048076, 34048685, 34050156
34051355, 34051770, 34052378, 34052471, 34052869, 34053296, 34053514
34054814, 34055289, 34056235, 34056691, 34056918, 34058858, 34060122
34060268, 34060829, 34062228, 34064415, 34066286, 34066652, 34069804
34070318, 34070446, 34070561, 34071111, 34071627, 34072411, 34075499
34078255, 34078687, 34079542, 34080081, 34080691, 34083290, 34085116
34086300, 34088194, 34088299, 34088989, 34089934, 34090927, 34091587

34092979, 34094476, 34096200, 34096213, 34097324, 34097491, 34098840
34098862, 34099185, 34100909, 34100969, 34101724, 34101781, 34102850
34103647, 34103857, 34104105, 34104403, 34104747, 34105531, 34105578
34106567, 34106830, 34107143, 34107171, 34110342, 34111239, 34111708
34113634, 34113754, 34115338, 34115571, 34115674, 34115836, 34116531
34116534, 34117188, 34117618, 34118219, 34119948, 34120395, 34122000
34123350, 34125814, 34126068, 34126600, 34127787, 34128961, 34129587
34129689, 34129964, 34130289, 34131435, 34131640, 34132089, 34132182
34132318, 34135867, 34136552, 34136598, 34136651, 34137325, 34137360
34137400, 34137513, 34139110, 34139217, 34141328, 34142034, 34142701
34142725, 34142884, 34145178, 34145715, 34146833, 34146985, 34146987
34147169, 34148591, 34149263, 34149515, 34151061, 34153098, 34153238
34153367, 34154847, 34155072, 34157133, 34157543, 34158902, 34160874
34161298, 34162108, 34162325, 34162335, 34162419, 34162936, 34163576
34164486, 34164828, 34166857, 34167286, 34168185, 34171382, 34171631
34171779, 34172434, 34172950, 34172951, 34173003, 34173450, 34173655
34174125, 34174543, 34175766, 34175987, 34176645, 34177162, 34177216
34177554, 34182692, 34183461, 34183998, 34186437, 34187150, 34188859
34191370, 34191733, 34191990, 34194445, 34195569, 34196203, 34197142
34198944, 34200295, 34202065, 34203331, 34203704, 34203713, 34204673
34205962, 34207008, 34207506, 34207825, 34208572, 34208822, 34210475
34210478, 34211059, 34212105, 34214908, 34215091, 34215118, 34215356
34215503, 34216873, 34219922, 34220568, 34220609, 34220943, 34220961
34220991, 34221484, 34221568, 34221772, 34222165, 34224381, 34224955
34225479, 34226067, 34226553, 34229104, 34229250, 34229833, 34233694
34234394, 34235520, 34236849, 34236850, 34236929, 34237240, 34238278
34238326, 34238452, 34239023, 34239253, 34239708, 34239739, 34240339
34241948, 34242857, 34244123, 34244448, 34248685, 34248786, 34250357
34250510, 34256822, 34256867, 34257221, 34257821, 34259077, 34259505
34260455, 34261458, 34261536, 34261947, 34262719, 34262797, 34263456
34264633, 34269674, 34270419, 34271144, 34272249, 34272626, 34276007
34276035, 34276149, 34278993, 34279907, 34280456, 34281503, 34281906
34282948, 34284147, 34284415, 34284480, 34286049, 34286361, 34286896
34287904, 34288172, 34289040, 34289391, 34291104, 34291231, 34292131
34296307, 34299775, 34299927, 34300648, 34301118, 34303814, 34305086
34308796, 34309486, 34309870, 34310304, 34310878, 34314448, 34314510
34317656, 34318537, 34320078, 34320104, 34322521, 34328460, 34329645
34329853, 34330060, 34330202, 34331370, 34333986, 34339279, 34339332
34339511, 34343228, 34346865, 34347024, 34348856, 34349149, 34349276
34349447, 34349515, 34350364, 34351706, 34352389, 34352605, 34358131
34358718, 34358785, 34363214, 34363828, 34364656, 34366429, 34366627
34367505, 34368448, 34369008, 34369015, 34369457, 34370261, 34370607
34371061, 34373053, 34373173, 34373784, 34376468, 34376629, 34377917
34379814, 34381597, 34382203, 34382212, 34383066, 34385931, 34386836

34387451, 34387852, 34392047, 34394126, 34394707, 34394887, 34395591
34396087, 34396210, 34396450, 34397170, 34400193, 34400514, 34400786
34401276, 34405224, 34405413, 34406030, 34406370, 34408490, 34410488
34411019, 34411060, 34413701, 34414246, 34414328, 34415933, 34416002
34417794, 34420448, 34421053, 34422617, 34423163, 34424661, 34424728
34425846, 34428819, 34430514, 34430618, 34432402, 34436025, 34443644
34444824, 34444997, 34446152, 34446545, 34447012, 34448189, 34448235
34449511, 34450366, 34450853, 34451554, 34452628, 34453303, 34453468
34453799, 34453970, 34454035, 34456728, 34457911, 34458786, 34460273
34461154, 34461697, 34462113, 34462893, 34464036, 34465619, 34465871
34467295, 34468807, 34469934, 34470389, 34470542, 34470753, 34471029
34472508, 34473578, 34475838, 34476155, 34477555, 34481738, 34482043
34484622, 34485380, 34485525, 34485657, 34485723, 34487786, 34489508
34491739, 34492025, 34495234, 34497838, 34498028, 34499374, 34504292
34505752, 34510828, 34511443, 34511846, 34511870, 34512077, 34513107
34519783, 34520519, 34521072, 34521241, 34523306, 34523596, 34524704
34524915, 34525391, 34525691, 34530272, 34530839, 34532111, 34533061
34533150, 34533431, 34534178, 34536480, 34538232, 34539284, 34539633
34539998, 34543854, 34543938, 34545238, 34547912, 34549471, 34549588
34549620, 34551005, 34551359, 34552065, 34552940, 34555251, 34556258
34557307, 34557355, 34557500, 34557851, 34558586, 34559114, 34559964
34560327, 34561380, 34561402, 34562023, 34564274, 34567061, 34567240
34567246, 34567785, 34569338, 34570620, 34572347, 34572899, 34574048
34574650, 34575765, 34575784, 34576656, 34577339, 34580665, 34580955
34585151, 34587326, 34588602, 34589443, 34589885, 34592878, 34595033
34596388, 34596863, 34598617, 34599377, 34599777, 34600007, 34600757
34601469, 34603342, 34604941, 34605269, 34605306, 34605643, 34606514
34609482, 34609883, 34611735, 34612360, 34619587, 34619921, 34624814
34627724, 34627975, 34630604, 34633291, 34634012, 34635564, 34638404
34639116, 34641746, 34645605, 34647902, 34648006, 34648786, 34649403
34651385, 34653168, 34653621, 34655977, 34658861, 34659006, 34659326
34664941, 34670162, 34670941, 34671488, 34672192, 34673162, 34680126
34681314, 34682800, 34684300, 34684487, 34687665, 34691455, 34691800
34692403, 34695366, 34696015, 34696043, 34696612, 34697338, 34697861
34698179, 34699616, 34700228, 34700255, 34700660, 34701323, 34704162
34709158, 34710427, 34710569, 34711434, 34711897, 34713413, 34714760
34715072, 34715960, 34716391, 34719772, 34720762, 34720854, 34724125
34724535, 34724582, 34724986, 34726380, 34730930, 34731121, 34732383
34733234, 34737946, 34738737, 34739733, 34740434, 34742578, 34743170
34743331, 34743869, 34744334, 34744980, 34748613, 34749799, 34752011
34761284, 34761787, 34762290, 34763780, 34765783, 34769588, 34771499
34773273, 34773547, 34774426, 34775863, 34777391, 34782556, 34783802
34784422, 34785211, 34786432, 34787623, 34793099, 34797666, 34797733
34798577, 34800180, 34801889, 34806060, 34808536, 34810252, 34810533

```
34816203, 34821386, 34822118, 34825329, 34827391, 34829425, 34830056
34830523, 34833503, 34837452, 34839112, 34844505, 34845369, 34845920
34850178, 34852202, 34858818, 34859550, 34860551, 34861159, 34861493
34863611, 34865504, 34866621, 34870095, 34871935, 34874803, 34879016
34879878, 34884137, 34884598, 34891346, 34892381, 34894430, 34899985
34933484, 34944894, 34958012, 34974052, 34987218, 34993116, 34993572
35001525, 35001966, 35012866, 35020339, 35021301, 35023651, 35024528
35034357, 35046819, 35047664, 35065501, 35066263, 35074697, 35075794
35079707, 35089117, 35096413, 35099667, 35099674, 35100889, 35123499
35133091, 35146774, 35154281, 35154926, 35156936, 35157812, 35160800
35162446, 35220732, 35239280, 35246710
```

Version 19.0.0.0.ru-2023-01.rur-2023-01.r2

Version 19.0.0.0.ru-2023-01.rur-2023-01.r2 includes the following:

- Patch [35099674](#): DSTV41 UPDATE - TZDATA2022G - NEED OJVM FIX
- Patch [35099667](#): RDBMS - DSTV41 UPDATE - TZDATA2022G
- Patch [35012866](#): BUG_33527739_APPLY.SQL GOT ORA-13516 AWR OPERATION FAILED CATPROC NOT VALID
- Patch [33125873](#): MAKE CACHE GLOBAL OBJECT INVALIDATION CIC NON-SERIALIZE FOR BETTER PERFORMANCE
- Patch [29213893](#): DBMS_STATS FAILING WITH ERROR ORA-01422 WHEN GATHERING STATS FOR USER\$ TABLE
- Patch [28730253](#): SUPPORT NEW ERA REIWA FOR JAPANESE IMPERIAL CALENDAR
- Patch [34786990](#): OJVM RELEASE UPDATE: 19.18.0.0.230117 (34786990)
- Patch [34765931](#): DATABASE RELEASE UPDATE : 19.18.0.0.0 (REL-JAN230131) (34765931)
- Patch [29585399](#): OCW RELEASE UPDATE 19.3.0.0.0 (29585399)
- PreUpgrade Jar: preupgrade_19_cbuild_13_lf.zip

Combined patches for version 19.0.0.0.ru-2023-01.rur-2023-01.r2, released January 2023

Bugs fixed:

```
1297945, 7391838, 8460502, 8476681, 9002767, 10123661, 12565410
```


12949919, 14112098, 14570574, 14735102, 15897884, 15931756, 15959416
16662822, 16664572, 16750494, 16799766, 17275499, 17395507, 17428816
17443054, 17468475, 17562236, 17777718, 18534283, 18697534, 18759260
18943905, 19080742, 19138896, 19147630, 19397646, 19630878, 19697993
19884953, 19958239, 20007421, 20083476, 20289608, 20313356, 20319830
20479545, 20661314, 20721183, 20867658, 20875943, 20922160, 21119541
21232786, 21245711, 21374587, 21528318, 21533734, 21629064, 21639146
21888352, 21965541, 22037067, 22066547, 22252368, 22325312, 22387320
22553815, 22580355, 22725871, 22729345, 22748979, 22873666, 23020668
23066463, 23094775, 23125587, 23294761, 23296836, 23311885, 23606241
23614160, 23645975, 23734075, 23734111, 23763462, 24336782, 24356932
24559425, 24561942, 24596874, 24597536, 24669730, 24687075, 24701882
24833686, 24916492, 24957575, 24971456, 25030027, 25033515, 25092651
25093917, 25148135, 25173172, 25404117, 25415139, 25416731, 25467237
25541233, 25560538, 25562258, 25607406, 25607716, 25632308, 25655012
25661172, 25675134, 25677036, 25756945, 25792962, 25804387, 25804908
25806201, 25809128, 25869323, 25881271, 25883179, 25905368, 25913778
25979242, 25986062, 25997810, 26001677, 26003708, 26108369, 26127355
26139817, 26173091, 26203132, 26247450, 26256280, 26280704, 26284288
26352569, 26352615, 26440142, 26476244, 26497655, 26499997, 26500553
26516556, 26577716, 26587659, 26611353, 26621826, 26668264, 26716835
26739322, 26758837, 26777814, 26785852, 26789742, 26800890, 26819036
26860844, 26872233, 26897528, 26951566, 26957541, 26960568, 26963540
26978857, 27004798, 27004828, 27015468, 27019512, 27036163, 27044169
27044246, 27063461, 27086374, 27091809, 27101798, 27126122, 27126938
27130348, 27131416, 27155644, 27162036, 27166935, 27175854, 27195575
27195935, 27207214, 27207959, 27221350, 27222128, 27243840, 27244999
27254335, 27260704, 27261477, 27275126, 27277677, 27302372, 27329690
27359766, 27359770, 27362994, 27369515, 27378053, 27381279, 27392968
27406105, 27411022, 27423500, 27428898, 27439716, 27453490, 27458357
27458493, 27460010, 27489107, 27497101, 27525303, 27572040, 27582210
27589260, 27595082, 27597359, 27604329, 27614573, 27622946, 27629928
27636387, 27639208, 27654410, 27658166, 27661222, 27666312, 27684864
27691701, 27692173, 27697886, 27700413, 27710072, 27722357, 27729678
27742354, 27745728, 27751111, 27751518, 27760043, 27764052, 27768096
27782078, 27785931, 27786168, 27801144, 27825962, 27828892, 27829722
27841399, 27846298, 27860754, 27873364, 27877830, 27880025, 27897090
27899093, 27907898, 27917890, 27929509, 27933036, 27934711, 27935464
27941110, 27950978, 27951757, 27957203, 27957963, 27962025, 27967484
27979632, 27989365, 27998559, 28001632, 28007516, 28023467, 28031385
28044739, 28052648, 28064977, 28072567, 28078186, 28089605, 28092783
28104176, 28109326, 28112563, 28125947, 28127287, 28127569, 28129791
28133903, 28138566, 28138847, 28144569, 28145995, 28156781, 28167557
28173612, 28181021, 28185286, 28187837, 28189466, 28193268, 28198802

28201045, 28204104, 28204262, 28205555, 28209601, 28209985, 28210681
28215483, 28234255, 28248841, 28263142, 28271258, 28271693, 28276054
28279176, 28279456, 28279612, 28294439, 28294563, 28298401, 28302580
28303692, 28313275, 28319114, 28322973, 28326928, 28337860, 28338211
28350595, 28351919, 28362187, 28364580, 28370061, 28371123, 28373960
28375383, 28379065, 28381939, 28383667, 28386259, 28387185, 28387574
28390177, 28390273, 28392179, 28395302, 28397317, 28402823, 28403019
28406374, 28410431, 28414968, 28430240, 28431445, 28432345, 28435333
28436173, 28436414, 28442896, 28451312, 28452123, 28454215, 28461031
28461789, 28463226, 28470673, 28475242, 28479352, 28482048, 28482049
28484299, 28487818, 28489419, 28492006, 28498976, 28499269, 28502773
28503081, 28504631, 28505321, 28513129, 28513333, 28521330, 28522750
28523644, 28526715, 28530171, 28530697, 28534475, 28534493, 28535127
28537481, 28538439, 28541606, 28542455, 28544270, 28546290, 28547068
28547926, 28553649, 28553981, 28558489, 28558645, 28561704, 28564479
28565296, 28567417, 28567819, 28569897, 28570589, 28572165, 28572407
28572533, 28572544, 28572667, 28572834, 28578945, 28587723, 28589194
28589509, 28589644, 28591817, 28592647, 28593127, 28593682, 28594086
28597221, 28598022, 28600107, 28601957, 28602253, 28604647, 28605066
28606598, 28607316, 28607632, 28608211, 28612239, 28618343, 28620697
28621543, 28621781, 28622202, 28625580, 28625862, 28625873, 28627033
28628592, 28630381, 28632796, 28632799, 28636532, 28639299, 28640772
28642469, 28642551, 28642899, 28643583, 28643654, 28643718, 28644549
28645570, 28646200, 28646939, 28647544, 28649388, 28651078, 28652776
28655209, 28657026, 28658263, 28659098, 28661333, 28661362, 28663289
28663782, 28670402, 28672124, 28672457, 28673945, 28681153, 28682182
28682796, 28689483, 28690694, 28692103, 28692275, 28692282, 28693954
28694526, 28694639, 28694872, 28694877, 28696373, 28697526, 28698087
28699321, 28700945, 28703812, 28704412, 28705231, 28707931, 28708400
28708585, 28709063, 28710385, 28710469, 28710663, 28710734, 28714461
28714720, 28715655, 28715727, 28717406, 28718302, 28718469, 28719348
28720204, 28720418, 28721497, 28722229, 28729900, 28730079, 28730253
28734355, 28734910, 28740708, 28740799, 28740863, 28741374, 28742555
28745367, 28747846, 28749853, 28751498, 28752923, 28755011, 28755084
28755309, 28755846, 28757960, 28758722, 28760206, 28760662, 28763291
28765983, 28767240, 28769456, 28770865, 28771022, 28771947, 28772390
28772816, 28774416, 28776431, 28776811, 28777073, 28777214, 28777478
28778754, 28781599, 28781754, 28785273, 28785321, 28785531, 28788272
28789531, 28789533, 28791576, 28791852, 28793062, 28794230, 28795452
28795551, 28795563, 28795734, 28800508, 28802066, 28802734, 28804517
28805242, 28806517, 28807247, 28808314, 28808652, 28808656, 28810381
28811560, 28811592, 28813317, 28813931, 28815123, 28815355, 28815557
28816871, 28817449, 28818063, 28819640, 28820669, 28821847, 28824482
28826113, 28827682, 28828390, 28831971, 28833912, 28835937, 28836716

28837979, 28838385, 28839869, 28842408, 28844656, 28844738, 28845346
28846759, 28847541, 28847572, 28849494, 28849776, 28850084, 28851458
28851467, 28852325, 28852334, 28854004, 28854212, 28854733, 28855520
28855922, 28857364, 28857552, 28861861, 28862532, 28863263, 28863432
28863487, 28865544, 28865569, 28867698, 28867992, 28869215, 28870496
28871040, 28872645, 28872829, 28873575, 28874416, 28875089, 28876253
28876639, 28876926, 28877252, 28878865, 28880218, 28880864, 28881191
28881848, 28882146, 28882751, 28882784, 28884931, 28887305, 28888083
28888327, 28889389, 28889730, 28891867, 28891941, 28892794, 28896556
28897123, 28897512, 28899663, 28900506, 28901126, 28902135, 28904380
28905312, 28905390, 28905457, 28905615, 28907196, 28909769, 28909992
28910498, 28910586, 28911140, 28912691, 28914144, 28915561, 28917080
28918429, 28919145, 28921844, 28922227, 28922485, 28922532, 28922608
28922767, 28925250, 28925460, 28925634, 28925880, 28927452, 28928462
28930944, 28932914, 28933079, 28933158, 28935293, 28935956, 28936114
28937717, 28938167, 28938422, 28938698, 28940179, 28940281, 28940472
28941901, 28942118, 28942455, 28942694, 28945421, 28945994, 28946233
28946574, 28948554, 28949888, 28950868, 28951332, 28951493, 28951533
28952168, 28954762, 28955606, 28955883, 28956145, 28956908, 28957260
28957292, 28957723, 28958088, 28958094, 28958590, 28959493, 28960863
28962271, 28962775, 28963036, 28965084, 28965095, 28965231, 28965376
28966444, 28968211, 28968779, 28970122, 28971177, 28974083, 28974902
28974999, 28977322, 28978664, 28979289, 28980448, 28980910, 28981871
28983095, 28983486, 28984313, 28985114, 28985272, 28985362, 28985478
28986207, 28986231, 28986257, 28986326, 28986481, 28986696, 28988482
28988864, 28989306, 28990681, 28993295, 28993353, 28994307, 28994542
28994721, 28994783, 28995287, 28996376, 28998369, 28999046, 29000000
29001305, 29001888, 29002273, 29002488, 29002784, 29002927, 29003207
29003407, 29003617, 29003738, 29004934, 29005748, 29006318, 29006621
29007321, 29007353, 29007775, 29008035, 29008669, 29009513, 29010126
29010517, 29011936, 29012609, 29013475, 29013832, 29014076, 29014385
29015118, 29015273, 29016294, 29017265, 29018655, 29018680, 29019121
29020147, 29020271, 29020423, 29021063, 29021352, 29022986, 29024028
29024054, 29024448, 29024552, 29024732, 29024795, 29024876, 29026154
29026582, 29026606, 29027456, 29027694, 29027914, 29027933, 29027940
29030184, 29030927, 29031575, 29031600, 29032234, 29032276, 29032457
29032607, 29033052, 29033145, 29033164, 29033200, 29033280, 29033655
29034331, 29034587, 29036278, 29037290, 29038528, 29038728, 29038730
29039089, 29039510, 29040032, 29040739, 29041739, 29041775, 29043554
29043651, 29043725, 29044086, 29044763, 29044954, 29046482, 29047127
29047850, 29048178, 29048289, 29048498, 29048605, 29048728, 29048792
29048858, 29049014, 29049673, 29050357, 29050560, 29050765, 29050886
29051263, 29051702, 29051953, 29052726, 29052850, 29053783, 29053902
29055644, 29056024, 29056270, 29056560, 29056767, 29056894, 29058476

29059011, 29060216, 29061016, 29061959, 29062692, 29062848, 29062860
29062868, 29110526, 29110783, 29110790, 29110797, 29110802, 29110805
29111598, 29111631, 29112455, 29113282, 29113305, 29115794, 29115857
29116779, 29117337, 29117526, 29117642, 29118543, 29119077, 29119733
29120223, 29122224, 29122254, 29122367, 29123297, 29123324, 29123432
29123444, 29123482, 29124104, 29124368, 29125036, 29125374, 29125380
29125708, 29125786, 29126345, 29127957, 29128693, 29128935, 29129450
29129476, 29129497, 29129691, 29129712, 29130219, 29131539, 29131772
29132456, 29132869, 29132938, 29133470, 29134447, 29135383, 29135649
29136111, 29138641, 29139070, 29139727, 29139761, 29139780, 29139956
29141316, 29141341, 29141685, 29141886, 29142609, 29142667, 29143516
29144995, 29145214, 29145730, 29146077, 29146157, 29146810, 29147849
29148799, 29149170, 29149829, 29150338, 29151520, 29152357, 29152603
29152752, 29154057, 29154631, 29154636, 29154725, 29154829, 29155099
29155208, 29157051, 29157389, 29158139, 29158680, 29158899, 29158990
29159216, 29159661, 29159909, 29159936, 29160174, 29160462, 29160824
29161597, 29161923, 29162095, 29162749, 29163073, 29163156, 29163415
29163437, 29163524, 29163567, 29164376, 29164446, 29165682, 29167111
29167342, 29167374, 29167940, 29168137, 29168219, 29168433, 29169073
29169215, 29169540, 29169739, 29170232, 29170717, 29171683, 29171942
29172618, 29172826, 29173140, 29173373, 29173618, 29173817, 29174004
29174753, 29175638, 29175765, 29175829, 29176318, 29177466, 29177543
29177886, 29178385, 29179097, 29180313, 29180455, 29180559, 29180721
29180893, 29181078, 29181153, 29181231, 29181568, 29181620, 29181743
29181923, 29182019, 29182517, 29182535, 29182901, 29182920, 29183298
29183912, 29184297, 29184666, 29185193, 29186091, 29186456, 29186605
29188255, 29189302, 29189307, 29189889, 29190235, 29190474, 29190663
29190740, 29191541, 29191827, 29192419, 29192468, 29192685, 29193207
29194205, 29194367, 29194493, 29194827, 29194981, 29195279, 29195337
29195758, 29196151, 29196725, 29198092, 29198913, 29199163, 29199635
29199733, 29200316, 29200700, 29201143, 29201494, 29201539, 29201695
29201787, 29202104, 29202461, 29202850, 29203041, 29203122, 29203166
29203227, 29203425, 29203443, 29203604, 29205281, 29205323, 29205419
29205463, 29205767, 29205918, 29206109, 29206605, 29206631, 29207073
29208260, 29208732, 29209545, 29210577, 29210610, 29210624, 29210683
29211457, 29211724, 29211895, 29212012, 29212433, 29212611, 29213320
29213351, 29213613, 29213641, 29213775, 29213850, 29213879, 29213893
29214561, 29214960, 29216312, 29216723, 29216746, 29216984, 29217294
29217472, 29217828, 29217848, 29217856, 29218570, 29219205, 29219273
29219627, 29220079, 29221248, 29221745, 29221891, 29221942, 29222031
29222534, 29222784, 29222892, 29223833, 29223859, 29223967, 29224065
29224294, 29224605, 29224710, 29225076, 29225168, 29225758, 29225861
29227602, 29228869, 29229164, 29229754, 29229839, 29229844, 29229955
29230252, 29230565, 29231133, 29232117, 29232154, 29232449, 29232533

29232653, 29233415, 29233810, 29233953, 29234123, 29235934, 29236573
29237538, 29237575, 29237744, 29240307, 29240668, 29240759, 29241345
29241651, 29242017, 29242561, 29242884, 29242906, 29243749, 29243958
29244495, 29244766, 29244968, 29245063, 29245137, 29245160, 29246163
29246337, 29247183, 29247415, 29247712, 29247906, 29248012, 29248495
29248552, 29248723, 29248835, 29248858, 29249289, 29249412, 29249583
29249991, 29250059, 29250317, 29251259, 29251564, 29252218, 29252510
29252790, 29253184, 29253871, 29254031, 29254177, 29254623, 29254930
29255178, 29255273, 29255431, 29255435, 29255616, 29255705, 29255718
29255973, 29256279, 29256426, 29259119, 29259320, 29260224, 29260407
29260452, 29260956, 29261547, 29261548, 29261695, 29261906, 29262143
29262512, 29262887, 29265446, 29265448, 29265780, 29266248, 29266899
29267292, 29268412, 29269171, 29269228, 29269825, 29270585, 29271019
29273168, 29273360, 29273539, 29273570, 29273735, 29273812, 29273847
29274428, 29274564, 29274623, 29274627, 29275461, 29276272, 29277317
29278218, 29278684, 29279658, 29279751, 29279854, 29281112, 29281527
29281691, 29281796, 29282090, 29282233, 29282666, 29282898, 29285197
29285453, 29285503, 29285621, 29285788, 29285956, 29286037, 29286220
29286229, 29287130, 29287705, 29290110, 29290235, 29292232, 29292253
29292378, 29292837, 29293072, 29293574, 29293806, 29294382, 29294753
29296257, 29297863, 29297915, 29298220, 29299049, 29299082, 29299830
29299844, 29301139, 29301463, 29301566, 29302565, 29302614, 29302963
29303712, 29303918, 29304314, 29304640, 29304692, 29304781, 29304853
29305093, 29306226, 29306478, 29306713, 29306790, 29307090, 29307109
29307638, 29309698, 29311336, 29311528, 29311588, 29311927, 29312310
29312672, 29312734, 29312753, 29312889, 29313347, 29313417, 29313525
29314539, 29314636, 29314867, 29314949, 29317756, 29318410, 29319441
29319558, 29320900, 29321489, 29321689, 29323946, 29323999, 29324568
29324735, 29325087, 29325105, 29325257, 29325356, 29325497, 29325765
29325993, 29326233, 29327044, 29327892, 29327972, 29328305, 29329042
29329087, 29329675, 29329807, 29329848, 29330361, 29330791, 29331066
29331209, 29331380, 29331493, 29332292, 29332395, 29332763, 29332771
29332966, 29333500, 29333683, 29333689, 29337294, 29337310, 29337742
29338315, 29338348, 29338453, 29338780, 29338913, 29339101, 29339155
29339299, 29339452, 29340333, 29341209, 29341782, 29342099, 29343086
29343156, 29343861, 29344541, 29345382, 29345937, 29346057, 29346138
29346211, 29346943, 29347620, 29348176, 29348358, 29350052, 29350712
29350762, 29350868, 29351044, 29351386, 29351662, 29351708, 29351716
29351735, 29351749, 29351771, 29351786, 29352298, 29352724, 29352867
29352947, 29353271, 29353389, 29353432, 29353718, 29353821, 29353960
29355654, 29355913, 29356547, 29356634, 29356698, 29356704, 29356711
29356752, 29356782, 29357424, 29357821, 29358509, 29358828, 29360252
29360285, 29360467, 29360672, 29360775, 29360911, 29360950, 29361319
29361472, 29361801, 29362596, 29363090, 29363151, 29364171, 29364177

29366406, 29366818, 29366940, 29367019, 29367561, 29367971, 29368253
29368310, 29368725, 29372069, 29372541, 29372562, 29373418, 29373588
29374179, 29374604, 29374627, 29375355, 29375941, 29375984, 29376346
29377804, 29377986, 29378029, 29378287, 29378834, 29378913, 29379299
29379381, 29379552, 29379750, 29379978, 29380527, 29381000, 29382296
29382641, 29382784, 29382815, 29383695, 29384740, 29384781, 29384854
29384864, 29384960, 29385339, 29385429, 29385652, 29385774, 29386125
29386502, 29386557, 29386635, 29386660, 29386835, 29387073, 29387274
29387310, 29387329, 29387337, 29388020, 29388072, 29388094, 29388524
29388830, 29389408, 29389889, 29390011, 29390435, 29390501, 29390785
29391030, 29391237, 29391301, 29391438, 29391849, 29391925, 29392554
29392966, 29393291, 29393649, 29394014, 29394140, 29394749, 29394761
29395657, 29396481, 29397841, 29397954, 29397996, 29398192, 29398488
29398863, 29399046, 29399100, 29399121, 29399336, 29399938, 29399959
29402110, 29402131, 29403307, 29404425, 29404483, 29405012, 29405462
29405651, 29405996, 29407488, 29407637, 29407804, 29407932, 29408853
29409149, 29409455, 29410311, 29410834, 29411037, 29411427, 29411469
29411931, 29412066, 29412269, 29413205, 29413360, 29413382, 29413517
29413544, 29413634, 29413956, 29415493, 29415774, 29416339, 29416688
29416700, 29417084, 29417113, 29417173, 29417719, 29417884, 29418165
29418341, 29420254, 29420834, 29421059, 29423003, 29423016, 29423156
29423227, 29423491, 29423826, 29424094, 29424999, 29426241, 29426320
29426521, 29428230, 29429017, 29429087, 29429264, 29429336, 29429466
29429566, 29429895, 29430524, 29430866, 29431192, 29431402, 29431485
29431985, 29432176, 29434301, 29434777, 29434869, 29435474, 29435652
29435966, 29436454, 29436514, 29436522, 29436727, 29437029, 29437379
29437594, 29437712, 29438150, 29438277, 29438736, 29439522, 29440651
29441196, 29442400, 29442936, 29443187, 29443250, 29443559, 29444072
29444275, 29444282, 29444524, 29444602, 29444906, 29445548, 29445707
29446319, 29446669, 29447460, 29448498, 29449477, 29449845, 29449852
29450162, 29450193, 29450273, 29450421, 29450812, 29450936, 29451085
29451224, 29451386, 29451660, 29452251, 29452576, 29452736, 29452739
29452809, 29452813, 29452936, 29452953, 29452977, 29453104, 29453105
29453109, 29453681, 29453682, 29454450, 29454467, 29454468, 29454469
29454470, 29454471, 29454978, 29455424, 29455773, 29456538, 29456714
29457312, 29457319, 29457370, 29457502, 29457807, 29457978, 29458132
29460252, 29461420, 29461791, 29461971, 29462594, 29462767, 29462957
29463047, 29463528, 29463553, 29463798, 29464616, 29464779, 29465047
29465177, 29466674, 29466707, 29467622, 29469563, 29469565, 29470059
29470205, 29470291, 29470636, 29470814, 29470880, 29471633, 29471832
29471857, 29471860, 29472170, 29472172, 29472176, 29472204, 29472235
29472402, 29472404, 29472405, 29472408, 29472411, 29472446, 29472618
29473708, 29474348, 29475386, 29476473, 29476702, 29477015, 29481584
29482021, 29483452, 29483532, 29483626, 29483672, 29483685, 29483712

29483723, 29483771, 29485099, 29485731, 29485877, 29486181, 29486848
29487150, 29487189, 29487407, 29488894, 29488996, 29489436, 29489546
29490032, 29490256, 29491784, 29492127, 29492939, 29493122, 29493821
29494101, 29494245, 29494788, 29494934, 29495057, 29495171, 29495684
29496977, 29497053, 29497311, 29497588, 29497696, 29497778, 29498198
29499077, 29500257, 29500826, 29500963, 29501218, 29502561, 29503543
29503631, 29503827, 29504103, 29504492, 29504682, 29505225, 29505589
29505668, 29506942, 29507270, 29507616, 29508681, 29508751, 29508998
29509777, 29510278, 29511064, 29511611, 29511771, 29511980, 29512125
29512773, 29512890, 29514284, 29514479, 29515134, 29515240, 29515476
29515534, 29515766, 29515834, 29516300, 29516727, 29516766, 29516943
29517168, 29517443, 29517883, 29518604, 29518767, 29519131, 29521187
29521688, 29521748, 29521862, 29522358, 29522561, 29522662, 29523055
29523216, 29523511, 29524043, 29524599, 29524985, 29525366, 29525467
29525886, 29526966, 29527595, 29527610, 29528184, 29528368, 29529147
29529436, 29530414, 29530440, 29530515, 29530812, 29530909, 29531654
29531836, 29532112, 29532532, 29534218, 29536342, 29536445, 29536794
29537829, 29538631, 29539027, 29539413, 29540327, 29540831, 29540862
29541517, 29541742, 29541769, 29541973, 29542084, 29542449, 29542474
29542580, 29542643, 29543034, 29543956, 29544552, 29546817, 29547010
29547867, 29548413, 29548427, 29548592, 29548687, 29548722, 29549040
29549071, 29549104, 29549154, 29549730, 29550530, 29552402, 29552773
29553141, 29554092, 29554351, 29554554, 29554997, 29555105, 29555239
29557144, 29557261, 29557336, 29557556, 29558238, 29558452, 29558926
29558975, 29559187, 29559395, 29559446, 29559908, 29559981, 29560019
29564592, 29564593, 29565611, 29579919, 29580394, 29580983, 29581460
29581771, 29583018, 29584261, 29584693, 29586143, 29587299, 29587488
29587720, 29587765, 29588580, 29588732, 29589544, 29590666, 29591311
29591343, 29591641, 29591661, 29592011, 29592215, 29592433, 29592595
29592946, 29593820, 29597158, 29597536, 29597716, 29597754, 29598039
29598040, 29598046, 29598226, 29598233, 29598338, 29598981, 29599008
29599243, 29599300, 29599552, 29601461, 29602831, 29603460, 29603884
29604002, 29604257, 29606261, 29607136, 29607797, 29608000, 29608023
29608888, 29609434, 29609468, 29609603, 29610506, 29611020, 29611991
29613733, 29614206, 29614931, 29614987, 29615824, 29616244, 29616414
29617414, 29618074, 29618190, 29620042, 29620564, 29622936, 29623323
29623592, 29624124, 29624408, 29625065, 29625804, 29625827, 29625876
29626154, 29626732, 29628200, 29628647, 29629430, 29629650, 29629681
29629745, 29630221, 29631749, 29632095, 29632265, 29632611, 29632751
29633697, 29633753, 29633936, 29634643, 29635427, 29635717, 29635990
29637362, 29637526, 29637560, 29638285, 29638928, 29641373, 29641736
29642451, 29643721, 29644426, 29644464, 29645167, 29645349, 29647176
29647770, 29648928, 29649694, 29651183, 29651517, 29651520, 29652809
29653132, 29653246, 29655164, 29655416, 29655668, 29655855, 29655895

29656400, 29656819, 29656843, 29657399, 29657422, 29657744, 29657960
29657973, 29658056, 29661028, 29661065, 29661722, 29663191, 29663368
29663494, 29663601, 29663813, 29664087, 29664161, 29665168, 29665940
29666451, 29667527, 29667994, 29668005, 29668253, 29669241, 29669413
29670713, 29670782, 29671363, 29672507, 29675446, 29676089, 29676921
29677051, 29677173, 29677733, 29677927, 29678217, 29679856, 29680700
29681987, 29683039, 29683189, 29683211, 29684518, 29685137, 29685276
29687214, 29687220, 29687459, 29687718, 29687727, 29687763, 29688867
29689145, 29689255, 29690795, 29690806, 29692115, 29692694, 29693847
29694869, 29695425, 29695821, 29695841, 29695964, 29695987, 29696242
29696310, 29697928, 29700125, 29700460, 29700770, 29701425, 29701720
29701755, 29701937, 29703932, 29704426, 29705793, 29706141, 29706160
29707099, 29707493, 29707896, 29708324, 29708353, 29708876, 29708915
29710188, 29710858, 29713810, 29715220, 29715647, 29715703, 29716029
29716194, 29716227, 29716491, 29716602, 29716871, 29717659, 29717901
29718198, 29719146, 29720133, 29720373, 29721418, 29721576, 29722026
29722092, 29722167, 29722389, 29723113, 29724497, 29724658, 29725115
29725421, 29725425, 29725476, 29725781, 29726695, 29737941, 29738374
29738400, 29739576, 29741319, 29741976, 29742223, 29742926, 29744225
29744400, 29744637, 29745288, 29745624, 29746003, 29746962, 29747493
29747648, 29747653, 29748285, 29748325, 29748336, 29748513, 29749469
29749471, 29750673, 29751094, 29753244, 29754196, 29754640, 29754951
29755821, 29756274, 29756444, 29757099, 29757264, 29757651, 29757687
29758203, 29758217, 29758661, 29761678, 29761837, 29761911, 29763158
29764644, 29765035, 29765219, 29765347, 29765393, 29765493, 29766207
29766435, 29766503, 29766679, 29768487, 29768899, 29769549, 29769695
29769901, 29770750, 29771032, 29771242, 29772514, 29772761, 29773185
29773197, 29773205, 29773459, 29773633, 29773842, 29774362, 29775393
29775473, 29779196, 29779368, 29779901, 29780140, 29780459, 29780507
29780633, 29782211, 29782284, 29782501, 29782823, 29782866, 29783142
29784106, 29785169, 29785239, 29785251, 29785311, 29785544, 29785550
29785831, 29787292, 29787766, 29788820, 29789911, 29791152, 29791880
29791916, 29792213, 29792433, 29793141, 29793151, 29793318, 29794174
29794462, 29795712, 29795957, 29796335, 29796378, 29796916, 29797209
29797726, 29801164, 29802382, 29802695, 29803593, 29803948, 29804875
29805368, 29805772, 29806390, 29806964, 29807964, 29809792, 29809837
29810012, 29810013, 29811616, 29811720, 29812084, 29812166, 29812489
29813503, 29813650, 29813671, 29814455, 29814995, 29815341, 29815713
29816887, 29817278, 29817547, 29817784, 29818794, 29819753, 29820341
29821130, 29821582, 29822714, 29825525, 29827647, 29827792, 29827852
29828644, 29829339, 29829453, 29830374, 29831196, 29831404, 29831567
29833406, 29833984, 29834506, 29836096, 29836424, 29838337, 29838485
29838740, 29838773, 29839481, 29839715, 29840619, 29841267, 29841687
29842369, 29843238, 29843277, 29843692, 29843831, 29844131, 29844226

29844275, 29845449, 29845530, 29845691, 29846126, 29846525, 29846645
29846688, 29847627, 29848084, 29848849, 29849100, 29849139, 29850083
29850552, 29850566, 29850930, 29851020, 29851308, 29851401, 29851733
29853485, 29856420, 29856506, 29856859, 29856890, 29858121, 29858376
29858420, 29858929, 29859068, 29860022, 29860028, 29860994, 29861075
29864203, 29864261, 29865188, 29865590, 29865658, 29867728, 29868639
29868736, 29869052, 29869086, 29869149, 29869404, 29869857, 29869877
29869887, 29869906, 29870065, 29870533, 29871098, 29871312, 29871360
29872401, 29872720, 29872937, 29872983, 29873206, 29873665, 29873751
29874090, 29874761, 29875200, 29875459, 29875565, 29875919, 29876358
29876989, 29877608, 29878076, 29879723, 29881050, 29881478, 29881575
29881643, 29881839, 29882427, 29882454, 29882729, 29884958, 29885182
29885890, 29886809, 29887045, 29887111, 29887840, 29888621, 29889184
29889358, 29890740, 29891075, 29891383, 29891533, 29891853, 29891857
29891916, 29892388, 29892604, 29892634, 29892973, 29892982, 29893132
29893197, 29893287, 29894021, 29896510, 29897418, 29897720, 29897863
29899384, 29900186, 29900203, 29900824, 29901021, 29901025, 29901419
29901961, 29902299, 29902327, 29902330, 29902659, 29903190, 29903299
29903357, 29903454, 29904002, 29906678, 29907870, 29907942, 29908389
29908639, 29908777, 29909658, 29910218, 29910402, 29912135, 29912286
29913805, 29913934, 29913966, 29914449, 29914544, 29915182, 29915217
29915848, 29916198, 29916975, 29919782, 29919789, 29920025, 29920376
29920804, 29921214, 29921318, 29921559, 29922225, 29922435, 29922461
29923452, 29924147, 29924181, 29924479, 29925177, 29926466, 29927360
29927756, 29928040, 29928210, 29928340, 29928427, 29928564, 29930457
29931230, 29931956, 29932202, 29932310, 29932430, 29932780, 29932953
29933718, 29934048, 29934052, 29934158, 29934557, 29935685, 29936841
29937565, 29937655, 29937956, 29938063, 29938225, 29939075, 29939400
29939795, 29940373, 29941062, 29942096, 29942275, 29942554, 29943670
29943879, 29944035, 29944159, 29944660, 29944963, 29945645, 29946101
29946388, 29947145, 29947242, 29947428, 29948154, 29948165, 29950018
29950220, 29951620, 29951759, 29952700, 29955625, 29956016, 29956222
29957412, 29957493, 29958925, 29960325, 29960884, 29961353, 29961360
29961609, 29961847, 29962160, 29962248, 29962590, 29962834, 29962927
29962939, 29965052, 29965207, 29965603, 29965888, 29966768, 29967223
29967386, 29967911, 29967980, 29968085, 29968703, 29969557, 29969985
29970081, 29970261, 29970273, 29970298, 29970587, 29970861, 29971027
29971481, 29971888, 29971936, 29971951, 29972134, 29972176, 29973012
29989783, 29989845, 29990779, 29991257, 29992299, 29993717, 29997326
29997553, 29997937, 29997959, 30000518, 30000664, 30001105, 30001331
30003187, 30003356, 30004660, 30004856, 30006159, 30006280, 30006411
30006472, 30006705, 30006985, 30007450, 30007536, 30007797, 30008035
30008125, 30008198, 30008214, 30008456, 30009528, 30009710, 30010995
30012181, 30012235, 30012737, 30013243, 30013535, 30014200, 30015070

30017836, 30018017, 30018126, 30018903, 30019864, 30021830, 30024618
30025814, 30026016, 30026596, 30027614, 30027638, 30027649, 30028182
30028599, 30028649, 30029519, 30029806, 30031027, 30031613, 30032233
30032376, 30032484, 30033040, 30033547, 30034456, 30035444, 30035598
30036258, 30038392, 30038576, 30039796, 30039800, 30039959, 30040157
30040511, 30041501, 30041514, 30042490, 30043398, 30043610, 30043930
30044108, 30044507, 30045242, 30045273, 30045389, 30045484, 30045983
30046497, 30047510, 30047531, 30047702, 30047765, 30047931, 30048688
30049966, 30051176, 30051783, 30051804, 30052740, 30052928, 30053036
30053501, 30053748, 30054980, 30055640, 30056058, 30057718, 30057799
30058149, 30058453, 30059106, 30059109, 30059821, 30060267, 30060330
30062364, 30062429, 30062736, 30062819, 30064268, 30066352, 30067565
30068101, 30068384, 30068792, 30068871, 30070064, 30070506, 30071446
30072018, 30072038, 30072905, 30073314, 30073422, 30073744, 30074250
30074296, 30074349, 30074469, 30074472, 30074820, 30075037, 30076058
30076197, 30076253, 30076604, 30078675, 30078934, 30079495, 30079949
30080111, 30080266, 30080297, 30080988, 30081055, 30081546, 30081580
30082145, 30082402, 30083100, 30083216, 30083488, 30083807, 30084458
30084606, 30084971, 30085897, 30086596, 30086992, 30087165, 30087509
30088229, 30088421, 30090568, 30092254, 30092280, 30092859, 30094929
30094948, 30095499, 30095591, 30095952, 30096138, 30097092, 30097115
30098251, 30098719, 30099302, 30099420, 30099454, 30099852, 30100354
30101090, 30101186, 30101541, 30101847, 30102774, 30103551, 30103553
30104348, 30104378, 30104555, 30104722, 30104850, 30105458, 30106748
30106901, 30108012, 30109365, 30109839, 30110224, 30110370, 30110518
30114477, 30114489, 30114534, 30116085, 30116203, 30116753, 30116854
30117209, 30117220, 30117335, 30117469, 30117593, 30118261, 30118279
30120608, 30121009, 30122523, 30122583, 30123138, 30124026, 30125765
30126145, 30126470, 30127145, 30127522, 30127805, 30127904, 30128047
30128231, 30130240, 30131286, 30131645, 30132708, 30132989, 30133841
30134103, 30134746, 30135396, 30135731, 30135899, 30135942, 30136102
30136346, 30137792, 30138600, 30138948, 30139392, 30140425, 30141240
30142527, 30142802, 30142812, 30142815, 30142907, 30143470, 30143593
30145712, 30146593, 30146969, 30147195, 30147307, 30147308, 30147473
30147928, 30148343, 30148929, 30148966, 30148999, 30149035, 30149658
30150606, 30150710, 30151636, 30153533, 30153552, 30153885, 30154633
30155241, 30155320, 30155388, 30155489, 30155814, 30155837, 30155999
30156569, 30157526, 30158313, 30159329, 30159488, 30159511, 30159536
30159690, 30159752, 30159760, 30160025, 30160625, 30161094, 30163243
30164238, 30164714, 30165493, 30165503, 30165876, 30165892, 30165897
30166257, 30166352, 30167787, 30169254, 30169841, 30170104, 30172925
30173113, 30173370, 30173556, 30174102, 30174394, 30174401, 30175180
30175291, 30175478, 30175587, 30177597, 30178250, 30178839, 30178990
30179012, 30179038, 30179644, 30179894, 30180195, 30180208, 30180643

30181756, 30182498, 30183367, 30183696, 30183715, 30183920, 30184102
30185852, 30186319, 30186476, 30186706, 30187627, 30187866, 30188215
30188631, 30189516, 30189535, 30190090, 30191274, 30192691, 30192729
30192853, 30193165, 30193262, 30193505, 30193506, 30193584, 30193736
30194612, 30194710, 30194972, 30195667, 30195668, 30195684, 30195773
30196195, 30196358, 30196629, 30198239, 30198598, 30198861, 30198905
30199890, 30200034, 30200132, 30200237, 30200680, 30200758, 30202349
30202388, 30202407, 30203929, 30204042, 30204542, 30206220, 30206493
30206675, 30207473, 30207519, 30208327, 30208690, 30208723, 30209222
30209736, 30210027, 30210429, 30210753, 30210884, 30211567, 30213031
30213540, 30213590, 30214769, 30214826, 30215130, 30215302, 30215351
30217206, 30217562, 30217982, 30218044, 30218317, 30218956, 30219222
30220932, 30221115, 30221237, 30221298, 30222187, 30222512, 30222669
30222975, 30223712, 30223847, 30223990, 30224544, 30224650, 30224725
30224868, 30224950, 30225265, 30225439, 30225443, 30225718, 30225837
30225844, 30226244, 30227400, 30228422, 30228567, 30229030, 30229126
30229683, 30230183, 30232638, 30233105, 30233536, 30233934, 30234132
30234227, 30235878, 30235919, 30235979, 30236092, 30236399, 30236554
30236746, 30236883, 30236964, 30237477, 30237640, 30238211, 30238715
30239480, 30240010, 30240547, 30240858, 30240930, 30240972, 30241567
30241807, 30241829, 30241920, 30242120, 30242724, 30243216, 30243720
30244340, 30244831, 30246053, 30246179, 30247305, 30248520, 30248531
30248564, 30249432, 30249738, 30249927, 30251003, 30251130, 30252005
30252098, 30252156, 30252458, 30252977, 30253035, 30253090, 30253608
30253705, 30253761, 30253835, 30254206, 30254525, 30254576, 30254726
30255143, 30255528, 30256542, 30257412, 30257908, 30259120, 30259469
30260523, 30260595, 30262248, 30263013, 30263377, 30264405, 30265523
30265608, 30265615, 30265703, 30266791, 30267155, 30269428, 30269748
30270647, 30270744, 30271114, 30272329, 30273212, 30274090, 30274188
30274324, 30274662, 30275434, 30275548, 30275569, 30275578, 30275784
30276144, 30276243, 30277120, 30277451, 30277589, 30277648, 30277733
30277884, 30277887, 30278402, 30281428, 30281615, 30282501, 30282591
30282918, 30283296, 30283577, 30283579, 30283581, 30283832, 30283932
30284219, 30284369, 30284751, 30285026, 30285166, 30285251, 30285341
30285457, 30285540, 30285843, 30286961, 30288343, 30288491, 30289074
30289458, 30290700, 30291536, 30292305, 30293345, 30293935, 30294267
30294465, 30294671, 30294865, 30295110, 30295137, 30295549, 30295790
30295808, 30297905, 30299367, 30299817, 30299934, 30300030, 30300342
30300363, 30300523, 30300538, 30304037, 30305163, 30305264, 30305395
30305568, 30305603, 30305880, 30306407, 30307814, 30307883, 30308368
30308578, 30308624, 30308772, 30308947, 30309098, 30309798, 30310195
30311826, 30312094, 30312546, 30313749, 30313848, 30313989, 30314079
30314198, 30314837, 30316667, 30316897, 30317005, 30317209, 30317397
30318638, 30318943, 30319080, 30319099, 30320029, 30321076, 30321398

30322980, 30323219, 30323658, 30323820, 30323849, 30324059, 30324180
30324466, 30324649, 30325407, 30325786, 30326115, 30326882, 30327149
30327581, 30327678, 30327810, 30328168, 30328209, 30328690, 30329209
30329737, 30329751, 30330123, 30331254, 30331356, 30331759, 30332505
30332893, 30333443, 30334484, 30334563, 30335127, 30335832, 30335987
30336032, 30336383, 30336530, 30336742, 30336996, 30337245, 30338434
30338591, 30339049, 30339103, 30339605, 30340540, 30341713, 30342371
30342878, 30343370, 30343750, 30344614, 30345201, 30345432, 30345593
30345809, 30345926, 30345950, 30346330, 30346729, 30346847, 30346867
30347215, 30347410, 30349714, 30350177, 30350543, 30351059, 30352278
30352532, 30352581, 30352623, 30352715, 30354034, 30355490, 30356060
30356461, 30357463, 30357698, 30357897, 30358416, 30359614, 30360383
30360653, 30361070, 30361635, 30362003, 30362850, 30363088, 30363193
30363311, 30363658, 30363716, 30364329, 30364481, 30364613, 30364835
30365265, 30365745, 30367193, 30368048, 30368482, 30368534, 30368668
30368917, 30371264, 30371623, 30371909, 30372081, 30372782, 30373419
30373541, 30373550, 30374345, 30374570, 30374739, 30375109, 30376986
30377347, 30377692, 30377729, 30379468, 30380511, 30380907, 30381207
30381525, 30381614, 30382364, 30382646, 30382982, 30383286, 30384121
30384152, 30387628, 30387666, 30388341, 30388853, 30389229, 30389414
30389507, 30389821, 30390279, 30390382, 30390635, 30391272, 30391794
30392011, 30392870, 30392987, 30393110, 30393317, 30393653, 30393944
30394509, 30394738, 30394974, 30395132, 30396120, 30396946, 30396974
30397100, 30398099, 30398251, 30398257, 30398422, 30398770, 30399906
30402386, 30403284, 30403412, 30403763, 30403877, 30403881, 30403902
30403989, 30404117, 30404153, 30404357, 30404639, 30406227, 30406709
30408128, 30408443, 30408515, 30408808, 30409207, 30409339, 30409469
30409472, 30409590, 30412188, 30412772, 30412863, 30412885, 30412921
30413137, 30413294, 30414491, 30414679, 30414714, 30416034, 30416603
30417648, 30417732, 30418926, 30419024, 30419196, 30419450, 30420105
30420452, 30421009, 30421026, 30421204, 30421439, 30421476, 30421706
30422487, 30423135, 30423218, 30424347, 30430921, 30431274, 30431504
30431582, 30431698, 30431703, 30431717, 30431867, 30432101, 30432470
30433177, 30434793, 30436326, 30436399, 30436406, 30437003, 30437149
30438224, 30439985, 30440651, 30440712, 30441277, 30441687, 30441959
30442266, 30442749, 30442805, 30442874, 30442884, 30443393, 30444636
30446583, 30446820, 30447060, 30447498, 30447589, 30447994, 30448182
30448348, 30448355, 30448917, 30449194, 30449837, 30450787, 30453442
30454090, 30455427, 30457633, 30457697, 30458080, 30458233, 30458568
30458593, 30460095, 30460558, 30460842, 30460922, 30461123, 30461458
30462439, 30463938, 30464250, 30464655, 30466081, 30466214, 30469579
30469777, 30470402, 30470947, 30472891, 30473634, 30474167, 30474386
30474497, 30474774, 30475041, 30475115, 30475813, 30476768, 30477588
30477685, 30477691, 30477767, 30479252, 30479647, 30479715, 30480591

30480872, 30481004, 30483065, 30483140, 30483217, 30483521, 30484042
30484623, 30484801, 30485255, 30486436, 30486896, 30487387, 30487697
30489582, 30490014, 30490578, 30490671, 30491456, 30492380, 30493331
30493518, 30493656, 30494087, 30494259, 30494900, 30495035, 30495078
30495133, 30495483, 30496957, 30497057, 30497120, 30497765, 30498824
30500224, 30500297, 30500344, 30500582, 30501574, 30502415, 30503943
30505029, 30505497, 30506794, 30506991, 30506996, 30507032, 30507313
30508100, 30509112, 30509277, 30510347, 30510527, 30510718, 30512690
30513285, 30513353, 30513480, 30513848, 30515886, 30516868, 30517214
30517516, 30517635, 30518114, 30518349, 30518447, 30518923, 30519188
30520662, 30521788, 30522285, 30522998, 30523137, 30523538, 30523601
30523750, 30524736, 30527198, 30527275, 30528547, 30528637, 30528687
30528704, 30528731, 30528935, 30529790, 30529915, 30529940, 30530585
30532811, 30533132, 30533580, 30534351, 30534549, 30534662, 30534827
30535905, 30536237, 30537403, 30537405, 30537533, 30537584, 30538141
30538818, 30539519, 30539866, 30540109, 30540407, 30544247, 30544595
30544629, 30544752, 30545040, 30545281, 30545556, 30549223, 30549255
30549368, 30549637, 30549789, 30549881, 30549883, 30551000, 30551123
30554178, 30556326, 30556523, 30556581, 30556807, 30557386, 30557803
30558561, 30559129, 30559218, 30559252, 30560365, 30560513, 30561404
30561590, 30561737, 30564139, 30564343, 30564898, 30565004, 30565595
30565699, 30565805, 30566054, 30567372, 30568514, 30568896, 30570083
30571306, 30572816, 30573236, 30573703, 30575243, 30575697, 30576112
30576393, 30576853, 30577071, 30577591, 30578221, 30579051, 30580813
30580887, 30581448, 30582035, 30582221, 30582500, 30584767, 30585407
30586493, 30587001, 30588738, 30589914, 30591028, 30591475, 30592859
30593046, 30593104, 30593863, 30593899, 30594167, 30595114, 30595408
30595860, 30596024, 30596320, 30596488, 30596694, 30598682, 30598746
30598919, 30599377, 30599405, 30599407, 30600173, 30600184, 30600230
30602230, 30602828, 30603211, 30605215, 30605676, 30606345, 30606451
30608583, 30609737, 30609799, 30610052, 30610097, 30610406, 30610667
30611527, 30611603, 30612199, 30613035, 30613937, 30613971, 30614411
30614497, 30616406, 30616738, 30616776, 30617002, 30617626, 30618056
30618230, 30618406, 30619112, 30619138, 30619383, 30619414, 30619525
30619728, 30619787, 30620805, 30621255, 30621910, 30622393, 30622528
30622755, 30623138, 30623142, 30624243, 30624792, 30624864, 30624874
30625121, 30626046, 30628834, 30628899, 30629139, 30629643, 30629799
30630391, 30630829, 30630930, 30631393, 30631523, 30633259, 30633395
30633938, 30634548, 30634559, 30635183, 30635302, 30635326, 30635360
30637270, 30637319, 30637841, 30638712, 30639996, 30640436, 30641541
30641755, 30641900, 30642124, 30644358, 30644530, 30644766, 30644889
30645590, 30645896, 30645938, 30646077, 30647133, 30649310, 30649766
30650297, 30650404, 30651231, 30651570, 30651621, 30651674, 30652515
30652595, 30652813, 30652853, 30654131, 30654558, 30655504, 30655906

30656839, 30657196, 30657365, 30657566, 30657624, 30657706, 30657875
30657906, 30657940, 30658421, 30658533, 30658555, 30658702, 30659940
30660412, 30661000, 30661939, 30662634, 30662651, 30662736, 30662803
30663591, 30663646, 30664266, 30665036, 30665399, 30665720, 30666902
30668407, 30668754, 30670096, 30670328, 30670369, 30670584, 30671606
30671720, 30671813, 30671958, 30674373, 30674959, 30675651, 30676209
30677633, 30679595, 30679707, 30679771, 30679804, 30681085, 30681222
30681462, 30681516, 30681521, 30681697, 30682289, 30684902, 30685163
30686017, 30686131, 30686809, 30687047, 30689557, 30689988, 30690686
30691604, 30691731, 30691857, 30692462, 30692473, 30692760, 30693791
30694947, 30695670, 30696566, 30696821, 30698289, 30699770, 30702732
30703610, 30704826, 30705448, 30706073, 30707740, 30708735, 30710088
30710506, 30710783, 30710807, 30710917, 30711370, 30711386, 30712670
30713133, 30714151, 30714715, 30716001, 30716863, 30718841, 30718862
30719327, 30719419, 30720736, 30720844, 30722105, 30722705, 30723671
30724679, 30724881, 30726204, 30727629, 30727701, 30727759, 30728196
30729278, 30729604, 30729839, 30730026, 30732711, 30733270, 30733563
30734242, 30734362, 30734707, 30735091, 30735153, 30735624, 30735736
30736718, 30737970, 30739013, 30739876, 30740115, 30740250, 30740440
30740444, 30740669, 30740997, 30741263, 30747820, 30748411, 30748707
30749181, 30749644, 30749722, 30750219, 30750991, 30751171, 30751521
30751527, 30751639, 30751968, 30753432, 30755348, 30758836, 30758854
30758943, 30759573, 30760739, 30761871, 30761878, 30763272, 30763305
30763639, 30763754, 30763970, 30764405, 30764663, 30764706, 30764976
30765486, 30765995, 30767277, 30767654, 30768636, 30769312, 30770717
30771009, 30772069, 30773164, 30773696, 30773797, 30776416, 30776676
30776929, 30777519, 30777759, 30778855, 30779240, 30781032, 30781041
30781461, 30781970, 30782266, 30782300, 30782414, 30783395, 30783551
30785101, 30786237, 30786641, 30786655, 30787365, 30788973, 30789427
30789904, 30790047, 30790441, 30801050, 30801296, 30801510, 30803210
30804646, 30806757, 30806984, 30807723, 30807888, 30808109, 30808364
30808869, 30809087, 30809267, 30810418, 30810680, 30810765, 30812574
30814266, 30814285, 30815204, 30815269, 30815495, 30815852, 30815994
30816760, 30816938, 30819340, 30819629, 30819756, 30820155, 30821297
30822207, 30822502, 30822919, 30823744, 30825391, 30825419, 30825656
30826474, 30827849, 30828205, 30828350, 30829779, 30829844, 30830555
30832466, 30832775, 30833454, 30834068, 30834110, 30834705, 30835184
30835219, 30835853, 30836129, 30838605, 30839253, 30839315, 30839451
30839836, 30839961, 30840150, 30840791, 30840793, 30841241, 30842277
30843271, 30844839, 30845806, 30846063, 30846159, 30846263, 30846782
30847442, 30847871, 30848028, 30848097, 30848773, 30851448, 30851951
30852945, 30852954, 30855101, 30856358, 30857501, 30857721, 30858444
30858810, 30858877, 30858919, 30860741, 30860803, 30861988, 30862285
30863115, 30864607, 30865346, 30865805, 30866141, 30866988, 30867685

30868010, 30868186, 30869131, 30870043, 30870248, 30870439, 30870513
30871716, 30871792, 30873527, 30874084, 30874270, 30874337, 30874660
30876666, 30879169, 30879708, 30880774, 30880913, 30881161, 30881407
30883715, 30883785, 30883877, 30886188, 30887435, 30887501, 30887777
30887976, 30887989, 30889443, 30889607, 30889723, 30890720, 30890752
30890971, 30891760, 30891792, 30892319, 30893601, 30894554, 30895426
30895577, 30896615, 30896620, 30896685, 30898131, 30898366, 30898381
30898748, 30898939, 30901889, 30902655, 30903129, 30904672, 30905604
30906274, 30906407, 30909329, 30909596, 30909907, 30909918, 30910255
30910264, 30910267, 30913399, 30914272, 30914411, 30914674, 30915781
30919403, 30919587, 30919691, 30919804, 30920082, 30920427, 30921136
30921259, 30922450, 30922936, 30922996, 30923514, 30923517, 30923597
30923732, 30923940, 30925316, 30925419, 30925828, 30927440, 30927821
30929206, 30930149, 30930339, 30931068, 30931311, 30931981, 30932674
30932923, 30933117, 30936251, 30936831, 30936942, 30937340, 30937391
30937410, 30938413, 30939307, 30939317, 30939934, 30940259, 30940382
30940868, 30940869, 30941056, 30942353, 30944643, 30945005, 30945772
30946072, 30946141, 30946595, 30946768, 30946843, 30946876, 30946896
30947294, 30948278, 30950326, 30950786, 30952104, 30952191, 30953157
30953266, 30953836, 30954062, 30954071, 30955702, 30956571, 30956647
30957739, 30958493, 30960314, 30960356, 30960736, 30961566, 30961824
30963567, 30964194, 30965111, 30965554, 30965649, 30966205, 30967084
30968737, 30968781, 30970518, 30972817, 30972841, 30972887, 30972947
30972951, 30972959, 30972966, 30973085, 30973113, 30973127, 30973137
30973143, 30973197, 30973698, 30973715, 30973877, 30974207, 30974813
30976603, 30977294, 30977411, 30978554, 30978747, 30978868, 30979701
30980023, 30980115, 30980317, 30980733, 30981182, 30981240, 30983064
30985027, 30985906, 30986423, 30987088, 30987105, 30987243, 30987717
30987724, 30988444, 30989951, 30990034, 30992120, 30992330, 30992477
30992597, 30992670, 30993198, 30993518, 30993604, 30994996, 30996945
30996991, 30997375, 30997960, 30998035, 30998475, 30998662, 30998759
30998847, 30999219, 31000312, 31001017, 31001455, 31001490, 31001859
31002223, 31002346, 31002923, 31003137, 31003659, 31003759, 31004077
31004719, 31004844, 31004871, 31005003, 31006011, 31006259, 31006792
31006953, 31008240, 31008858, 31008907, 31009032, 31009271, 31009545
31009590, 31009680, 31010218, 31010554, 31010976, 31011361, 31011690
31013127, 31013531, 31014323, 31015330, 31016413, 31018218, 31019249
31019407, 31021068, 31021109, 31021157, 31021324, 31021542, 31021780
31022858, 31025267, 31025520, 31025531, 31025859, 31026220, 31026591
31026860, 31026870, 31027747, 31028883, 31028986, 31029936, 31030898
31031240, 31031955, 31032463, 31032725, 31032904, 31032913, 31034794
31035287, 31035916, 31037421, 31038220, 31038447, 31038817, 31039337
31039627, 31039928, 31040847, 31041540, 31042208, 31042337, 31043483
31043630, 31043695, 31043747, 31044145, 31044460, 31044504, 31044951

31045929, 31046188, 31046619, 31046830, 31047022, 31047169, 31047333
31047697, 31047740, 31048025, 31048741, 31049215, 31049995, 31050103
31050433, 31050557, 31051056, 31051075, 31052735, 31052809, 31053669
31054031, 31054177, 31054874, 31055142, 31056909, 31057402, 31058548
31061482, 31061504, 31062010, 31062645, 31063315, 31063380, 31063769
31064025, 31065701, 31065838, 31066082, 31066250, 31066265, 31066554
31067456, 31067483, 31067892, 31067913, 31069059, 31069872, 31070528
31071080, 31073424, 31073440, 31073586, 31074032, 31075323, 31075960
31077117, 31077365, 31078391, 31078757, 31079204, 31080474, 31081558
31082719, 31082726, 31084778, 31084921, 31086467, 31086869, 31086954
31087361, 31087679, 31088115, 31088341, 31089259, 31089270, 31090262
31091402, 31091469, 31091868, 31092129, 31092233, 31092581, 31092921
31093712, 31094183, 31094228, 31094249, 31094374, 31094625, 31094688
31095972, 31096846, 31097760, 31097961, 31098661, 31098870, 31099312
31099926, 31099981, 31100172, 31101386, 31101840, 31103065, 31103804
31104809, 31105225, 31105733, 31105896, 31106140, 31106577, 31107577
31108603, 31108644, 31109506, 31109924, 31110021, 31110225, 31110887
31112088, 31112209, 31112530, 31112972, 31113089, 31113177, 31113249
31113426, 31113682, 31114116, 31114265, 31114671, 31115201, 31115502
31115653, 31117282, 31118486, 31118702, 31118809, 31118844, 31119057
31119467, 31119846, 31120361, 31122876, 31123976, 31124213, 31124363
31124821, 31124914, 31125773, 31125849, 31125918, 31126053, 31126058
31127043, 31127457, 31127961, 31127968, 31127969, 31128086, 31129851
31130156, 31132732, 31134430, 31137765, 31138106, 31138371, 31139643
31140940, 31141792, 31142377, 31142749, 31142815, 31143146, 31143415
31143870, 31145389, 31145403, 31145525, 31145804, 31146338, 31146727
31151483, 31153120, 31153485, 31154794, 31155085, 31155305, 31155634
31156301, 31156383, 31156767, 31156898, 31158151, 31158341, 31158380
31159382, 31161861, 31162457, 31162711, 31162915, 31163379, 31163498
31163534, 31165038, 31165577, 31165722, 31166083, 31166801, 31168440
31169366, 31170082, 31171096, 31171147, 31171631, 31172207, 31172233
31172642, 31173887, 31174836, 31175365, 31176451, 31176502, 31177193
31177204, 31177221, 31178051, 31178058, 31178103, 31180519, 31181375
31181380, 31181989, 31182159, 31182451, 31182756, 31182793, 31183413
31184230, 31184370, 31185224, 31188038, 31188398, 31189749, 31190624
31191224, 31192039, 31192261, 31192739, 31193292, 31193511, 31193695
31193745, 31193936, 31194015, 31194264, 31195090, 31195430, 31195600
31195838, 31196164, 31196272, 31196310, 31196395, 31196812, 31200057
31200845, 31201001, 31201366, 31201611, 31202536, 31204002, 31204412
31204878, 31205834, 31206070, 31206201, 31207446, 31208287, 31209735
31213034, 31214119, 31214928, 31215422, 31215438, 31215548, 31215854
31216823, 31216995, 31217946, 31218837, 31218904, 31219047, 31219975
31220188, 31220549, 31220837, 31220850, 31220881, 31220912, 31221454
31222780, 31223382, 31224819, 31225538, 31226448, 31226534, 31228670

31230250, 31230775, 31233170, 31233235, 31234765, 31234790, 31234983
31235797, 31236624, 31240626, 31240864, 31242319, 31242976, 31243859
31244165, 31244968, 31245856, 31246583, 31247532, 31247838, 31248496
31249008, 31249406, 31249689, 31249696, 31250120, 31250152, 31250221
31251325, 31252659, 31253451, 31254243, 31254297, 31254535, 31254929
31255369, 31255869, 31256383, 31257740, 31257826, 31258101, 31258344
31258697, 31258995, 31260692, 31261467, 31261641, 31262275, 31262388
31263980, 31265651, 31265773, 31266236, 31266779, 31268557, 31270711
31270847, 31271032, 31274074, 31279670, 31281708, 31282037, 31283557
31287091, 31287296, 31287741, 31287871, 31289115, 31290017, 31290300
31290427, 31291986, 31292298, 31293484, 31293791, 31293867, 31298871
31301460, 31303032, 31303249, 31304573, 31304945, 31304975, 31305114
31305309, 31305624, 31306248, 31306261, 31306470, 31306867, 31306927
31307715, 31309379, 31309867, 31310564, 31310624, 31311732, 31311830
31312450, 31312976, 31313117, 31313177, 31313214, 31313444, 31313812
31314323, 31314885, 31315441, 31315495, 31315876, 31315923, 31316250
31317032, 31321092, 31322720, 31323383, 31324442, 31324507, 31325584
31326320, 31326608, 31326977, 31326998, 31327046, 31327259, 31327278
31327349, 31327391, 31327896, 31331265, 31331354, 31331372, 31333105
31333156, 31334606, 31334961, 31335037, 31335142, 31336298, 31336371
31338249, 31338673, 31338686, 31338769, 31339457, 31339643, 31339744
31341138, 31341746, 31343110, 31344046, 31344097, 31346493, 31348711
31348922, 31349426, 31350348, 31352517, 31353098, 31353610, 31355339
31356601, 31356954, 31357581, 31357737, 31358308, 31358474, 31358511
31359215, 31359366, 31360146, 31360155, 31360214, 31360282, 31360314
31360323, 31360469, 31360529, 31362408, 31362692, 31364001, 31364383
31366716, 31367188, 31367364, 31368027, 31369444, 31370500, 31371071
31372498, 31373825, 31373837, 31373843, 31374283, 31374449, 31374738
31375865, 31376011, 31376708, 31377129, 31377206, 31377487, 31377701
31377808, 31377936, 31380443, 31381174, 31381389, 31381701, 31382518
31383049, 31383396, 31383464, 31383814, 31384324, 31385668, 31386394
31386696, 31387033, 31387123, 31387426, 31387443, 31388201, 31388288
31389006, 31390936, 31390955, 31391991, 31393208, 31393600, 31393991
31394341, 31394347, 31394365, 31394544, 31395222, 31395247, 31396027
31396609, 31396695, 31396980, 31398505, 31398617, 31398663, 31398721
31398761, 31399131, 31399883, 31400754, 31401831, 31402078, 31402598
31403177, 31403565, 31404014, 31404130, 31404263, 31404487, 31404550
31405300, 31405751, 31408636, 31408732, 31409483, 31409912, 31409964
31410289, 31411163, 31412209, 31414023, 31414524, 31415324, 31416193
31416213, 31416250, 31417007, 31417192, 31417242, 31417336, 31417844
31417990, 31418442, 31419363, 31420295, 31420316, 31420320, 31420337
31421316, 31422440, 31422620, 31423645, 31424838, 31425167, 31425761
31425800, 31427345, 31429020, 31429501, 31429590, 31429770, 31429784
31429809, 31429844, 31429971, 31430722, 31430735, 31430910, 31431005

31431326, 31431771, 31431964, 31431969, 31431971, 31431973, 31431975
31431986, 31432906, 31433092, 31433579, 31433749, 31434421, 31434805
31434870, 31434915, 31435163, 31435308, 31435735, 31437030, 31437448
31440252, 31440426, 31440813, 31441916, 31441920, 31442332, 31442714
31443030, 31444353, 31444516, 31445356, 31446431, 31447733, 31448642
31448680, 31449354, 31450392, 31450653, 31450942, 31451019, 31453375
31453585, 31454428, 31454972, 31454988, 31455051, 31455597, 31456383
31456857, 31457334, 31458049, 31458537, 31458634, 31458739, 31459231
31459242, 31459369, 31461990, 31462082, 31462940, 31462969, 31463613
31464165, 31465389, 31466433, 31468060, 31468705, 31469001, 31469418
31471441, 31471589, 31471856, 31472077, 31473148, 31474315, 31475085
31475378, 31475635, 31476093, 31476603, 31476701, 31476736, 31477424
31477695, 31479072, 31479075, 31479106, 31479272, 31479772, 31481750
31481893, 31483466, 31483949, 31484385, 31484603, 31485340, 31485386
31485507, 31486061, 31486557, 31487441, 31487491, 31487775, 31487826
31487844, 31488085, 31488464, 31489032, 31489137, 31489481, 31489590
31489672, 31489731, 31489936, 31490604, 31491634, 31492171, 31492191
31492588, 31492655, 31492856, 31493153, 31493840, 31494095, 31494264
31494420, 31494794, 31495254, 31495297, 31495564, 31496174, 31497550
31498559, 31499370, 31499700, 31500699, 31500719, 31500971, 31501139
31502301, 31503349, 31503674, 31503688, 31503934, 31504723, 31505088
31506095, 31507107, 31507129, 31508229, 31508460, 31508712, 31509279
31510891, 31510910, 31511142, 31511519, 31511771, 31511940, 31512044
31512262, 31513011, 31515163, 31515869, 31515879, 31515911, 31515929
31516164, 31516184, 31516255, 31516265, 31517395, 31517417, 31517502
31517652, 31518068, 31518371, 31521504, 31521701, 31522560, 31522708
31523548, 31523578, 31523585, 31523620, 31523646, 31523728, 31523736
31523836, 31525310, 31525463, 31525609, 31525783, 31526250, 31526903
31527103, 31527199, 31527381, 31528724, 31528738, 31528962, 31529594
31529967, 31530985, 31530995, 31531079, 31532084, 31532176, 31532308
31532339, 31533050, 31533113, 31533274, 31533799, 31533817, 31533833
31534841, 31535073, 31535516, 31535782, 31535870, 31535955, 31536401
31536731, 31537521, 31537736, 31538274, 31538363, 31538891, 31539566
31541805, 31541864, 31541895, 31541905, 31542347, 31542356, 31542851
31542956, 31543810, 31544097, 31545400, 31545477, 31546864, 31547220
31547445, 31547480, 31548675, 31549221, 31549468, 31551142, 31552563
31552615, 31552738, 31552755, 31553289, 31553674, 31553813, 31553968
31554610, 31555126, 31555173, 31555346, 31555539, 31555800, 31556139
31556950, 31557160, 31557518, 31557663, 31558194, 31559079, 31559085
31559415, 31559563, 31560323, 31560348, 31560592, 31561886, 31562484
31563138, 31564060, 31564760, 31564795, 31567124, 31567403, 31567441
31567719, 31568423, 31569057, 31569867, 31570054, 31570161, 31571415
31571688, 31571742, 31572006, 31572046, 31572267, 31573269, 31573457
31574122, 31574150, 31574244, 31574267, 31575529, 31575649, 31575665

31576738, 31577569, 31578202, 31578994, 31580079, 31580122, 31580374
31580437, 31581627, 31582179, 31583865, 31584056, 31584555, 31584853
31585040, 31585319, 31585351, 31585491, 31585789, 31586381, 31586862
31588631, 31588933, 31590826, 31591384, 31591400, 31591409, 31591421
31592707, 31594725, 31595025, 31595632, 31597104, 31597668, 31597727
31598146, 31599363, 31599990, 31600023, 31600291, 31600894, 31601385
31602782, 31603199, 31603380, 31603625, 31605119, 31605370, 31605737
31606474, 31607937, 31608753, 31609974, 31610024, 31611125, 31612535
31613275, 31613838, 31615736, 31616101, 31616104, 31617492, 31617523
31619276, 31620252, 31620748, 31620829, 31620944, 31622250, 31623413
31623463, 31625579, 31625618, 31625959, 31626438, 31626493, 31626528
31626572, 31627587, 31627856, 31628155, 31628311, 31628753, 31628975
31629056, 31630551, 31630794, 31630946, 31631985, 31632273, 31632534
31632605, 31632663, 31633224, 31634510, 31634805, 31635875, 31635963
31635980, 31637094, 31637607, 31637680, 31638398, 31638733, 31638943
31639082, 31640139, 31640197, 31640240, 31642462, 31642556, 31642639
31643308, 31644775, 31645288, 31647304, 31647789, 31648120, 31648157
31649223, 31649447, 31649818, 31649819, 31649958, 31649962, 31650046
31650112, 31650202, 31652641, 31652763, 31653080, 31653167, 31653634
31653647, 31653758, 31653913, 31653916, 31653917, 31654116, 31654119
31654122, 31654125, 31654133, 31655807, 31656263, 31656601, 31657084
31657211, 31657324, 31657462, 31657483, 31657681, 31658464, 31658819
31658943, 31659065, 31660283, 31661369, 31661586, 31661865, 31661879
31662131, 31662143, 31662504, 31662625, 31662925, 31663189, 31663788
31664203, 31664399, 31665107, 31666449, 31666684, 31667096, 31667180
31667940, 31668033, 31668061, 31668065, 31668312, 31668694, 31668768
31668872, 31669064, 31670014, 31670263, 31670353, 31671512, 31671568
31672507, 31672605, 31673406, 31674380, 31674801, 31675568, 31675852
31675860, 31676324, 31676927, 31676941, 31677345, 31677460, 31677479
31677587, 31678629, 31679900, 31680709, 31680713, 31680985, 31682766
31683044, 31683260, 31683311, 31683373, 31683708, 31684080, 31684494
31685612, 31685882, 31685989, 31686979, 31688127, 31688241, 31688978
31691030, 31691089, 31691480, 31694070, 31695062, 31695693, 31696043
31696577, 31696853, 31697741, 31699090, 31699230, 31700234, 31701239
31701429, 31701517, 31701910, 31703614, 31705178, 31705265, 31705356
31705704, 31706000, 31706595, 31706758, 31706956, 31707190, 31708133
31708175, 31708529, 31709647, 31709739, 31709777, 31710272, 31710587
31711155, 31711720, 31711889, 31711997, 31712260, 31714645, 31715935
31716510, 31716873, 31717010, 31718000, 31718134, 31718346, 31718842
31719167, 31720344, 31720377, 31720839, 31720942, 31721557, 31721863
31721880, 31722558, 31722646, 31723226, 31723323, 31723651, 31725154
31727229, 31727231, 31727233, 31727560, 31728149, 31728160, 31728440
31728444, 31728447, 31728477, 31728486, 31728858, 31729557, 31730485
31730766, 31731076, 31731407, 31732095, 31732311, 31732672, 31734007

31734012, 31734017, 31734583, 31735662, 31736095, 31737059, 31737603
31739198, 31739891, 31740252, 31741359, 31741938, 31743771, 31744832
31745130, 31745233, 31745528, 31746054, 31747706, 31747818, 31747935
31747989, 31748000, 31748182, 31748233, 31748944, 31750577, 31750581
31750889, 31752492, 31752502, 31752633, 31753202, 31753425, 31753478
31753692, 31754240, 31754546, 31754887, 31754980, 31755245, 31755451
31756415, 31756465, 31756568, 31756650, 31757357, 31757775, 31757824
31758083, 31758344, 31758846, 31758939, 31758960, 31759565, 31760278
31760592, 31760721, 31760738, 31761510, 31762819, 31763030, 31763356
31763707, 31763905, 31764089, 31764239, 31764866, 31764913, 31765068
31765246, 31765257, 31765296, 31766462, 31766499, 31766534, 31766675
31766696, 31767204, 31767237, 31767598, 31767852, 31768490, 31768497
31768505, 31768866, 31769267, 31769373, 31769530, 31770289, 31771302
31771370, 31771410, 31771468, 31771745, 31771836, 31772002, 31772070
31773582, 31773909, 31774019, 31774132, 31775101, 31776121, 31776659
31776785, 31776994, 31777410, 31777489, 31779833, 31780567, 31781897
31781944, 31783422, 31783451, 31783782, 31783872, 31783985, 31783991
31784352, 31785445, 31785572, 31786282, 31786697, 31786838, 31787057
31787655, 31788104, 31788594, 31788704, 31788761, 31788785, 31789167
31789178, 31789335, 31790500, 31790757, 31792397, 31792465, 31792615
31793126, 31793691, 31793713, 31794336, 31794631, 31794882, 31795231
31795696, 31796208, 31796277, 31796882, 31798001, 31798323, 31798669
31798702, 31798742, 31799858, 31800053, 31800059, 31800139, 31800757
31804838, 31805303, 31805812, 31807179, 31807431, 31807516, 31809510
31809729, 31810213, 31812352, 31812824, 31813214, 31813662, 31815099
31815227, 31816158, 31816343, 31816631, 31818080, 31820632, 31820662
31820842, 31820859, 31820926, 31821129, 31821701, 31821835, 31822026
31822951, 31823051, 31823327, 31823716, 31824504, 31824792, 31824934
31825151, 31825324, 31825410, 31827339, 31827605, 31827912, 31828378
31828999, 31829366, 31829617, 31829639, 31831950, 31832785, 31832901
31833172, 31833585, 31833896, 31833948, 31834191, 31834214, 31834611
31834677, 31834871, 31835300, 31835805, 31835854, 31836113, 31836454
31839038, 31839779, 31839888, 31840180, 31840490, 31840516, 31840992
31841147, 31841210, 31841696, 31842545, 31843028, 31843462, 31843476
31843716, 31843842, 31843845, 31844137, 31844357, 31844557, 31844560
31845092, 31845403, 31845803, 31845955, 31846318, 31846454, 31847489
31847541, 31848331, 31848365, 31848391, 31848903, 31849859, 31850132
31850227, 31851383, 31851449, 31852482, 31852506, 31852574, 31854285
31854692, 31855307, 31855484, 31855526, 31855996, 31857143, 31858580
31858621, 31858833, 31859067, 31859143, 31860193, 31860406, 31860760
31862359, 31862593, 31862611, 31863118, 31863250, 31863890, 31864818
31864947, 31865822, 31866141, 31866159, 31866388, 31867037, 31867331
31867351, 31869348, 31869601, 31869944, 31869954, 31869966, 31870010
31870150, 31870164, 31870190, 31870196, 31871384, 31871692, 31872230

31872320, 31873155, 31875140, 31876138, 31876192, 31876368, 31876867
31878256, 31878314, 31878605, 31880154, 31881527, 31883124, 31883343
31883739, 31883845, 31886547, 31886695, 31886745, 31886848, 31887130
31887709, 31888148, 31888731, 31888964, 31889222, 31890230, 31890516
31892029, 31892856, 31895670, 31897023, 31897178, 31897786, 31897854
31898193, 31898257, 31898326, 31900476, 31900585, 31902517, 31902662
31903523, 31903713, 31903786, 31903962, 31904739, 31904933, 31904960
31905033, 31907042, 31907137, 31907510, 31907565, 31907792, 31907962
31908345, 31908482, 31908571, 31908750, 31909295, 31909807, 31912638
31912834, 31913650, 31913839, 31914003, 31914943, 31915444, 31915968
31916096, 31916644, 31917378, 31917494, 31917856, 31917967, 31918462
31919563, 31919952, 31921267, 31922161, 31922580, 31923463, 31923622
31925162, 31925462, 31925765, 31926203, 31926811, 31926848, 31927078
31927510, 31927930, 31930204, 31932042, 31932196, 31933451, 31933837
31933842, 31933846, 31933914, 31934254, 31934301, 31935336, 31935672
31935717, 31935970, 31936588, 31936983, 31938116, 31938288, 31939263
31939461, 31939486, 31939494, 31939767, 31940176, 31940458, 31941148
31941948, 31942136, 31942144, 31942258, 31942274, 31942473, 31943497
31943691, 31944980, 31945038, 31945407, 31945659, 31945701, 31945827
31945928, 31946936, 31947732, 31947861, 31949490, 31950145, 31950244
31950577, 31951599, 31951628, 31952046, 31952052, 31953394, 31953449
31953989, 31954223, 31956113, 31956435, 31956920, 31957152, 31957564
31957674, 31957683, 31958038, 31958958, 31959140, 31959253, 31960124
31960389, 31960603, 31961578, 31961940, 31964519, 31964610, 31965012
31965391, 31965542, 31965574, 31966094, 31968431, 31969646, 31970188
31971792, 31972615, 31972671, 31973203, 31974187, 31974424, 31974597
31974693, 31976303, 31977024, 31977257, 31980125, 31980216, 31980296
31981745, 31981751, 31982879, 31985494, 31985738, 31985961, 31986808
31986836, 31986905, 31987278, 31987922, 31988079, 31988833, 31990386
31991705, 31992242, 31992270, 31992615, 31992953, 31993051, 31993795
31994145, 31994206, 31994298, 31995577, 31995937, 31996264, 31996331
31997107, 31997457, 31997658, 31997660, 31998181, 31998189, 31998861
31999024, 31999453, 32000837, 32001851, 32002411, 32003551, 32003908
32004148, 32004299, 32004977, 32005046, 32005048, 32005053, 32005215
32006467, 32006703, 32006824, 32006883, 32007076, 32007698, 32008408
32008586, 32008716, 32008819, 32009197, 32009334, 32009754, 32010275
32010593, 32010707, 32011107, 32011888, 32012137, 32012400, 32012788
32012891, 32012975, 32013253, 32013403, 32014520, 32015642, 32015820
32016340, 32016884, 32017215, 32017301, 32017422, 32017570, 32017635
32017671, 32018632, 32018953, 32020701, 32021877, 32022223, 32022711
32022814, 32023471, 32025328, 32028155, 32028269, 32032653, 32032733
32032887, 32033795, 32034085, 32034318, 32034766, 32035268, 32035536
32035893, 32035899, 32035902, 32036045, 32037237, 32037962, 32038054
32038780, 32038812, 32038844, 32038996, 32039059, 32040940, 32040971

32041003, 32041799, 32042256, 32042352, 32042706, 32042926, 32043743
32044533, 32044767, 32044903, 32045377, 32046125, 32046412, 32046587
32047226, 32048412, 32048616, 32048921, 32050048, 32051896, 32052587
32052992, 32053746, 32054806, 32055692, 32055733, 32056529, 32057291
32057333, 32057565, 32057639, 32057755, 32058260, 32060164, 32060577
32061018, 32061146, 32061173, 32061648, 32062227, 32064239, 32064682
32064826, 32066061, 32067130, 32067356, 32067675, 32067937, 32068110
32068187, 32068190, 32069160, 32069508, 32069696, 32069834, 32070206
32071183, 32071457, 32071582, 32072747, 32072944, 32073027, 32073710
32074450, 32074708, 32074728, 32075009, 32075020, 32075130, 32075580
32076305, 32076561, 32076599, 32077318, 32078078, 32079097, 32079573
32079739, 32080081, 32080655, 32081074, 32081381, 32082098, 32084068
32087287, 32087331, 32087597, 32087956, 32088132, 32088478, 32089051
32089820, 32090518, 32090725, 32092312, 32092797, 32093558, 32094825
32095097, 32095380, 32095610, 32095658, 32096252, 32096397, 32097387
32097589, 32097604, 32097767, 32097882, 32097962, 32098224, 32098237
32098535, 32099153, 32099539, 32099580, 32101305, 32101419, 32101499
32102542, 32102722, 32102854, 32103383, 32103427, 32103628, 32104324
32104402, 32104578, 32104610, 32105135, 32105239, 32105412, 32105468
32107505, 32107621, 32107664, 32108094, 32108115, 32108566, 32108576
32109384, 32109796, 32111046, 32112798, 32112822, 32113113, 32113530
32113791, 32114541, 32114561, 32114572, 32114746, 32115403, 32115642
32116952, 32117115, 32117253, 32117490, 32118543, 32118727, 32119144
32119339, 32119565, 32120283, 32120453, 32121014, 32121326, 32121673
32121803, 32121885, 32122197, 32122574, 32123331, 32123673, 32124176
32124570, 32124594, 32124607, 32124611, 32125142, 32125160, 32125845
32127227, 32127448, 32127911, 32128142, 32129659, 32130083, 32130485
32130504, 32131010, 32131401, 32131774, 32132464, 32132504, 32133039
32133898, 32138257, 32138478, 32138782, 32139432, 32139659, 32140616
32140800, 32142788, 32143492, 32143562, 32144917, 32147340, 32148419
32148662, 32149848, 32150818, 32150854, 32151098, 32152341, 32153396
32153619, 32153909, 32156194, 32157050, 32157075, 32157078, 32159343
32161260, 32161381, 32162391, 32164053, 32164112, 32164218, 32165367
32165759, 32165814, 32165887, 32166950, 32167592, 32167923, 32169151
32170162, 32170190, 32171622, 32171791, 32172050, 32172773, 32172777
32172783, 32173142, 32173376, 32173543, 32174321, 32174405, 32174492
32174571, 32175329, 32175780, 32176922, 32177701, 32177869, 32178217
32178966, 32179209, 32179306, 32180918, 32181149, 32182097, 32182783
32183102, 32183756, 32183809, 32184235, 32184577, 32184844, 32184855
32185296, 32186186, 32186983, 32187775, 32189400, 32189869, 32189952
32190132, 32190190, 32190284, 32190419, 32190573, 32191427, 32191451
32193431, 32195333, 32195815, 32195946, 32196492, 32196738, 32196943
32197147, 32198292, 32198368, 32198396, 32199681, 32200524, 32201743
32201903, 32201936, 32202976, 32203068, 32203354, 32205455, 32205514

32205825, 32207088, 32207920, 32208144, 32208326, 32208346, 32208691
32209784, 32210660, 32211423, 32212041, 32212062, 32212635, 32212916
32213376, 32213696, 32214021, 32214080, 32214195, 32214654, 32214743
32214782, 32215240, 32215991, 32216027, 32216841, 32216930, 32218369
32218395, 32218498, 32218552, 32219179, 32219318, 32219835, 32219988
32220017, 32220364, 32220709, 32221141, 32222473, 32223045, 32223654
32223669, 32224140, 32224583, 32225117, 32225353, 32225742, 32225899
32227352, 32228188, 32228677, 32229431, 32229625, 32229919, 32230213
32230775, 32230953, 32231049, 32231356, 32233406, 32234148, 32234161
32235513, 32236601, 32236685, 32236798, 32237489, 32237778, 32238935
32239137, 32239730, 32240272, 32241889, 32243007, 32243148, 32243814
32243882, 32243985, 32244187, 32245711, 32245850, 32246090, 32247141
32247420, 32248131, 32248405, 32248649, 32249207, 32249371, 32249509
32249640, 32249674, 32250232, 32250238, 32251364, 32252036, 32252213
32252262, 32252294, 32253703, 32254063, 32254399, 32254686, 32255029
32255073, 32255529, 32255753, 32255762, 32257449, 32258021, 32258388
32258423, 32259063, 32259322, 32259535, 32259785, 32260010, 32260290
32263923, 32264556, 32266406, 32266906, 32267171, 32267610, 32268669
32268800, 32274403, 32277643, 32277793, 32279351, 32280901, 32281066
32283798, 32284241, 32284325, 32284485, 32284608, 32284725, 32285086
32285563, 32285717, 32285789, 32287797, 32287989, 32289552, 32289858
32290227, 32290313, 32290399, 32290812, 32290949, 32290990, 32291114
32291139, 32292180, 32292805, 32293615, 32294031, 32294566, 32294851
32295794, 32296259, 32296941, 32297373, 32297469, 32297849, 32298004
32298173, 32298782, 32300098, 32300822, 32300849, 32301856, 32302470
32302561, 32303160, 32303657, 32304293, 32304712, 32305792, 32306556
32307046, 32307586, 32307983, 32309046, 32309488, 32309723, 32311019
32312131, 32312412, 32312586, 32316070, 32316252, 32316326, 32317012
32317306, 32318528, 32318820, 32318914, 32319410, 32321317, 32321319
32321765, 32322629, 32322738, 32323488, 32323600, 32323816, 32324219
32325525, 32325574, 32325611, 32327201, 32327208, 32327690, 32328231
32329914, 32330269, 32330540, 32331889, 32332107, 32334745, 32335257
32335769, 32336990, 32338220, 32338476, 32338736, 32338897, 32338919
32338953, 32339801, 32340392, 32340885, 32341217, 32341260, 32341820
32342172, 32342345, 32342750, 32342824, 32343092, 32343678, 32344099
32344168, 32344199, 32345001, 32345050, 32345178, 32345272, 32345785
32346649, 32346733, 32347957, 32350182, 32351767, 32353343, 32355765
32355912, 32356340, 32356545, 32356609, 32356628, 32357412, 32357665
32358760, 32359044, 32361175, 32361677, 32362016, 32362066, 32362072
32362698, 32363212, 32363549, 32363711, 32363981, 32364147, 32366154
32366303, 32366461, 32366536, 32367151, 32368161, 32368480, 32368789
32368792, 32369041, 32371828, 32372725, 32374050, 32374431, 32374566
32374616, 32375438, 32375493, 32376614, 32376774, 32376872, 32376922
32377901, 32378953, 32379001, 32379140, 32379303, 32379775, 32380591

32381403, 32381605, 32382021, 32382207, 32382667, 32385068, 32385141
32385832, 32386482, 32386683, 32386720, 32386877, 32387555, 32387818
32388247, 32389047, 32389497, 32390629, 32390855, 32391021, 32392724
32393137, 32393612, 32394623, 32394660, 32394986, 32396085, 32396154
32396326, 32397113, 32397350, 32398714, 32400076, 32401086, 32402243
32402292, 32403509, 32403748, 32404638, 32404933, 32405239, 32406222
32406479, 32407783, 32408640, 32409009, 32409344, 32409942, 32410175
32412340, 32413042, 32413512, 32414944, 32414996, 32415846, 32415989
32416652, 32416655, 32417227, 32417242, 32417274, 32417301, 32417438
32417632, 32417766, 32417870, 32419774, 32421958, 32422965, 32423678
32423985, 32424465, 32425097, 32425124, 32425194, 32425205, 32425778
32425862, 32426213, 32426315, 32426900, 32427158, 32427173, 32427226
32427583, 32427953, 32428097, 32428189, 32428330, 32430745, 32431049
32431067, 32431251, 32431290, 32431413, 32432078, 32432245, 32433687
32434131, 32435911, 32436342, 32436460, 32436721, 32436757, 32437538
32439726, 32440067, 32440681, 32441128, 32441671, 32441834, 32442229
32442404, 32443087, 32443531, 32443744, 32443935, 32444159, 32446565
32449622, 32449909, 32450344, 32453583, 32453611, 32453888, 32455219
32455516, 32455650, 32455742, 32455961, 32457252, 32457974, 32459153
32459632, 32460136, 32460145, 32461726, 32462153, 32464021, 32464584
32465193, 32465209, 32465466, 32465495, 32465853, 32465894, 32466474
32467812, 32468643, 32468791, 32469004, 32469225, 32471100, 32471251
32471346, 32471642, 32472561, 32472589, 32473465, 32474686, 32474827
32474926, 32474997, 32476437, 32477479, 32478452, 32480419, 32480510
32480528, 32480541, 32481807, 32482131, 32483115, 32483966, 32484945
32485859, 32486528, 32486955, 32489206, 32490128, 32490416, 32490804
32491443, 32492343, 32492382, 32492422, 32492452, 32495545, 32495572
32497756, 32498459, 32498569, 32498602, 32498752, 32498783, 32499155
32500117, 32501930, 32503790, 32504340, 32504786, 32505009, 32505439
32505557, 32505634, 32506166, 32506309, 32506473, 32506809, 32507542
32508585, 32509271, 32509318, 32509584, 32509606, 32509814, 32510116
32512048, 32512145, 32512438, 32512918, 32514516, 32515708, 32515850
32516220, 32516336, 32517405, 32517797, 32518029, 32518679, 32519995
32520525, 32520645, 32520691, 32520994, 32522300, 32522472, 32523206
32523613, 32523750, 32524841, 32525039, 32526118, 32526703, 32527621
32529396, 32529483, 32530202, 32531259, 32531627, 32531647, 32533019
32533225, 32533461, 32534925, 32535106, 32535156, 32535159, 32535520
32536006, 32538436, 32538824, 32539300, 32539322, 32539914, 32539936
32540706, 32541049, 32542063, 32542641, 32544124, 32544464, 32544740
32544784, 32545415, 32546408, 32546937, 32548580, 32549168, 32549277
32549351, 32550051, 32550589, 32550751, 32550894, 32551177, 32551246
32552043, 32552602, 32553241, 32555120, 32555592, 32556165, 32556311
32556891, 32557354, 32559543, 32561759, 32561791, 32561841, 32562587
32563106, 32563114, 32563151, 32563940, 32565722, 32565870, 32567750

32567788, 32568163, 32569603, 32569745, 32573197, 32573703, 32573942
32574796, 32576097, 32576508, 32576534, 32577408, 32578113, 32578616
32578792, 32579075, 32579371, 32579529, 32580082, 32580378, 32580852
32583315, 32583355, 32583375, 32583692, 32584347, 32584375, 32584505
32585832, 32586534, 32587305, 32587472, 32587567, 32587793, 32587994
32588298, 32588656, 32588691, 32589147, 32589819, 32589990, 32593845
32593877, 32593886, 32593955, 32594965, 32595551, 32596355, 32596705
32597099, 32597637, 32598380, 32598406, 32601769, 32602194, 32602344
32602599, 32602735, 32602871, 32602990, 32603092, 32603152, 32603319
32603564, 32603619, 32605116, 32606093, 32606489, 32606531, 32607812
32607991, 32608297, 32608821, 32609394, 32609512, 32609730, 32609886
32610185, 32610271, 32613788, 32614157, 32614583, 32615310, 32615776
32616678, 32618819, 32619195, 32619298, 32619327, 32620859, 32620919
32621140, 32621309, 32622507, 32622612, 32625160, 32625356, 32626384
32626756, 32627140, 32628131, 32628221, 32628237, 32629028, 32629772
32629859, 32630060, 32631551, 32631787, 32633251, 32634049, 32635881
32635931, 32636938, 32638991, 32639432, 32639860, 32639950, 32641593
32641748, 32642587, 32642994, 32643533, 32644392, 32645139, 32646025
32647170, 32648248, 32649737, 32649749, 32651063, 32651769, 32651773
32652143, 32652573, 32652605, 32653470, 32653669, 32654962, 32655446
32655691, 32656130, 32656231, 32656275, 32657251, 32658481, 32659438
32659574, 32659930, 32659983, 32660528, 32662165, 32663019, 32664665
32665550, 32665836, 32666862, 32668900, 32668907, 32669149, 32670769
32671437, 32671481, 32672057, 32674819, 32675095, 32675227, 32675756
32676084, 32676350, 32676659, 32677000, 32677702, 32678737, 32682430
32682586, 32682703, 32684009, 32684387, 32685743, 32685989, 32686338
32686850, 32689123, 32690400, 32690581, 32692372, 32693242, 32695999
32697157, 32697431, 32697781, 32697859, 32698508, 32698569, 32700396
32700455, 32700675, 32700989, 32701048, 32702005, 32703155, 32704013
32704119, 32704231, 32704765, 32705734, 32705800, 32706821, 32707007
32707211, 32710165, 32710534, 32710750, 32711099, 32711741, 32712220
32712791, 32712916, 32715346, 32715845, 32715945, 32716726, 32718204
32718316, 32718547, 32718721, 32719288, 32720344, 32720458, 32722118
32724505, 32724654, 32725484, 32726772, 32728216, 32728984, 32730701
32731498, 32732179, 32733671, 32733845, 32734021, 32734171, 32734299
32734800, 32735915, 32735980, 32736370, 32737774, 32737827, 32737969
32738356, 32739966, 32740421, 32740503, 32740515, 32740987, 32743290
32743511, 32746515, 32746831, 32747680, 32747738, 32748974, 32749028
32750264, 32750940, 32751438, 32753371, 32753472, 32753946, 32754044
32754574, 32754845, 32755356, 32755493, 32755517, 32755731, 32756125
32756914, 32757219, 32758096, 32758260, 32759503, 32760795, 32760868
32760906, 32761229, 32761294, 32761932, 32762155, 32762231, 32763283
32763544, 32764690, 32765738, 32766252, 32766397, 32766407, 32766916
32768752, 32769786, 32769880, 32770812, 32771735, 32775512, 32775526

32776891, 32778725, 32780676, 32781826, 32782851, 32783456, 32784393
32784403, 32786308, 32786309, 32788660, 32789228, 32790012, 32793286
32794120, 32794261, 32795016, 32795712, 32797115, 32797486, 32800137
32800539, 32801192, 32801303, 32801337, 32802926, 32803416, 32803807
32804604, 32804609, 32804760, 32806069, 32806112, 32806856, 32806915
32807517, 32809152, 32809234, 32810125, 32810668, 32811069, 32811131
32813351, 32813767, 32816003, 32817950, 32818019, 32818230, 32818242
32818436, 32818545, 32821107, 32822436, 32822847, 32823545, 32823692
32827206, 32828636, 32828738, 32829060, 32829563, 32829937, 32830405
32831451, 32831855, 32831901, 32833378, 32834168, 32834394, 32834426
32835524, 32837435, 32838028, 32838533, 32841689, 32841994, 32842415
32842823, 32843576, 32843672, 32843754, 32846272, 32846876, 32847962
32847975, 32848060, 32848531, 32848816, 32850174, 32850514, 32851615
32851841, 32852484, 32852504, 32853080, 32855257, 32855878, 32856375
32856546, 32856640, 32857370, 32857881, 32857908, 32858446, 32863795
32864736, 32866089, 32867469, 32868116, 32868344, 32868369, 32869560
32870681, 32872839, 32874571, 32874995, 32875003, 32875118, 32875482
32875931, 32877550, 32878039, 32879447, 32879655, 32879990, 32880225
32880390, 32880490, 32881057, 32881462, 32881853, 32883252, 32883853
32887649, 32888458, 32888472, 32889096, 32889434, 32890532, 32891500
32892883, 32893686, 32893951, 32894842, 32895105, 32897184, 32897679
32898672, 32898678, 32898971, 32899387, 32900165, 32900208, 32902635
32903472, 32903625, 32907741, 32907975, 32908241, 32908249, 32908946
32909255, 32909292, 32909936, 32910846, 32912726, 32913527, 32913610
32913791, 32914508, 32914711, 32914795, 32915747, 32915760, 32915847
32915909, 32916025, 32916080, 32917969, 32918041, 32918394, 32920489
32920547, 32922090, 32922635, 32924796, 32925421, 32925703, 32926513
32926653, 32930360, 32930423, 32930665, 32931078, 32931941, 32933936
32935932, 32936005, 32936402, 32936424, 32936537, 32936859, 32936950
32936961, 32936988, 32937167, 32937338, 32939376, 32939883, 32940440
32940714, 32940955, 32941096, 32941509, 32941792, 32943694, 32945404
32946347, 32946711, 32947264, 32947268, 32951181, 32951258, 32952285
32953258, 32955962, 32956092, 32956896, 32957606, 32958616, 32961142
32961939, 32962162, 32965460, 32966389, 32966688, 32967871, 32968221
32968634, 32969466, 32969863, 32970478, 32972633, 32972716, 32973035
32973406, 32976022, 32977489, 32980826, 32982562, 32983419, 32983750
32983871, 32984625, 32984679, 32985908, 32986577, 32987004, 32987206
32987308, 32988028, 32991527, 32992004, 32993522, 32993998, 32994080
32995072, 32995206, 32995242, 32995863, 32996071, 32996974, 32998659
32999086, 32999329, 32999541, 33000440, 33000516, 33000980, 33001094
33001615, 33003817, 33004172, 33004888, 33005241, 33008265, 33009224
33009321, 33009351, 33010173, 33010444, 33011078, 33011198, 33012307
33013379, 33015716, 33016007, 33018951, 33019726, 33020016, 33020510
33021036, 33021100, 33021642, 33022043, 33022140, 33022926, 33023671

33025005, 33026533, 33026796, 33026949, 33027087, 33027377, 33027525
33027539, 33027553, 33028013, 33028286, 33028462, 33030293, 33031619
33032299, 33032400, 33032579, 33033425, 33034103, 33034619, 33034642
33034846, 33035201, 33035710, 33036321, 33037136, 33037150, 33037531
33037895, 33038120, 33038422, 33038479, 33038537, 33039277, 33040335
33043590, 33044062, 33045137, 33046179, 33047645, 33047827, 33048074
33048277, 33048591, 33049012, 33049866, 33049915, 33050587, 33050622
33050626, 33052585, 33053538, 33055560, 33056383, 33056579, 33058363
33059891, 33059924, 33060161, 33060212, 33061152, 33061339, 33061595
33062419, 33063919, 33064324, 33064565, 33065089, 33065343, 33065415
33065437, 33065526, 33065979, 33066892, 33068672, 33069366, 33069583
33069889, 33071321, 33072392, 33072854, 33075133, 33075246, 33075452
33076129, 33080651, 33084064, 33085296, 33085361, 33088863, 33089096
33089130, 33089192, 33090110, 33090127, 33090781, 33090848, 33092087
33093807, 33096609, 33097276, 33097433, 33099666, 33099872, 33100195
33100352, 33101055, 33101058, 33101334, 33102477, 33105276, 33105354
33105656, 33106822, 33106897, 33107872, 33108317, 33109335, 33109981
33110192, 33110642, 33110992, 33111729, 33113848, 33114640, 33115438
33115892, 33116125, 33116131, 33116481, 33117641, 33120284, 33120828
33120920, 33121866, 33121880, 33121934, 33123402, 33123404, 33123985
33125873, 33126216, 33126290, 33127032, 33127141, 33127312, 33129473
33131149, 33131335, 33131526, 33131742, 33132050, 33135083, 33136252
33136601, 33137328, 33139230, 33139277, 33140218, 33141420, 33142123
33142479, 33142533, 33142739, 33144001, 33145153, 33145583, 33146001
33146055, 33147065, 33148063, 33149578, 33150236, 33150645, 33151089
33152388, 33153797, 33157157, 33157547, 33159956, 33161035, 33161424
33161535, 33161726, 33163159, 33163187, 33164865, 33165183, 33165391
33166116, 33166242, 33169254, 33172549, 33172631, 33172679, 33174203
33176523, 33176672, 33177660, 33178223, 33178248, 33179718, 33180354
33181281, 33181349, 33181881, 33182152, 33184467, 33185231, 33185773
33186578, 33186650, 33187513, 33188597, 33189199, 33190454, 33190694
33190761, 33191073, 33191584, 33192462, 33192939, 33193293, 33195096
33195330, 33195897, 33196009, 33196035, 33196475, 33197296, 33198902
33199431, 33201415, 33203951, 33205229, 33205781, 33206160, 33206701
33207143, 33207240, 33207247, 33207342, 33208644, 33211160, 33211334
33211942, 33212112, 33214493, 33214554, 33214707, 33215225, 33216590
33216667, 33218194, 33218259, 33218392, 33218518, 33218694, 33219840
33220466, 33221061, 33223248, 33224375, 33225584, 33225678, 33227044
33227337, 33228119, 33229327, 33230882, 33232128, 33233560, 33234302
33235620, 33236729, 33237523, 33239083, 33239980, 33240921, 33241118
33241692, 33242408, 33243077, 33244297, 33245879, 33245940, 33246099
33246700, 33247240, 33247372, 33247795, 33247862, 33251111, 33251188
33251482, 33252648, 33253370, 33253466, 33253504, 33254019, 33261707
33261786, 33266449, 33268162, 33270914, 33271941, 33273598, 33273638

33275880, 33276748, 33278133, 33278440, 33278509, 33279339, 33279489
33279810, 33280121, 33281287, 33281785, 33282110, 33282502, 33282504
33282605, 33282871, 33282971, 33283122, 33284571, 33287418, 33288427
33289442, 33289604, 33289734, 33290765, 33291305, 33292174, 33292175
33292429, 33292896, 33292950, 33294123, 33294139, 33294845, 33295267
33297275, 33299877, 33301919, 33303486, 33303555, 33303725, 33304435
33304775, 33304830, 33305150, 33305175, 33305254, 33305995, 33306161
33306852, 33307945, 33308107, 33308199, 33308244, 33308736, 33309324
33311488, 33312823, 33312932, 33313374, 33314115, 33314122, 33314422
33314523, 33315230, 33315590, 33315801, 33315835, 33316711, 33316815
33317279, 33317740, 33317752, 33318311, 33318949, 33319065, 33319353
33319802, 33320455, 33322672, 33323634, 33323903, 33324226, 33325981
33327118, 33329027, 33329192, 33329493, 33329960, 33330508, 33331329
33332612, 33332891, 33334218, 33334340, 33334404, 33334945, 33334957
33334972, 33335941, 33337385, 33337799, 33337807, 33338247, 33338891
33339868, 33340595, 33343993, 33344767, 33345269, 33346851, 33347947
33349744, 33349880, 33350643, 33351136, 33351978, 33352629, 33352740
33352794, 33353474, 33354011, 33354662, 33354933, 33354968, 33355007
33355136, 33355766, 33356602, 33356612, 33357029, 33358233, 33358968
33359279, 33360117, 33360246, 33362391, 33364012, 33364820, 33366942
33367076, 33367184, 33367909, 33370332, 33371121, 33373644, 33373693
33375194, 33376694, 33379172, 33379714, 33380058, 33380472, 33380871
33381652, 33381775, 33381839, 33382108, 33382224, 33382529, 33382620
33384092, 33384505, 33387654, 33387767, 33388473, 33388715, 33388927
33389651, 33390561, 33390695, 33390717, 33390917, 33390925, 33392926
33392996, 33393503, 33394330, 33395219, 33397350, 33397495, 33397605
33398383, 33398674, 33401519, 33402361, 33402406, 33402456, 33402847
33403040, 33403843, 33404069, 33407135, 33407139, 33408858, 33409163
33409376, 33409759, 33409841, 33410321, 33415279, 33416041, 33416405
33417145, 33417828, 33417987, 33418439, 33418443, 33420096, 33420249
33420490, 33421125, 33421440, 33422596, 33422675, 33422877, 33423728
33424192, 33425046, 33425127, 33426135, 33427823, 33427991, 33428191
33431382, 33434256, 33434602, 33434897, 33435012, 33435454, 33437800
33440178, 33440442, 33440899, 33441073, 33441786, 33443834, 33444647
33446226, 33446788, 33447015, 33447602, 33447957, 33448908, 33450599
33450736, 33451134, 33452091, 33454288, 33454299, 33454753, 33455225
33456516, 33456703, 33456848, 33457235, 33457584, 33457842, 33458082
33458732, 33459161, 33460265, 33460450, 33460521, 33460870, 33462620
33463044, 33464061, 33464358, 33464378, 33464843, 33466822, 33467243
33467715, 33469785, 33470077, 33470092, 33470254, 33471858, 33473564
33473583, 33473795, 33473815, 33473989, 33474080, 33474386, 33474769
33474916, 33476482, 33476928, 33479415, 33479703, 33480124, 33480765
33482137, 33482590, 33484230, 33484387, 33485134, 33488913, 33489699
33490023, 33490031, 33490293, 33491676, 33492066, 33492136, 33493957

33495024, 33495575, 33496433, 33497160, 33498037, 33499125, 33499867
33500486, 33501425, 33503732, 33504158, 33504432, 33504626, 33504902
33505158, 33507610, 33507953, 33510062, 33510077, 33510171, 33510735
33511329, 33511523, 33512062, 33513037, 33513434, 33513447, 33513526
33513906, 33514038, 33514172, 33514179, 33514440, 33515115, 33516571
33517445, 33517703, 33520658, 33521864, 33522170, 33522372, 33522799
33522941, 33523189, 33523393, 33523982, 33524097, 33525014, 33525448
33527359, 33527630, 33527663, 33527739, 33531067, 33531364, 33531929
33532136, 33532470, 33532517, 33532755, 33533239, 33533269, 33534589
33536140, 33536640, 33537225, 33537630, 33537652, 33538009, 33538063
33538807, 33539504, 33540746, 33541736, 33541865, 33542695, 33544375
33544836, 33545633, 33545698, 33546789, 33546839, 33547527, 33548709
33548869, 33549281, 33550827, 33551931, 33553452, 33553902, 33555482
33556254, 33557344, 33558058, 33558087, 33558251, 33558317, 33558391
33558960, 33559245, 33559316, 33559848, 33560308, 33561671, 33561708
33561845, 33562255, 33563137, 33563167, 33563718, 33564109, 33564809
33566611, 33566851, 33566856, 33567156, 33568355, 33570800, 33571225
33572061, 33573142, 33574722, 33575022, 33575100, 33578015, 33580079
33580595, 33580746, 33583859, 33584585, 33584637, 33585244, 33585591
33589647, 33589667, 33590420, 33590551, 33590607, 33591046, 33596056
33596361, 33596874, 33598703, 33598728, 33598840, 33599665, 33599734
33600479, 33601195, 33601538, 33601673, 33601849, 33603291, 33604939
33606850, 33607081, 33607127, 33607613, 33611438, 33613169, 33613512
33613829, 33613833, 33615478, 33615505, 33616923, 33617587, 33617685
33618962, 33621739, 33621871, 33621893, 33621993, 33622325, 33622575
33624052, 33624356, 33625059, 33625822, 33627360, 33627820, 33628304
33628592, 33628693, 33630464, 33631068, 33631337, 33631562, 33631820
33631959, 33632051, 33632754, 33633469, 33633875, 33633883, 33635094
33635886, 33636280, 33637219, 33641592, 33645932, 33647498, 33647716
33647739, 33647820, 33648273, 33649782, 33651003, 33651993, 33652008
33652234, 33653008, 33653695, 33655399, 33656104, 33656608, 33656679
33657553, 33660093, 33660782, 33660816, 33660838, 33661960, 33662079
33662706, 33663113, 33663444, 33664959, 33664976, 33666228, 33666803
33667505, 33667548, 33667790, 33668078, 33668496, 33670617, 33670793
33674035, 33674065, 33676061, 33676296, 33676842, 33677163, 33677196
33679665, 33679838, 33681238, 33682799, 33684125, 33684377, 33684692
33687039, 33689561, 33690676, 33692669, 33695048, 33695100, 33698504
33699798, 33702035, 33703196, 33704431, 33704635, 33705050, 33706800
33708795, 33708958, 33709660, 33710568, 33711151, 33711938, 33714000
33714495, 33715183, 33715322, 33718837, 33718848, 33720017, 33723325
33725523, 33726388, 33726682, 33726788, 33726841, 33727390, 33727406
33727922, 33727983, 33729692, 33730024, 33731488, 33736618, 33738135
33738702, 33741444, 33741730, 33742827, 33743745, 33745318, 33746114
33748852, 33749367, 33749984, 33750344, 33750791, 33751080, 33751431

33754410, 33755161, 33755486, 33757064, 33758069, 33760298, 33761538
33763570, 33763679, 33764761, 33766130, 33766686, 33766937, 33767425
33768567, 33770079, 33770883, 33770960, 33771433, 33773883, 33774856
33775544, 33775825, 33776598, 33777176, 33779360, 33779364, 33779494
33779786, 33780312, 33782200, 33783365, 33783710, 33784447, 33785175
33786208, 33787804, 33787884, 33788643, 33789142, 33790553, 33792885
33794088, 33794290, 33796040, 33797504, 33798328, 33799368, 33801197
33801237, 33803836, 33804758, 33805155, 33807727, 33808041, 33808955
33809062, 33809642, 33810107, 33810130, 33810360, 33811111, 33811601
33811659, 33812475, 33813801, 33813849, 33814415, 33816129, 33816674
33817457, 33817717, 33817746, 33819404, 33821129, 33821145, 33821234
33821569, 33822187, 33822881, 33824185, 33824830, 33825303, 33826285
33827120, 33827191, 33827202, 33828243, 33832499, 33832583, 33833554
33833783, 33834239, 33835379, 33835574, 33836203, 33837343, 33837484
33838019, 33840911, 33840932, 33840940, 33841610, 33841850, 33842364
33842953, 33843368, 33843512, 33845824, 33846103, 33846146, 33846662
33847898, 33848060, 33848148, 33848294, 33849209, 33849726, 33850434
33850437, 33850535, 33852315, 33852881, 33853330, 33858183, 33858700
33860501, 33860895, 33860900, 33862262, 33862860, 33863150, 33863597
33864784, 33865116, 33865165, 33865495, 33865537, 33866472, 33866585
33867451, 33867491, 33868507, 33870133, 33870373, 33870702, 33871591
33871761, 33872487, 33872610, 33874274, 33874455, 33875167, 33876296
33877868, 33878003, 33878970, 33879044, 33879054, 33880474, 33882024
33883017, 33883347, 33884314, 33886297, 33886487, 33886862, 33886871
33888856, 33888932, 33889459, 33890586, 33891752, 33893127, 33895721
33896341, 33896412, 33896423, 33896760, 33897055, 33898336, 33899027
33899902, 33900807, 33902235, 33902465, 33902539, 33904798, 33904963
33906515, 33906975, 33907094, 33907659, 33907942, 33909666, 33909838
33909842, 33912833, 33912872, 33913384, 33915586, 33916081, 33916206
33916249, 33916311, 33917203, 33918190, 33921410, 33921441, 33921860
33922026, 33922061, 33925702, 33927256, 33927405, 33927483, 33929317
33931668, 33932721, 33932921, 33933784, 33934979, 33935707, 33936939
33937333, 33937866, 33939477, 33940540, 33941905, 33942062, 33943313
33945728, 33945794, 33949153, 33950698, 33951799, 33952245, 33952532
33952976, 33954999, 33955060, 33955371, 33956182, 33957025, 33960379
33960464, 33960647, 33961800, 33963458, 33964258, 33964867, 33964963
33967599, 33969309, 33970659, 33970841, 33972204, 33973155, 33973593
33973695, 33973922, 33974068, 33974560, 33974788, 33974835, 33975649
33976016, 33976581, 33976796, 33976856, 33981298, 33982111, 33982392
33982541, 33983204, 33985986, 33986030, 33987170, 33987911, 33987976
33988339, 33988926, 33988974, 33989017, 33990166, 33990559, 33992920
33993386, 33994084, 33997092, 33997202, 33998060, 33998441, 33998706
34001147, 34001406, 34001696, 34003077, 34003643, 34004063, 34006614
34006650, 34007432, 34009154, 34010877, 34011029, 34011657, 34012165

34013946, 34017363, 34018423, 34019478, 34020905, 34022834, 34023045
34023117, 34023644, 34024924, 34027056, 34027199, 34027791, 34027965
34028486, 34031036, 34034279, 34034799, 34038365, 34039170, 34039802
34039805, 34042084, 34042759, 34042949, 34045021, 34045429, 34045719
34048076, 34048685, 34050156, 34051355, 34052378, 34052471, 34052869
34053296, 34053514, 34054814, 34055289, 34056235, 34056691, 34056918
34058858, 34060122, 34060268, 34060829, 34064415, 34066286, 34066652
34069804, 34070446, 34071627, 34072411, 34075499, 34078255, 34079542
34080081, 34080691, 34083290, 34085116, 34086300, 34088194, 34088299
34088989, 34089934, 34090927, 34091587, 34092979, 34094476, 34096213
34097491, 34098840, 34098862, 34099185, 34100909, 34101724, 34101781
34103647, 34103857, 34104105, 34104403, 34104747, 34105531, 34105578
34106567, 34106830, 34107171, 34110342, 34111239, 34111708, 34113634
34113754, 34115571, 34115674, 34115836, 34116531, 34116534, 34117188
34118219, 34119948, 34120395, 34122000, 34123350, 34125814, 34126068
34126600, 34127787, 34128961, 34129587, 34129689, 34129964, 34130289
34131435, 34132089, 34132318, 34135867, 34136552, 34136598, 34136651
34137325, 34137360, 34137513, 34139110, 34139217, 34141328, 34142034
34142725, 34142884, 34145178, 34145715, 34146833, 34146985, 34146987
34147169, 34148591, 34149263, 34151061, 34153098, 34153238, 34153367
34154847, 34155072, 34157543, 34158902, 34160874, 34162108, 34162325
34162335, 34164486, 34164828, 34166857, 34167286, 34168185, 34171382
34171631, 34171779, 34172434, 34172950, 34172951, 34173003, 34173655
34174125, 34174543, 34175766, 34175987, 34176645, 34177216, 34177554
34182692, 34183461, 34183998, 34186437, 34187150, 34191370, 34191733
34191990, 34194445, 34195569, 34198944, 34200295, 34202065, 34203704
34203713, 34204673, 34205962, 34207008, 34207506, 34207825, 34208572
34208822, 34210475, 34210478, 34212105, 34215091, 34215118, 34215356
34215503, 34216873, 34220609, 34220943, 34220991, 34222165, 34224381
34224955, 34225479, 34226067, 34229104, 34229250, 34229833, 34233694
34234394, 34236849, 34236850, 34238278, 34238326, 34238452, 34239023
34239253, 34240339, 34241948, 34242857, 34248685, 34248786, 34250357
34256822, 34256867, 34257221, 34259077, 34259505, 34261458, 34261536
34261947, 34262719, 34264633, 34269674, 34270419, 34271144, 34272249
34272626, 34276007, 34276035, 34278993, 34279907, 34280456, 34281503
34282948, 34284147, 34284480, 34286361, 34287904, 34288172, 34289040
34289391, 34291104, 34291231, 34292131, 34299927, 34301118, 34303814
34305086, 34309486, 34309870, 34310304, 34314448, 34314510, 34318537
34320078, 34322521, 34329853, 34330202, 34333986, 34339279, 34339332
34339511, 34343228, 34346865, 34348856, 34349149, 34349276, 34349447
34351706, 34352389, 34352605, 34358131, 34358718, 34363214, 34366429
34366627, 34367505, 34368448, 34370261, 34370607, 34371061, 34373053
34373173, 34376468, 34376629, 34377917, 34381597, 34382203, 34382212
34385931, 34386836, 34387852, 34394126, 34394887, 34395591, 34396087

34396210, 34397170, 34400193, 34400514, 34401276, 34405413, 34406030
34408490, 34411060, 34414328, 34417794, 34420448, 34421053, 34422617
34424661, 34424728, 34425846, 34428819, 34430618, 34436025, 34443644
34444824, 34446152, 34446545, 34447012, 34448189, 34449511, 34450366
34450853, 34451554, 34452628, 34453303, 34453468, 34453799, 34453970
34454035, 34458786, 34460273, 34461697, 34462893, 34464036, 34465871
34470389, 34470542, 34471029, 34472508, 34473578, 34476155, 34477555
34482043, 34485380, 34485525, 34485657, 34491739, 34495234, 34497838
34499374, 34505752, 34511443, 34511846, 34512077, 34519783, 34520519
34521072, 34521241, 34523306, 34524704, 34524915, 34525391, 34525691
34530272, 34530839, 34532111, 34533061, 34533150, 34536480, 34538232
34543854, 34543938, 34545238, 34547912, 34549471, 34549620, 34551359
34552065, 34557355, 34557851, 34558586, 34559114, 34559964, 34561402
34562023, 34567061, 34567240, 34567246, 34569338, 34570620, 34572347
34572899, 34574048, 34574650, 34576656, 34577339, 34580665, 34585151
34587326, 34589885, 34592878, 34596863, 34598617, 34599377, 34599777
34601469, 34604941, 34609482, 34609883, 34627724, 34639116, 34647902
34651385, 34653168, 34664941, 34672192, 34673162, 34680126, 34696043
34697861, 34698179, 34699616, 34700228, 34701323, 34709158, 34710569
34713413, 34714760, 34715072, 34715960, 34724125, 34726380, 34743170
34744334, 34744980, 34752011, 34763780, 34769588, 34774426, 34786432
34800180, 34806060, 34808536, 34810533, 34816203, 34830056, 34830523
34839112, 34844505, 34845369, 34860551, 34861159, 34879878, 34894430
34899985, 34958012, 35001966, 35012866, 35099667, 35099674

Version 19.0.0.0.ru-2023-01.rur-2023-01.r1

Version 19.0.0.0.ru-2023-01.rur-2023-01.r1 includes the following:

- Patch [34699616](#): DSTV40 UPDATE - TZDATA2022E - NEED OJVM FIX
- Patch [35012866](#): BUG_33527739_APPLY.SQL GOT ORA-13516 AWR OPERATION FAILED CATPROC NOT VALID
- Patch [33125873](#): MAKE CACHE GLOBAL OBJECT INVALIDATION CIC NON-SERIALIZE FOR BETTER PERFORMANCE
- Patch [29213893](#): DBMS_STATS FAILING WITH ERROR ORA-01422 WHEN GATHERING STATS FOR USER\$ TABLE
- Patch [28730253](#): SUPPORT NEW ERA REIWA FOR JAPANESE IMPERIAL CALENDAR
- Patch [34786990](#): OJVM RELEASE UPDATE: 19.18.0.0.230117 (34786990)
- Patch [34765931](#): DATABASE RELEASE UPDATE : 19.18.0.0.0 (REL-JAN230131) (34765931)

- Patch [29585399](#): OCW RELEASE UPDATE 19.3.0.0.0 (29585399)
- PreUpgrade Jar: preupgrade_19_cbuild_13_lf.zip

Combined patches for version 19.0.0.0.ru-2023-01.rur-2023-01.r1, released January 2023

Bugs fixed:

1297945, 7391838, 8460502, 8476681, 9002767, 10123661, 12565410
12949919, 14112098, 14570574, 14735102, 15897884, 15931756, 15959416
16662822, 16664572, 16750494, 16799766, 17275499, 17395507, 17428816
17443054, 17468475, 17562236, 17777718, 18534283, 18697534, 18759260
18943905, 19080742, 19138896, 19147630, 19397646, 19630878, 19697993
19884953, 19958239, 20007421, 20083476, 20289608, 20313356, 20319830
20479545, 20661314, 20721183, 20867658, 20875943, 20922160, 21119541
21232786, 21245711, 21374587, 21528318, 21533734, 21629064, 21639146
21888352, 21965541, 22037067, 22066547, 22252368, 22325312, 22387320
22553815, 22580355, 22725871, 22729345, 22748979, 22873666, 23020668
23066463, 23094775, 23125587, 23294761, 23296836, 23311885, 23606241
23614160, 23645975, 23734075, 23734111, 23763462, 24336782, 24356932
24559425, 24561942, 24596874, 24597536, 24669730, 24687075, 24701882
24833686, 24916492, 24957575, 24971456, 25030027, 25033515, 25092651
25093917, 25148135, 25173172, 25404117, 25415139, 25416731, 25467237
25541233, 25560538, 25562258, 25607406, 25607716, 25632308, 25655012
25661172, 25675134, 25677036, 25756945, 25792962, 25804387, 25804908
25806201, 25809128, 25869323, 25881271, 25883179, 25905368, 25913778
25979242, 25986062, 25997810, 26001677, 26003708, 26108369, 26127355
26139817, 26173091, 26203132, 26247450, 26256280, 26280704, 26284288
26352569, 26352615, 26440142, 26476244, 26497655, 26499997, 26500553
26516556, 26577716, 26587659, 26611353, 26621826, 26668264, 26716835
26739322, 26758837, 26777814, 26785852, 26789742, 26800890, 26819036
26860844, 26872233, 26897528, 26951566, 26957541, 26960568, 26963540
26978857, 27004798, 27004828, 27015468, 27019512, 27036163, 27044169
27044246, 27063461, 27086374, 27091809, 27101798, 27126122, 27126938
27130348, 27131416, 27155644, 27162036, 27166935, 27175854, 27195575
27195935, 27207214, 27207959, 27221350, 27222128, 27243840, 27244999
27254335, 27260704, 27261477, 27275126, 27277677, 27302372, 27329690
27359766, 27359770, 27362994, 27369515, 27378053, 27381279, 27392968
27406105, 27411022, 27423500, 27428898, 27439716, 27453490, 27458357
27458493, 27460010, 27489107, 27497101, 27525303, 27572040, 27582210
27589260, 27595082, 27597359, 27604329, 27614573, 27622946, 27629928

27636387, 27639208, 27654410, 27658166, 27661222, 27666312, 27684864
27691701, 27692173, 27697886, 27700413, 27710072, 27722357, 27729678
27742354, 27745728, 27751111, 27751518, 27760043, 27764052, 27768096
27782078, 27785931, 27786168, 27801144, 27825962, 27828892, 27829722
27841399, 27846298, 27860754, 27873364, 27877830, 27880025, 27897090
27899093, 27907898, 27917890, 27929509, 27933036, 27934711, 27935464
27941110, 27950978, 27951757, 27957203, 27957963, 27962025, 27967484
27979632, 27989365, 27998559, 28001632, 28007516, 28023467, 28031385
28044739, 28052648, 28064977, 28072567, 28078186, 28089605, 28092783
28104176, 28109326, 28112563, 28125947, 28127287, 28127569, 28129791
28133903, 28138566, 28138847, 28144569, 28145995, 28156781, 28167557
28173612, 28181021, 28185286, 28187837, 28189466, 28193268, 28198802
28201045, 28204104, 28204262, 28205555, 28209601, 28209985, 28210681
28215483, 28234255, 28248841, 28263142, 28271258, 28271693, 28276054
28279176, 28279456, 28279612, 28294439, 28294563, 28298401, 28302580
28303692, 28313275, 28319114, 28322973, 28326928, 28337860, 28338211
28350595, 28351919, 28362187, 28364580, 28370061, 28371123, 28373960
28375383, 28379065, 28381939, 28383667, 28386259, 28387185, 28387574
28390177, 28390273, 28392179, 28395302, 28397317, 28402823, 28403019
28406374, 28410431, 28414968, 28430240, 28431445, 28432345, 28435333
28436173, 28436414, 28442896, 28451312, 28452123, 28454215, 28461031
28461789, 28463226, 28470673, 28475242, 28479352, 28482048, 28482049
28484299, 28487818, 28489419, 28492006, 28498976, 28499269, 28502773
28503081, 28504631, 28505321, 28513129, 28513333, 28521330, 28522750
28523644, 28526715, 28530171, 28530697, 28534475, 28534493, 28535127
28537481, 28538439, 28541606, 28542455, 28544270, 28546290, 28547068
28547926, 28553649, 28553981, 28558489, 28558645, 28561704, 28564479
28565296, 28567417, 28567819, 28569897, 28570589, 28572165, 28572407
28572533, 28572544, 28572667, 28572834, 28578945, 28587723, 28589194
28589509, 28589644, 28591817, 28592647, 28593127, 28593682, 28594086
28597221, 28598022, 28600107, 28601957, 28602253, 28604647, 28605066
28606598, 28607316, 28607632, 28608211, 28612239, 28618343, 28620697
28621543, 28621781, 28622202, 28625580, 28625862, 28625873, 28627033
28628592, 28630381, 28632796, 28632799, 28636532, 28639299, 28640772
28642469, 28642551, 28642899, 28643583, 28643654, 28643718, 28644549
28645570, 28646200, 28646939, 28647544, 28649388, 28651078, 28652776
28655209, 28657026, 28658263, 28659098, 28661333, 28661362, 28663289
28663782, 28670402, 28672124, 28672457, 28673945, 28681153, 28682182
28682796, 28689483, 28690694, 28692103, 28692275, 28692282, 28693954
28694526, 28694639, 28694872, 28694877, 28696373, 28697526, 28698087
28699321, 28700945, 28703812, 28704412, 28705231, 28707931, 28708400
28708585, 28709063, 28710385, 28710469, 28710663, 28710734, 28714461
28714720, 28715655, 28715727, 28717406, 28718302, 28718469, 28719348
28720204, 28720418, 28721497, 28722229, 28729900, 28730079, 28730253

28734355, 28734910, 28740708, 28740799, 28740863, 28741374, 28742555
28745367, 28747846, 28749853, 28751498, 28752923, 28755011, 28755084
28755309, 28755846, 28757960, 28758722, 28760206, 28760662, 28763291
28765983, 28767240, 28769456, 28770865, 28771022, 28771947, 28772390
28772816, 28774416, 28776431, 28776811, 28777073, 28777214, 28777478
28778754, 28781599, 28781754, 28785273, 28785321, 28785531, 28788272
28789531, 28789533, 28791576, 28791852, 28793062, 28794230, 28795452
28795551, 28795563, 28795734, 28800508, 28802066, 28802734, 28804517
28805242, 28806517, 28807247, 28808314, 28808652, 28808656, 28810381
28811560, 28811592, 28813317, 28813931, 28815123, 28815355, 28815557
28816871, 28817449, 28818063, 28819640, 28820669, 28821847, 28824482
28826113, 28827682, 28828390, 28831971, 28833912, 28835937, 28836716
28837979, 28838385, 28839869, 28842408, 28844656, 28844738, 28845346
28846759, 28847541, 28847572, 28849494, 28849776, 28850084, 28851458
28851467, 28852325, 28852334, 28854004, 28854212, 28854733, 28855520
28855922, 28857364, 28857552, 28861861, 28862532, 28863263, 28863432
28863487, 28865544, 28865569, 28867698, 28867992, 28869215, 28870496
28871040, 28872645, 28872829, 28873575, 28874416, 28875089, 28876253
28876639, 28876926, 28877252, 28878865, 28880218, 28880864, 28881191
28881848, 28882146, 28882751, 28882784, 28884931, 28887305, 28888083
28888327, 28889389, 28889730, 28891867, 28891941, 28892794, 28896556
28897123, 28897512, 28899663, 28900506, 28901126, 28902135, 28904380
28905312, 28905390, 28905457, 28905615, 28907196, 28909769, 28909992
28910498, 28910586, 28911140, 28912691, 28914144, 28915561, 28917080
28918429, 28919145, 28921844, 28922227, 28922485, 28922532, 28922608
28922767, 28925250, 28925460, 28925634, 28925880, 28927452, 28928462
28930944, 28932914, 28933079, 28933158, 28935293, 28935956, 28936114
28937717, 28938167, 28938422, 28938698, 28940179, 28940281, 28940472
28941901, 28942118, 28942455, 28942694, 28945421, 28945994, 28946233
28946574, 28948554, 28949888, 28950868, 28951332, 28951493, 28951533
28952168, 28954762, 28955606, 28955883, 28956145, 28956908, 28957260
28957292, 28957723, 28958088, 28958094, 28958590, 28959493, 28960863
28962271, 28962775, 28963036, 28965084, 28965095, 28965231, 28965376
28966444, 28968211, 28968779, 28970122, 28971177, 28974083, 28974902
28974999, 28977322, 28978664, 28979289, 28980448, 28980910, 28981871
28983095, 28983486, 28984313, 28985114, 28985272, 28985362, 28985478
28986207, 28986231, 28986257, 28986326, 28986481, 28986696, 28988482
28988864, 28989306, 28990681, 28993295, 28993353, 28994307, 28994542
28994721, 28994783, 28995287, 28996376, 28998369, 28999046, 29000000
29001305, 29001888, 29002273, 29002488, 29002784, 29002927, 29003207
29003407, 29003617, 29003738, 29004934, 29005748, 29006318, 29006621
29007321, 29007353, 29007775, 29008035, 29008669, 29009513, 29010126
29010517, 29011936, 29012609, 29013475, 29013832, 29014076, 29014385
29015118, 29015273, 29016294, 29017265, 29018655, 29018680, 29019121

29020147, 29020271, 29020423, 29021063, 29021352, 29022986, 29024028
29024054, 29024448, 29024552, 29024732, 29024795, 29024876, 29026154
29026582, 29026606, 29027456, 29027694, 29027914, 29027933, 29027940
29030184, 29030927, 29031575, 29031600, 29032234, 29032276, 29032457
29032607, 29033052, 29033145, 29033164, 29033200, 29033280, 29033655
29034331, 29034587, 29036278, 29037290, 29038528, 29038728, 29038730
29039089, 29039510, 29040032, 29040739, 29041739, 29041775, 29043554
29043651, 29043725, 29044086, 29044763, 29044954, 29046482, 29047127
29047850, 29048178, 29048289, 29048498, 29048605, 29048728, 29048792
29048858, 29049014, 29049673, 29050357, 29050560, 29050765, 29050886
29051263, 29051702, 29051953, 29052726, 29052850, 29053783, 29053902
29055644, 29056024, 29056270, 29056560, 29056767, 29056894, 29058476
29059011, 29060216, 29061016, 29061959, 29062692, 29062848, 29062860
29062868, 29110526, 29110783, 29110790, 29110797, 29110802, 29110805
29111598, 29111631, 29112455, 29113282, 29113305, 29115794, 29115857
29116779, 29117337, 29117526, 29117642, 29118543, 29119077, 29119733
29120223, 29122224, 29122254, 29122367, 29123297, 29123324, 29123432
29123444, 29123482, 29124104, 29124368, 29125036, 29125374, 29125380
29125708, 29125786, 29126345, 29127957, 29128693, 29128935, 29129450
29129476, 29129497, 29129691, 29129712, 29130219, 29131539, 29131772
29132456, 29132869, 29132938, 29133470, 29134447, 29135383, 29135649
29136111, 29138641, 29139070, 29139727, 29139761, 29139780, 29139956
29141316, 29141341, 29141685, 29141886, 29142609, 29142667, 29143516
29144995, 29145214, 29145730, 29146077, 29146157, 29146810, 29147849
29148799, 29149170, 29149829, 29150338, 29151520, 29152357, 29152603
29152752, 29154057, 29154631, 29154636, 29154725, 29154829, 29155099
29155208, 29157051, 29157389, 29158139, 29158680, 29158899, 29158990
29159216, 29159661, 29159909, 29159936, 29160174, 29160462, 29160824
29161597, 29161923, 29162095, 29162749, 29163073, 29163156, 29163415
29163437, 29163524, 29163567, 29164376, 29164446, 29165682, 29167111
29167342, 29167374, 29167940, 29168137, 29168219, 29168433, 29169073
29169215, 29169540, 29169739, 29170232, 29170717, 29171683, 29171942
29172618, 29172826, 29173140, 29173373, 29173618, 29173817, 29174004
29174753, 29175638, 29175765, 29175829, 29176318, 29177466, 29177543
29177886, 29178385, 29179097, 29180313, 29180455, 29180559, 29180721
29180893, 29181078, 29181153, 29181231, 29181568, 29181620, 29181743
29181923, 29182019, 29182517, 29182535, 29182901, 29182920, 29183298
29183912, 29184297, 29184666, 29185193, 29186091, 29186456, 29186605
29188255, 29189302, 29189307, 29189889, 29190235, 29190474, 29190663
29190740, 29191541, 29191827, 29192419, 29192468, 29192685, 29193207
29194205, 29194367, 29194493, 29194827, 29194981, 29195279, 29195337
29195758, 29196151, 29196725, 29198092, 29198913, 29199163, 29199635
29199733, 29200316, 29200700, 29201143, 29201494, 29201539, 29201695
29201787, 29202104, 29202461, 29202850, 29203041, 29203122, 29203166

29203227, 29203425, 29203443, 29203604, 29205281, 29205323, 29205419
29205463, 29205767, 29205918, 29206109, 29206605, 29206631, 29207073
29208260, 29208732, 29209545, 29210577, 29210610, 29210624, 29210683
29211457, 29211724, 29211895, 29212012, 29212433, 29212611, 29213320
29213351, 29213613, 29213641, 29213775, 29213850, 29213879, 29213893
29214561, 29214960, 29216312, 29216723, 29216746, 29216984, 29217294
29217472, 29217828, 29217848, 29217856, 29218570, 29219205, 29219273
29219627, 29220079, 29221248, 29221745, 29221891, 29221942, 29222031
29222534, 29222784, 29222892, 29223833, 29223859, 29223967, 29224065
29224294, 29224605, 29224710, 29225076, 29225168, 29225758, 29225861
29227602, 29228869, 29229164, 29229754, 29229839, 29229844, 29229955
29230252, 29230565, 29231133, 29232117, 29232154, 29232449, 29232533
29232653, 29233415, 29233810, 29233953, 29234123, 29235934, 29236573
29237538, 29237575, 29237744, 29240307, 29240668, 29240759, 29241345
29241651, 29242017, 29242561, 29242884, 29242906, 29243749, 29243958
29244495, 29244766, 29244968, 29245063, 29245137, 29245160, 29246163
29246337, 29247183, 29247415, 29247712, 29247906, 29248012, 29248495
29248552, 29248723, 29248835, 29248858, 29249289, 29249412, 29249583
29249991, 29250059, 29250317, 29251259, 29251564, 29252218, 29252510
29252790, 29253184, 29253871, 29254031, 29254177, 29254623, 29254930
29255178, 29255273, 29255431, 29255435, 29255616, 29255705, 29255718
29255973, 29256279, 29256426, 29259119, 29259320, 29260224, 29260407
29260452, 29260956, 29261547, 29261548, 29261695, 29261906, 29262143
29262512, 29262887, 29265446, 29265448, 29265780, 29266248, 29266899
29267292, 29268412, 29269171, 29269228, 29269825, 29270585, 29271019
29273168, 29273360, 29273539, 29273570, 29273735, 29273812, 29273847
29274428, 29274564, 29274623, 29274627, 29275461, 29276272, 29277317
29278218, 29278684, 29279658, 29279751, 29279854, 29281112, 29281527
29281691, 29281796, 29282090, 29282233, 29282666, 29282898, 29285197
29285453, 29285503, 29285621, 29285788, 29285956, 29286037, 29286220
29286229, 29287130, 29287705, 29290110, 29290235, 29292232, 29292253
29292378, 29292837, 29293072, 29293574, 29293806, 29294382, 29294753
29296257, 29297863, 29297915, 29298220, 29299049, 29299082, 29299830
29299844, 29301139, 29301463, 29301566, 29302565, 29302614, 29302963
29303712, 29303918, 29304314, 29304640, 29304692, 29304781, 29304853
29305093, 29306226, 29306478, 29306713, 29306790, 29307090, 29307109
29307638, 29309698, 29311336, 29311528, 29311588, 29311927, 29312310
29312672, 29312734, 29312753, 29312889, 29313347, 29313417, 29313525
29314539, 29314636, 29314867, 29314949, 29317756, 29318410, 29319441
29319558, 29320900, 29321489, 29321689, 29323946, 29323999, 29324568
29324735, 29325087, 29325105, 29325257, 29325356, 29325497, 29325765
29325993, 29326233, 29327044, 29327892, 29327972, 29328305, 29329042
29329087, 29329675, 29329807, 29329848, 29330361, 29330791, 29331066
29331209, 29331380, 29331493, 29332292, 29332395, 29332763, 29332771

29332966, 29333500, 29336843, 29336899, 29337294, 29337310, 29337742
29338315, 29338348, 29338453, 29338780, 29338913, 29339101, 29339155
29339299, 29339452, 29340333, 29341209, 29341782, 29342099, 29343086
29343156, 29343861, 29344541, 29345382, 29345937, 29346057, 29346138
29346211, 29346943, 29347620, 29348176, 29348358, 29350052, 29350712
29350762, 29350868, 29351044, 29351386, 29351662, 29351708, 29351716
29351735, 29351749, 29351771, 29351786, 29352298, 29352724, 29352867
29352947, 29353271, 29353389, 29353432, 29353718, 29353821, 29353960
29355654, 29355913, 29356547, 29356634, 29356698, 29356704, 29356711
29356752, 29356782, 29357424, 29357821, 29358509, 29358828, 29360252
29360285, 29360467, 29360672, 29360775, 29360911, 29360950, 29361319
29361472, 29361801, 29362596, 29363090, 29363151, 29364171, 29364177
29366406, 29366818, 29366940, 29367019, 29367561, 29367971, 29368253
29368310, 29368725, 29372069, 29372541, 29372562, 29373418, 29373588
29374179, 29374604, 29374627, 29375355, 29375941, 29375984, 29376346
29377804, 29377986, 29378029, 29378287, 29378834, 29378913, 29379299
29379381, 29379552, 29379750, 29379978, 29380527, 29381000, 29382296
29382641, 29382784, 29382815, 29383695, 29384740, 29384781, 29384854
29384864, 29384960, 29385339, 29385429, 29385652, 29385774, 29386125
29386502, 29386557, 29386635, 29386660, 29386835, 29387073, 29387274
29387310, 29387329, 29387337, 29388020, 29388072, 29388094, 29388524
29388830, 29389408, 29389889, 29390011, 29390435, 29390501, 29390785
29391030, 29391237, 29391301, 29391438, 29391849, 29391925, 29392554
29392966, 29393291, 29393649, 29394014, 29394140, 29394749, 29394761
29395657, 29396481, 29397841, 29397954, 29397996, 29398192, 29398488
29398863, 29399046, 29399100, 29399121, 29399336, 29399938, 29399959
29402110, 29402131, 29403307, 29404425, 29404483, 29405012, 29405462
29405651, 29405996, 29407488, 29407637, 29407804, 29407932, 29408853
29409149, 29409455, 29410311, 29410834, 29411037, 29411427, 29411469
29411931, 29412066, 29412269, 29413205, 29413360, 29413382, 29413517
29413544, 29413634, 29413956, 29415493, 29415774, 29416339, 29416688
29416700, 29417084, 29417113, 29417173, 29417719, 29417884, 29418165
29418341, 29420254, 29420834, 29421059, 29423003, 29423016, 29423156
29423227, 29423491, 29423826, 29424094, 29424999, 29426241, 29426320
29426521, 29428230, 29429017, 29429087, 29429264, 29429336, 29429466
29429566, 29429895, 29430524, 29430866, 29431192, 29431402, 29431485
29431985, 29432176, 29434301, 29434777, 29434869, 29435474, 29435652
29435966, 29436454, 29436514, 29436522, 29436727, 29437029, 29437379
29437594, 29437712, 29438150, 29438277, 29438736, 29439522, 29440651
29441196, 29442400, 29442936, 29443187, 29443250, 29443559, 29444072
29444275, 29444282, 29444524, 29444602, 29444906, 29445548, 29445707
29446319, 29446669, 29447460, 29448498, 29449477, 29449845, 29449852
29450162, 29450193, 29450273, 29450421, 29450812, 29450936, 29451085
29451224, 29451386, 29451660, 29452251, 29452576, 29452736, 29452739

29452809, 29452813, 29452936, 29452953, 29452977, 29453104, 29453105
29453109, 29453681, 29453682, 29454450, 29454467, 29454468, 29454469
29454470, 29454471, 29454978, 29455424, 29455773, 29456538, 29456714
29457312, 29457319, 29457370, 29457502, 29457807, 29457978, 29458132
29460252, 29461420, 29461791, 29461971, 29462594, 29462767, 29462957
29463047, 29463528, 29463553, 29463798, 29464616, 29464779, 29465047
29465177, 29466674, 29466707, 29467622, 29469563, 29469565, 29470059
29470205, 29470291, 29470636, 29470814, 29470880, 29471633, 29471832
29471857, 29471860, 29472170, 29472172, 29472176, 29472204, 29472235
29472402, 29472404, 29472405, 29472408, 29472411, 29472446, 29472618
29473708, 29474348, 29475386, 29476473, 29476702, 29477015, 29481584
29482021, 29483452, 29483532, 29483626, 29483672, 29483685, 29483712
29483723, 29483771, 29485099, 29485731, 29485877, 29486181, 29486848
29487150, 29487189, 29487407, 29488894, 29488996, 29489436, 29489546
29490032, 29490256, 29491784, 29492127, 29492939, 29493122, 29493821
29494101, 29494245, 29494788, 29494934, 29495057, 29495171, 29495684
29496977, 29497053, 29497311, 29497588, 29497696, 29497778, 29498198
29499077, 29500257, 29500826, 29500963, 29501218, 29502561, 29503543
29503631, 29503827, 29504103, 29504492, 29504682, 29505225, 29505589
29505668, 29506942, 29507270, 29507616, 29508681, 29508751, 29508998
29509777, 29510278, 29511064, 29511611, 29511771, 29511980, 29512125
29512773, 29512890, 29514284, 29514479, 29515134, 29515240, 29515476
29515534, 29515766, 29515834, 29516300, 29516727, 29516766, 29516943
29517168, 29517443, 29517883, 29518604, 29518767, 29519131, 29521187
29521688, 29521748, 29521862, 29522358, 29522561, 29522662, 29523055
29523216, 29523511, 29524043, 29524599, 29524985, 29525366, 29525467
29525886, 29526966, 29527595, 29527610, 29528184, 29528368, 29529147
29529436, 29530414, 29530440, 29530515, 29530812, 29530909, 29531654
29531836, 29532112, 29532532, 29534218, 29536342, 29536445, 29536794
29537829, 29538631, 29539027, 29539413, 29540327, 29540831, 29540862
29541517, 29541742, 29541769, 29541973, 29542084, 29542449, 29542474
29542580, 29542643, 29543034, 29543956, 29544552, 29546817, 29547010
29547867, 29548413, 29548427, 29548592, 29548687, 29548722, 29549040
29549071, 29549104, 29549154, 29549730, 29550530, 29552402, 29552773
29553141, 29554092, 29554351, 29554554, 29554997, 29555105, 29555239
29557144, 29557261, 29557336, 29557556, 29558238, 29558452, 29558926
29558975, 29559187, 29559395, 29559446, 29559908, 29559981, 29560019
29564592, 29564593, 29565611, 29579919, 29580394, 29580983, 29581460
29581771, 29583018, 29584261, 29584693, 29586143, 29587299, 29587488
29587720, 29587765, 29588580, 29588732, 29589544, 29590666, 29591311
29591343, 29591641, 29591661, 29592011, 29592215, 29592433, 29592595
29592946, 29593820, 29597158, 29597536, 29597716, 29597754, 29598039
29598040, 29598046, 29598226, 29598233, 29598338, 29598981, 29599008
29599243, 29599300, 29599552, 29601461, 29602831, 29603460, 29603884

29604002, 29604257, 29606261, 29607136, 29607797, 29608000, 29608023
29608888, 29609434, 29609468, 29609603, 29610506, 29611020, 29611991
29613733, 29614206, 29614931, 29614987, 29615824, 29616244, 29616414
29617414, 29618074, 29618190, 29620042, 29620564, 29622936, 29623323
29623592, 29624124, 29624408, 29625065, 29625804, 29625827, 29625876
29626154, 29626732, 29628200, 29628647, 29629430, 29629650, 29629681
29629745, 29630221, 29631749, 29632095, 29632265, 29632611, 29632751
29633697, 29633753, 29633936, 29634643, 29635427, 29635717, 29635990
29637362, 29637526, 29637560, 29638285, 29638928, 29641373, 29641736
29642451, 29643721, 29644426, 29644464, 29645167, 29645349, 29647176
29647770, 29648928, 29649694, 29651183, 29651517, 29651520, 29652809
29653132, 29653246, 29655164, 29655416, 29655668, 29655855, 29655895
29656400, 29656819, 29656843, 29657399, 29657422, 29657744, 29657960
29657973, 29658056, 29661028, 29661065, 29661722, 29663191, 29663368
29663494, 29663601, 29663813, 29664087, 29664161, 29665168, 29665940
29666451, 29667527, 29667994, 29668005, 29668253, 29669241, 29669413
29670713, 29670782, 29671363, 29672507, 29675446, 29676089, 29676921
29677051, 29677173, 29677733, 29677927, 29678217, 29679856, 29680700
29681987, 29683039, 29683189, 29683211, 29684518, 29685137, 29685276
29687214, 29687220, 29687459, 29687718, 29687727, 29687763, 29688867
29689145, 29689255, 29690795, 29690806, 29692115, 29692694, 29693847
29694869, 29695425, 29695821, 29695841, 29695964, 29695987, 29696242
29696310, 29697928, 29700125, 29700460, 29700770, 29701425, 29701720
29701755, 29701937, 29703932, 29704426, 29705793, 29706141, 29706160
29707099, 29707493, 29707896, 29708324, 29708353, 29708876, 29708915
29710188, 29710858, 29713810, 29715220, 29715647, 29715703, 29716029
29716194, 29716227, 29716491, 29716602, 29716871, 29717659, 29717901
29718198, 29719146, 29720133, 29720373, 29721418, 29721576, 29722026
29722092, 29722167, 29722389, 29723113, 29724497, 29724658, 29725115
29725421, 29725425, 29725476, 29725781, 29726695, 29737941, 29738374
29738400, 29739576, 29741319, 29741976, 29742223, 29742926, 29744225
29744400, 29744637, 29745288, 29745624, 29746003, 29746962, 29747493
29747648, 29747653, 29748285, 29748325, 29748336, 29748513, 29749469
29749471, 29750673, 29751094, 29753244, 29754196, 29754640, 29754951
29755821, 29756274, 29756444, 29757099, 29757264, 29757651, 29757687
29758203, 29758217, 29758661, 29761678, 29761837, 29761911, 29763158
29764644, 29765035, 29765219, 29765347, 29765393, 29765493, 29766207
29766435, 29766503, 29766679, 29768487, 29768899, 29769549, 29769695
29769901, 29770750, 29771032, 29771242, 29772514, 29772761, 29773185
29773197, 29773205, 29773459, 29773633, 29773842, 29774362, 29775393
29775473, 29779196, 29779368, 29779901, 29780140, 29780459, 29780507
29780633, 29782211, 29782284, 29782501, 29782823, 29782866, 29783142
29784106, 29785169, 29785239, 29785251, 29785311, 29785544, 29785550
29785831, 29787292, 29787766, 29788820, 29789911, 29791152, 29791880

29791916, 29792213, 29792433, 29793141, 29793151, 29793318, 29794174
29794462, 29795712, 29795957, 29796335, 29796378, 29796916, 29797209
29797726, 29801164, 29802382, 29802695, 29803593, 29803948, 29804875
29805368, 29805772, 29806390, 29806964, 29807964, 29809792, 29809837
29810012, 29810013, 29811616, 29811720, 29812084, 29812166, 29812489
29813503, 29813650, 29813671, 29814455, 29814995, 29815341, 29815713
29816887, 29817278, 29817547, 29817784, 29818794, 29819753, 29820341
29821130, 29821582, 29822714, 29825525, 29827647, 29827792, 29827852
29828644, 29829339, 29829453, 29830374, 29831196, 29831404, 29831567
29833406, 29833984, 29834506, 29836096, 29836424, 29838337, 29838485
29838740, 29838773, 29839481, 29839715, 29840619, 29841267, 29841687
29842369, 29843238, 29843277, 29843692, 29843831, 29844131, 29844226
29844275, 29845449, 29845530, 29845691, 29846126, 29846525, 29846645
29846688, 29847627, 29848084, 29848849, 29849100, 29849139, 29850083
29850552, 29850566, 29850930, 29851020, 29851308, 29851401, 29851733
29853485, 29856420, 29856506, 29856859, 29856890, 29858121, 29858376
29858420, 29858929, 29859068, 29860022, 29860028, 29860994, 29861075
29864203, 29864261, 29865188, 29865590, 29865658, 29867728, 29868639
29868736, 29869052, 29869086, 29869149, 29869404, 29869857, 29869877
29869887, 29869906, 29870065, 29870533, 29871098, 29871312, 29871360
29872401, 29872720, 29872937, 29872983, 29873206, 29873665, 29873751
29874090, 29874761, 29875200, 29875459, 29875565, 29875919, 29876358
29876989, 29877608, 29878076, 29879723, 29881050, 29881478, 29881575
29881643, 29881839, 29882427, 29882454, 29882729, 29884958, 29885182
29885890, 29886809, 29887045, 29887111, 29887840, 29888621, 29889184
29889358, 29890740, 29891075, 29891383, 29891533, 29891853, 29891857
29891916, 29892388, 29892604, 29892634, 29892973, 29892982, 29893132
29893197, 29893287, 29894021, 29896510, 29897418, 29897720, 29897863
29899384, 29900186, 29900203, 29900824, 29901021, 29901025, 29901419
29901961, 29902299, 29902327, 29902330, 29902659, 29903190, 29903299
29903357, 29903454, 29904002, 29906678, 29907870, 29907942, 29908389
29908639, 29908777, 29909658, 29910218, 29910402, 29912135, 29912286
29913805, 29913934, 29913966, 29914449, 29914544, 29915182, 29915217
29915848, 29916198, 29916975, 29919782, 29919789, 29920025, 29920376
29920804, 29921214, 29921318, 29921559, 29922225, 29922435, 29922461
29923452, 29924147, 29924181, 29924479, 29925177, 29926466, 29927360
29927756, 29928040, 29928210, 29928340, 29928427, 29928564, 29930457
29931230, 29931956, 29932202, 29932310, 29932430, 29932780, 29932953
29933718, 29934048, 29934052, 29934158, 29934557, 29935685, 29936841
29937565, 29937655, 29937956, 29938063, 29938225, 29939075, 29939400
29939795, 29940373, 29941062, 29942096, 29942275, 29942554, 29943670
29943879, 29944035, 29944159, 29944660, 29944963, 29945645, 29946101
29946388, 29947145, 29947242, 29947428, 29948154, 29948165, 29950018
29950220, 29951620, 29951759, 29952700, 29955625, 29956016, 29956222

29957412, 29957493, 29958925, 29960325, 29960884, 29961353, 29961360
29961609, 29961847, 29962160, 29962248, 29962590, 29962834, 29962927
29962939, 29965052, 29965207, 29965603, 29965888, 29966768, 29967223
29967386, 29967911, 29967980, 29968085, 29968703, 29969557, 29969985
29970081, 29970261, 29970273, 29970298, 29970587, 29970861, 29971027
29971481, 29971888, 29971936, 29971951, 29972134, 29972176, 29973012
29989783, 29989845, 29990779, 29991257, 29992299, 29993717, 29997326
29997553, 29997937, 29997959, 30000518, 30000664, 30001105, 30001331
30003187, 30003356, 30004660, 30004856, 30006159, 30006280, 30006411
30006472, 30006705, 30006985, 30007450, 30007536, 30007797, 30008035
30008125, 30008198, 30008214, 30008456, 30009528, 30009710, 30010995
30012181, 30012235, 30012737, 30013243, 30013535, 30014200, 30015070
30017836, 30018017, 30018126, 30018903, 30019864, 30021830, 30024618
30025814, 30026016, 30026596, 30027614, 30027638, 30027649, 30028182
30028599, 30028649, 30029519, 30029806, 30031027, 30031613, 30032233
30032376, 30032484, 30033040, 30033547, 30034456, 30035444, 30035598
30036258, 30038392, 30038576, 30039796, 30039800, 30039959, 30040157
30040511, 30041501, 30041514, 30042490, 30043398, 30043610, 30043930
30044108, 30044507, 30045242, 30045273, 30045389, 30045484, 30045983
30046497, 30047510, 30047531, 30047702, 30047765, 30047931, 30048688
30049966, 30051176, 30051783, 30051804, 30052740, 30052928, 30053036
30053501, 30053748, 30054980, 30055640, 30056058, 30057718, 30057799
30058149, 30058453, 30059106, 30059109, 30059821, 30060267, 30060330
30062364, 30062429, 30062736, 30062819, 30064268, 30066352, 30067565
30068101, 30068384, 30068792, 30068871, 30070064, 30070506, 30071446
30072018, 30072038, 30072905, 30073314, 30073422, 30073744, 30074250
30074296, 30074349, 30074469, 30074472, 30074820, 30075037, 30076058
30076197, 30076253, 30076604, 30078675, 30078934, 30079495, 30079949
30080111, 30080266, 30080297, 30080988, 30081055, 30081546, 30081580
30082145, 30082402, 30083100, 30083216, 30083488, 30083807, 30084458
30084606, 30084971, 30085897, 30086596, 30086992, 30087165, 30087509
30088229, 30088421, 30090568, 30092254, 30092280, 30092859, 30094929
30094948, 30095499, 30095591, 30095952, 30096138, 30097092, 30097115
30098251, 30098719, 30099302, 30099420, 30099454, 30099852, 30100354
30101090, 30101186, 30101541, 30101847, 30102774, 30103551, 30103553
30104348, 30104378, 30104555, 30104722, 30104850, 30105458, 30106748
30106901, 30108012, 30109365, 30109839, 30110224, 30110370, 30110518
30114477, 30114489, 30114534, 30116085, 30116203, 30116753, 30116854
30117209, 30117220, 30117335, 30117469, 30117593, 30118261, 30118279
30120608, 30121009, 30122523, 30122583, 30123138, 30124026, 30125765
30126145, 30126470, 30127145, 30127522, 30127805, 30127904, 30128047
30128231, 30130240, 30131286, 30131645, 30132708, 30132989, 30133841
30134103, 30134746, 30135396, 30135731, 30135899, 30135942, 30136102
30136346, 30137792, 30138600, 30138948, 30139392, 30140425, 30141240

30142527, 30142802, 30142812, 30142815, 30142907, 30143470, 30143593
30145712, 30146593, 30146969, 30147195, 30147307, 30147308, 30147473
30147928, 30148343, 30148929, 30148966, 30148999, 30149035, 30149658
30150606, 30150710, 30151636, 30153533, 30153552, 30153885, 30154633
30155241, 30155320, 30155388, 30155489, 30155814, 30155837, 30155999
30156569, 30157526, 30158313, 30159329, 30159488, 30159511, 30159536
30159690, 30159752, 30159760, 30160025, 30160625, 30161094, 30163243
30164238, 30164714, 30165493, 30165503, 30165876, 30165892, 30165897
30166257, 30166352, 30167787, 30169254, 30169841, 30170104, 30172925
30173113, 30173370, 30173556, 30174102, 30174394, 30174401, 30175180
30175291, 30175478, 30175587, 30177597, 30178250, 30178839, 30178990
30179012, 30179038, 30179644, 30179894, 30180195, 30180208, 30180643
30181756, 30182498, 30183367, 30183696, 30183715, 30183920, 30184102
30185852, 30186319, 30186476, 30186706, 30187627, 30187866, 30188215
30188631, 30189516, 30189535, 30190090, 30191274, 30192691, 30192729
30192853, 30193165, 30193262, 30193505, 30193506, 30193584, 30193736
30194612, 30194710, 30194972, 30195667, 30195668, 30195684, 30195773
30196195, 30196358, 30196629, 30198239, 30198598, 30198861, 30198905
30199890, 30200034, 30200132, 30200237, 30200680, 30200758, 30202349
30202388, 30202407, 30203929, 30204042, 30204542, 30206220, 30206493
30206675, 30207473, 30207519, 30208327, 30208690, 30208723, 30209222
30209736, 30210027, 30210429, 30210753, 30210884, 30211567, 30213031
30213540, 30213590, 30214769, 30214826, 30215130, 30215302, 30215351
30217206, 30217562, 30217982, 30218044, 30218317, 30218956, 30219222
30220932, 30221115, 30221237, 30221298, 30222187, 30222512, 30222669
30222975, 30223712, 30223847, 30223990, 30224544, 30224650, 30224725
30224868, 30224950, 30225265, 30225439, 30225443, 30225718, 30225837
30225844, 30226244, 30227400, 30228422, 30228567, 30229030, 30229126
30229683, 30230183, 30232638, 30233105, 30233536, 30233934, 30234132
30234227, 30235878, 30235919, 30235979, 30236092, 30236399, 30236554
30236746, 30236883, 30236964, 30237477, 30237640, 30238211, 30238715
30239480, 30240010, 30240547, 30240858, 30240930, 30240972, 30241567
30241807, 30241829, 30241920, 30242120, 30242724, 30243216, 30243720
30244340, 30244831, 30246053, 30246179, 30247305, 30248520, 30248531
30248564, 30249432, 30249738, 30249927, 30251003, 30251130, 30252005
30252098, 30252156, 30252458, 30252977, 30253035, 30253090, 30253608
30253705, 30253761, 30253835, 30254206, 30254525, 30254576, 30254726
30255143, 30255528, 30256542, 30257412, 30257908, 30259120, 30259469
30260523, 30260595, 30262248, 30263013, 30263377, 30264405, 30265523
30265608, 30265615, 30265703, 30266791, 30267155, 30269428, 30269748
30270647, 30270744, 30271114, 30272329, 30273212, 30274090, 30274188
30274324, 30274662, 30275434, 30275548, 30275569, 30275578, 30275784
30276144, 30276243, 30277120, 30277451, 30277589, 30277648, 30277733
30277884, 30277887, 30278402, 30281428, 30281615, 30282501, 30282591

30282918, 30283296, 30283577, 30283579, 30283581, 30283832, 30283932
30284219, 30284369, 30284751, 30285026, 30285166, 30285251, 30285341
30285457, 30285540, 30285843, 30286961, 30288343, 30288491, 30289074
30289458, 30290700, 30291536, 30292305, 30293345, 30293935, 30294267
30294465, 30294671, 30294865, 30295110, 30295137, 30295549, 30295790
30295808, 30297905, 30299367, 30299817, 30299934, 30300030, 30300342
30300363, 30300523, 30300538, 30304037, 30305163, 30305264, 30305395
30305568, 30305603, 30305880, 30306407, 30307814, 30307883, 30308368
30308578, 30308624, 30308772, 30308947, 30309098, 30309798, 30310195
30311826, 30312094, 30312546, 30313749, 30313848, 30313989, 30314079
30314198, 30314837, 30316667, 30316897, 30317005, 30317209, 30317397
30318638, 30318943, 30319080, 30319099, 30320029, 30321076, 30321398
30322980, 30323219, 30323658, 30323820, 30323849, 30324059, 30324180
30324466, 30324649, 30325407, 30325786, 30326115, 30326882, 30327149
30327581, 30327678, 30327810, 30328168, 30328209, 30328690, 30329209
30329737, 30329751, 30330123, 30331254, 30331356, 30331759, 30332505
30332893, 30333443, 30334484, 30334563, 30335127, 30335832, 30335987
30336032, 30336383, 30336530, 30336742, 30336996, 30337245, 30338434
30338591, 30339049, 30339103, 30339605, 30340540, 30341713, 30342371
30342878, 30343370, 30343750, 30344614, 30345201, 30345432, 30345593
30345809, 30345926, 30345950, 30346330, 30346729, 30346847, 30346867
30347215, 30347410, 30349714, 30350177, 30350543, 30351059, 30352278
30352532, 30352581, 30352623, 30352715, 30354034, 30355490, 30356060
30356461, 30357463, 30357698, 30357897, 30358416, 30359614, 30360383
30360653, 30361070, 30361635, 30362003, 30362850, 30363088, 30363193
30363311, 30363658, 30363716, 30364329, 30364481, 30364613, 30364835
30365265, 30365745, 30367193, 30368048, 30368482, 30368534, 30368668
30368917, 30371264, 30371623, 30371909, 30372081, 30372782, 30373419
30373541, 30373550, 30374345, 30374570, 30374739, 30375109, 30376986
30377347, 30377692, 30377729, 30379468, 30380511, 30380907, 30381207
30381525, 30381614, 30382364, 30382646, 30382982, 30383286, 30384121
30384152, 30387628, 30387666, 30388341, 30388853, 30389229, 30389414
30389507, 30389821, 30390279, 30390382, 30390635, 30391272, 30391794
30392011, 30392870, 30392987, 30393110, 30393317, 30393653, 30393944
30394509, 30394738, 30394974, 30395132, 30396120, 30396946, 30396974
30397100, 30398099, 30398251, 30398257, 30398422, 30398770, 30399906
30402386, 30403284, 30403412, 30403763, 30403877, 30403881, 30403902
30403989, 30404117, 30404153, 30404357, 30404639, 30406227, 30406709
30408128, 30408443, 30408515, 30408808, 30409207, 30409339, 30409469
30409472, 30409590, 30412188, 30412772, 30412863, 30412885, 30412921
30413137, 30413294, 30414491, 30414679, 30414714, 30416034, 30416603
30417648, 30417732, 30418926, 30419024, 30419196, 30419450, 30420105
30420452, 30421009, 30421026, 30421204, 30421439, 30421476, 30421706
30422487, 30423135, 30423218, 30424347, 30430921, 30431274, 30431504

30431582, 30431698, 30431703, 30431717, 30431867, 30432101, 30432470
30433177, 30434793, 30436326, 30436399, 30436406, 30437003, 30437149
30438224, 30439985, 30440651, 30440712, 30441277, 30441687, 30441959
30442266, 30442749, 30442805, 30442874, 30442884, 30443393, 30446436
30446583, 30446820, 30447060, 30447498, 30447589, 30447994, 30448182
30448348, 30448355, 30448917, 30449194, 30449837, 30450787, 30453442
30454090, 30455427, 30457633, 30457697, 30458080, 30458233, 30458568
30458593, 30460095, 30460558, 30460842, 30460922, 30461123, 30461458
30462439, 30463938, 30464250, 30464655, 30466081, 30466214, 30469579
30469777, 30470402, 30470947, 30472891, 30473634, 30474167, 30474386
30474497, 30474774, 30475041, 30475115, 30475813, 30476768, 30477588
30477685, 30477691, 30477767, 30479252, 30479647, 30479715, 30480591
30480872, 30481004, 30483065, 30483140, 30483217, 30483521, 30484042
30484623, 30484801, 30485255, 30486436, 30486896, 30487387, 30487697
30489582, 30490014, 30490578, 30490671, 30491456, 30492380, 30493331
30493518, 30493656, 30494087, 30494259, 30494900, 30495035, 30495078
30495133, 30495483, 30496957, 30497057, 30497120, 30497765, 30498824
30500224, 30500297, 30500344, 30500582, 30501574, 30502415, 30503943
30505029, 30505497, 30506794, 30506991, 30506996, 30507032, 30507313
30508100, 30509112, 30509277, 30510347, 30510527, 30510718, 30512690
30513285, 30513353, 30513480, 30513848, 30515886, 30516868, 30517214
30517516, 30517635, 30518114, 30518349, 30518447, 30518923, 30519188
30520662, 30521788, 30522285, 30522998, 30523137, 30523538, 30523601
30523750, 30524736, 30527198, 30527275, 30528547, 30528637, 30528687
30528704, 30528731, 30528935, 30529790, 30529915, 30529940, 30530585
30532811, 30533132, 30533580, 30534351, 30534549, 30534662, 30534827
30535905, 30536237, 30537403, 30537405, 30537533, 30537584, 30538141
30538818, 30539519, 30539866, 30540109, 30540407, 30544247, 30544595
30544629, 30544752, 30545040, 30545281, 30545556, 30549223, 30549255
30549368, 30549637, 30549789, 30549881, 30549883, 30551000, 30551123
30554178, 30556326, 30556523, 30556581, 30556807, 30557386, 30557803
30558561, 30559129, 30559218, 30559252, 30560365, 30560513, 30561404
30561590, 30561737, 30564139, 30564343, 30564898, 30565004, 30565595
30565699, 30565805, 30566054, 30567372, 30568514, 30568896, 30570083
30571306, 30572816, 30573236, 30573703, 30575243, 30575697, 30576112
30576393, 30576853, 30577071, 30577591, 30578221, 30579051, 30580813
30580887, 30581448, 30582035, 30582221, 30582500, 30584767, 30585407
30586493, 30587001, 30588738, 30589914, 30591028, 30591475, 30592859
30593046, 30593104, 30593863, 30593899, 30594167, 30595114, 30595408
30595860, 30596024, 30596320, 30596488, 30596694, 30598682, 30598746
30598919, 30599377, 30599405, 30599407, 30600173, 30600184, 30600230
30602230, 30602828, 30603211, 30605215, 30605676, 30606345, 30606451
30608583, 30609737, 30609799, 30610052, 30610097, 30610406, 30610667
30611527, 30611603, 30612199, 30613035, 30613937, 30613971, 30614411

30614497, 30616406, 30616738, 30616776, 30617002, 30617626, 30618056
30618230, 30618406, 30619112, 30619138, 30619383, 30619414, 30619525
30619728, 30619787, 30620805, 30621255, 30621910, 30622393, 30622528
30622755, 30623138, 30623142, 30624243, 30624792, 30624864, 30624874
30625121, 30626046, 30628834, 30628899, 30629139, 30629643, 30629799
30630391, 30630829, 30630930, 30631393, 30631523, 30633259, 30633395
30633938, 30634548, 30634559, 30635183, 30635302, 30635326, 30635360
30637270, 30637319, 30637841, 30638712, 30639996, 30640436, 30641541
30641755, 30641900, 30642124, 30644358, 30644530, 30644766, 30644889
30645590, 30645896, 30645938, 30646077, 30647133, 30649310, 30649766
30650297, 30650404, 30651231, 30651570, 30651621, 30651674, 30652515
30652595, 30652813, 30652853, 30654131, 30654558, 30655504, 30655906
30656839, 30657196, 30657365, 30657566, 30657624, 30657706, 30657875
30657906, 30657940, 30658421, 30658533, 30658555, 30658702, 30659940
30660412, 30661000, 30661939, 30662634, 30662651, 30662736, 30662803
30663591, 30663646, 30664266, 30665036, 30665399, 30665720, 30666902
30668407, 30668754, 30670096, 30670328, 30670369, 30670584, 30671606
30671720, 30671813, 30671958, 30674373, 30674959, 30675651, 30676209
30677633, 30679595, 30679707, 30679771, 30679804, 30681085, 30681222
30681462, 30681516, 30681521, 30681697, 30682289, 30684902, 30685163
30686017, 30686131, 30686809, 30687047, 30689557, 30689988, 30690686
30691604, 30691731, 30691857, 30692462, 30692473, 30692760, 30693791
30694947, 30695670, 30696566, 30696821, 30698289, 30699770, 30702732
30703610, 30704826, 30705448, 30706073, 30707740, 30708735, 30710088
30710506, 30710783, 30710807, 30710917, 30711370, 30711386, 30712670
30713133, 30714151, 30714715, 30716001, 30716863, 30718841, 30718862
30719327, 30719419, 30720736, 30720844, 30722105, 30722705, 30723671
30724679, 30724881, 30726204, 30727629, 30727701, 30727759, 30728196
30729278, 30729604, 30729839, 30730026, 30732711, 30733270, 30733563
30734242, 30734362, 30734707, 30735091, 30735153, 30735624, 30735736
30736718, 30737970, 30739013, 30739876, 30740115, 30740250, 30740440
30740444, 30740669, 30740997, 30741263, 30747820, 30748411, 30748707
30749181, 30749644, 30749722, 30750219, 30750991, 30751171, 30751521
30751527, 30751639, 30751968, 30753432, 30755348, 30758836, 30758854
30758943, 30759573, 30760739, 30761871, 30761878, 30763272, 30763305
30763639, 30763754, 30763970, 30764405, 30764663, 30764706, 30764976
30765486, 30765995, 30767277, 30767654, 30768636, 30769312, 30770717
30771009, 30772069, 30773164, 30773696, 30773797, 30776416, 30776676
30776929, 30777519, 30777759, 30778855, 30779240, 30781032, 30781041
30781461, 30781970, 30782266, 30782300, 30782414, 30783395, 30783551
30785101, 30786237, 30786641, 30786655, 30787365, 30788973, 30789427
30789904, 30790047, 30790441, 30801050, 30801296, 30801510, 30803210
30804646, 30806757, 30806984, 30807723, 30807888, 30808109, 30808364
30808869, 30809087, 30809267, 30810418, 30810680, 30810765, 30812574

30814266, 30814285, 30815204, 30815269, 30815495, 30815852, 30815994
30816760, 30816938, 30819340, 30819629, 30819756, 30820155, 30821297
30822207, 30822502, 30822919, 30823744, 30825391, 30825419, 30825656
30826474, 30827849, 30828205, 30828350, 30829779, 30829844, 30830555
30832466, 30832775, 30833454, 30834068, 30834110, 30834705, 30835184
30835219, 30835853, 30836129, 30838605, 30839253, 30839315, 30839451
30839836, 30839961, 30840150, 30840791, 30840793, 30841241, 30842277
30843271, 30844839, 30845806, 30846063, 30846159, 30846263, 30846782
30847442, 30847871, 30848028, 30848097, 30848773, 30851448, 30851951
30852945, 30852954, 30855101, 30856358, 30857501, 30857721, 30858444
30858810, 30858877, 30858919, 30860741, 30860803, 30861988, 30862285
30863115, 30864607, 30865346, 30865805, 30866141, 30866988, 30867685
30868010, 30868186, 30869131, 30870043, 30870248, 30870439, 30870513
30871716, 30871792, 30873527, 30874084, 30874270, 30874337, 30874660
30876666, 30879169, 30879708, 30880774, 30880913, 30881161, 30881407
30883715, 30883785, 30883877, 30886188, 30887435, 30887501, 30887777
30887976, 30887989, 30889443, 30889607, 30889723, 30890720, 30890752
30890971, 30891760, 30891792, 30892319, 30893601, 30894554, 30895426
30895577, 30896615, 30896620, 30896685, 30898131, 30898366, 30898381
30898748, 30898939, 30901889, 30902655, 30903129, 30904672, 30905604
30906274, 30906407, 30909329, 30909596, 30909907, 30909918, 30910255
30910264, 30910267, 30913399, 30914272, 30914411, 30914674, 30915781
30919403, 30919587, 30919691, 30919804, 30920082, 30920427, 30921136
30921259, 30922450, 30922936, 30922996, 30923514, 30923517, 30923597
30923732, 30923940, 30925316, 30925419, 30925828, 30927440, 30927821
30929206, 30930149, 30930339, 30931068, 30931311, 30931981, 30932674
30932923, 30933117, 30936251, 30936831, 30936942, 30937340, 30937391
30937410, 30938413, 30939307, 30939317, 30939934, 30940259, 30940382
30940868, 30940869, 30941056, 30942353, 30944643, 30945005, 30945772
30946072, 30946141, 30946595, 30946768, 30946843, 30946876, 30946896
30947294, 30948278, 30950326, 30950786, 30952104, 30952191, 30953157
30953266, 30953836, 30954062, 30954071, 30955702, 30956571, 30956647
30957739, 30958493, 30960314, 30960356, 30960736, 30961566, 30961824
30963567, 30964194, 30965111, 30965554, 30965649, 30966205, 30967084
30968737, 30968781, 30970518, 30972817, 30972841, 30972887, 30972947
30972951, 30972959, 30972966, 30973085, 30973113, 30973127, 30973137
30973143, 30973197, 30973698, 30973715, 30973877, 30974207, 30974813
30976603, 30977294, 30977411, 30978554, 30978747, 30978868, 30979701
30980023, 30980115, 30980317, 30980733, 30981182, 30981240, 30983064
30985027, 30985906, 30986423, 30987088, 30987105, 30987243, 30987717
30987724, 30988444, 30989951, 30990034, 30992120, 30992330, 30992477
30992597, 30992670, 30993198, 30993518, 30993604, 30994996, 30996945
30996991, 30997375, 30997960, 30998035, 30998475, 30998662, 30998759
30998847, 30999219, 31000312, 31001017, 31001455, 31001490, 31001859

31002223, 31002346, 31002923, 31003137, 31003659, 31003759, 31004077
31004719, 31004844, 31004871, 31005003, 31006011, 31006259, 31006792
31006953, 31008240, 31008858, 31008907, 31009032, 31009271, 31009545
31009590, 31009680, 31010218, 31010554, 31010976, 31011361, 31011690
31013127, 31013531, 31014323, 31015330, 31016413, 31018218, 31019249
31019407, 31021068, 31021109, 31021157, 31021324, 31021542, 31021780
31022858, 31025267, 31025520, 31025531, 31025859, 31026220, 31026591
31026860, 31026870, 31027747, 31028883, 31028986, 31029936, 31030898
31031240, 31031955, 31032463, 31032725, 31032904, 31032913, 31034794
31035287, 31035916, 31037421, 31038220, 31038447, 31038817, 31039337
31039627, 31039928, 31040847, 31041540, 31042208, 31042337, 31043483
31043630, 31043695, 31043747, 31044145, 31044460, 31044504, 31044951
31045929, 31046188, 31046619, 31046830, 31047022, 31047169, 31047333
31047697, 31047740, 31048025, 31048741, 31049215, 31049995, 31050103
31050433, 31050557, 31051056, 31051075, 31052735, 31052809, 31053669
31054031, 31054177, 31054874, 31055142, 31056909, 31057402, 31058548
31061482, 31061504, 31062010, 31062645, 31063315, 31063380, 31063769
31064025, 31065701, 31065838, 31066082, 31066250, 31066265, 31066554
31067456, 31067483, 31067892, 31067913, 31069059, 31069872, 31070528
31071080, 31073424, 31073440, 31073586, 31074032, 31075323, 31075960
31077117, 31077365, 31078391, 31078757, 31079204, 31080474, 31081558
31082719, 31082726, 31084778, 31084921, 31086467, 31086869, 31086954
31087361, 31087679, 31088115, 31088341, 31089259, 31089270, 31090262
31091402, 31091469, 31091868, 31092129, 31092233, 31092581, 31092921
31093712, 31094183, 31094228, 31094249, 31094374, 31094625, 31094688
31095972, 31096846, 31097760, 31097961, 31098661, 31098870, 31099312
31099926, 31099981, 31100172, 31101386, 31101840, 31103065, 31103804
31104809, 31105225, 31105733, 31105896, 31106140, 31106577, 31107577
31108603, 31108644, 31109506, 31109924, 31110021, 31110225, 31110887
31112088, 31112209, 31112530, 31112972, 31113089, 31113177, 31113249
31113426, 31113682, 31114116, 31114265, 31114671, 31115201, 31115502
31115653, 31117282, 31118486, 31118702, 31118809, 31118844, 31119057
31119467, 31119846, 31120361, 31122876, 31123976, 31124213, 31124363
31124821, 31124914, 31125773, 31125849, 31125918, 31126053, 31126058
31127043, 31127457, 31127961, 31127968, 31127969, 31128086, 31129851
31130156, 31132732, 31134430, 31137765, 31138106, 31138371, 31139643
31140940, 31141792, 31142377, 31142749, 31142815, 31143146, 31143415
31143870, 31145389, 31145403, 31145525, 31145804, 31146338, 31146727
31151483, 31153120, 31153485, 31154794, 31155085, 31155305, 31155634
31156301, 31156383, 31156767, 31156898, 31158151, 31158341, 31158380
31159382, 31161861, 31162457, 31162711, 31162915, 31163379, 31163498
31163534, 31165038, 31165577, 31165722, 31166083, 31166801, 31168440
31169366, 31170082, 31171096, 31171147, 31171631, 31172207, 31172233
31172642, 31173887, 31174836, 31175365, 31176451, 31176502, 31177193

31177204, 31177221, 31178051, 31178058, 31178103, 31180519, 31181375
31181380, 31181989, 31182159, 31182451, 31182756, 31182793, 31183413
31184230, 31184370, 31185224, 31188038, 31188398, 31189749, 31190624
31191224, 31192039, 31192261, 31192739, 31193292, 31193511, 31193695
31193745, 31193936, 31194015, 31194264, 31195090, 31195430, 31195600
31195838, 31196164, 31196272, 31196310, 31196395, 31196812, 31200057
31200845, 31201001, 31201366, 31201611, 31202536, 31204002, 31204412
31204878, 31205834, 31206070, 31206201, 31207446, 31208287, 31209735
31213034, 31214119, 31214928, 31215422, 31215438, 31215548, 31215854
31216823, 31216995, 31217946, 31218837, 31218904, 31219047, 31219975
31220188, 31220549, 31220837, 31220850, 31220881, 31220912, 31221454
31222780, 31223382, 31224819, 31225538, 31226448, 31226534, 31228670
31230250, 31230775, 31233170, 31233235, 31234765, 31234790, 31234983
31235797, 31236624, 31240626, 31240864, 31242319, 31242976, 31243859
31244165, 31244968, 31245856, 31246583, 31247532, 31247838, 31248496
31249008, 31249406, 31249689, 31249696, 31250120, 31250152, 31250221
31251325, 31252659, 31253451, 31254243, 31254297, 31254535, 31254929
31255369, 31255869, 31256383, 31257740, 31257826, 31258101, 31258344
31258697, 31258995, 31260692, 31261467, 31261641, 31262275, 31262388
31263980, 31265651, 31265773, 31266236, 31266779, 31268557, 31270711
31270847, 31271032, 31274074, 31279670, 31281708, 31282037, 31283557
31287091, 31287296, 31287741, 31287871, 31289115, 31290017, 31290300
31290427, 31291986, 31292298, 31293484, 31293791, 31293867, 31298871
31301460, 31303032, 31303249, 31304573, 31304945, 31304975, 31305114
31305309, 31305624, 31306248, 31306261, 31306470, 31306867, 31306927
31307715, 31309379, 31309867, 31310564, 31310624, 31311732, 31311830
31312450, 31312976, 31313117, 31313177, 31313214, 31313444, 31313812
31314323, 31314885, 31315441, 31315495, 31315876, 31315923, 31316250
31317032, 31321092, 31322720, 31323383, 31324442, 31324507, 31325584
31326320, 31326608, 31326977, 31326998, 31327046, 31327259, 31327278
31327349, 31327391, 31327896, 31331265, 31331354, 31331372, 31333105
31333156, 31334606, 31334961, 31335037, 31335142, 31336298, 31336371
31338249, 31338673, 31338686, 31338769, 31339457, 31339643, 31339744
31341138, 31341746, 31343110, 31344046, 31344097, 31346493, 31348711
31348922, 31349426, 31350348, 31352517, 31353098, 31353610, 31355339
31356601, 31356954, 31357581, 31357737, 31358308, 31358474, 31358511
31359215, 31359366, 31360146, 31360155, 31360214, 31360282, 31360314
31360323, 31360469, 31360529, 31362408, 31362692, 31364001, 31364383
31366716, 31367188, 31367364, 31368027, 31369444, 31370500, 31371071
31372498, 31373825, 31373837, 31373843, 31374283, 31374449, 31374738
31375865, 31376011, 31376708, 31377129, 31377206, 31377487, 31377701
31377808, 31377936, 31380443, 31381174, 31381389, 31381701, 31382518
31383049, 31383396, 31383464, 31383814, 31384324, 31385668, 31386394
31386696, 31387033, 31387123, 31387426, 31387443, 31388201, 31388288

31389006, 31390936, 31390955, 31391991, 31393208, 31393600, 31393991
31394341, 31394347, 31394365, 31394544, 31395222, 31395247, 31396027
31396609, 31396695, 31396980, 31398505, 31398617, 31398663, 31398721
31398761, 31399131, 31399883, 31400754, 31401831, 31402078, 31402598
31403177, 31403565, 31404014, 31404130, 31404263, 31404487, 31404550
31405300, 31405751, 31408636, 31408732, 31409483, 31409912, 31409964
31410289, 31411163, 31412209, 31414023, 31414524, 31415324, 31416193
31416213, 31416250, 31417007, 31417192, 31417242, 31417336, 31417844
31417990, 31418442, 31419363, 31420295, 31420316, 31420320, 31420337
31421316, 31422440, 31422620, 31423645, 31424838, 31425167, 31425761
31425800, 31427345, 31429020, 31429501, 31429590, 31429770, 31429784
31429809, 31429844, 31429971, 31430722, 31430735, 31430910, 31431005
31431326, 31431771, 31431964, 31431969, 31431971, 31431973, 31431975
31431986, 31432906, 31433092, 31433579, 31433749, 31434421, 31434805
31434870, 31434915, 31435163, 31435308, 31435735, 31437030, 31437448
31440252, 31440426, 31440813, 31441916, 31441920, 31442332, 31442714
31443030, 31444353, 31444516, 31445356, 31446431, 31447733, 31448642
31448680, 31449354, 31450392, 31450653, 31450942, 31451019, 31453375
31453585, 31454428, 31454972, 31454988, 31455051, 31455597, 31456383
31456857, 31457334, 31458049, 31458537, 31458634, 31458739, 31459231
31459242, 31459369, 31461990, 31462082, 31462940, 31462969, 31463613
31464165, 31465389, 31466433, 31468060, 31468705, 31469001, 31469418
31471441, 31471589, 31471856, 31472077, 31473148, 31474315, 31475085
31475378, 31475635, 31476093, 31476603, 31476701, 31476736, 31477424
31477695, 31479072, 31479075, 31479106, 31479272, 31479772, 31481750
31481893, 31483466, 31483949, 31484385, 31484603, 31485340, 31485386
31485507, 31486061, 31486557, 31487441, 31487491, 31487775, 31487826
31487844, 31488085, 31488464, 31489032, 31489137, 31489481, 31489590
31489672, 31489731, 31489936, 31490604, 31491634, 31492171, 31492191
31492588, 31492655, 31492856, 31493153, 31493840, 31494095, 31494264
31494420, 31494794, 31495254, 31495297, 31495564, 31496174, 31497550
31498559, 31499370, 31499700, 31500699, 31500719, 31500971, 31501139
31502301, 31503349, 31503674, 31503688, 31503934, 31504723, 31505088
31506095, 31507107, 31507129, 31508229, 31508460, 31508712, 31509279
31510891, 31510910, 31511142, 31511519, 31511771, 31511940, 31512044
31512262, 31513011, 31515163, 31515869, 31515879, 31515911, 31515929
31516164, 31516184, 31516255, 31516265, 31517395, 31517417, 31517502
31517652, 31518068, 31518371, 31521504, 31521701, 31522560, 31522708
31523548, 31523578, 31523585, 31523620, 31523646, 31523728, 31523736
31523836, 31525310, 31525463, 31525609, 31525783, 31526250, 31526903
31527103, 31527199, 31527381, 31528724, 31528738, 31528962, 31529594
31529967, 31530985, 31530995, 31531079, 31532084, 31532176, 31532308
31532339, 31533050, 31533113, 31533274, 31533799, 31533817, 31533833
31534841, 31535073, 31535516, 31535782, 31535870, 31535955, 31536401

31536731, 31537521, 31537736, 31538274, 31538363, 31538891, 31539566
31541805, 31541864, 31541895, 31541905, 31542347, 31542356, 31542851
31542956, 31543810, 31544097, 31545400, 31545477, 31546864, 31547220
31547445, 31547480, 31548675, 31549221, 31549468, 31551142, 31552563
31552615, 31552738, 31552755, 31553289, 31553674, 31553813, 31553968
31554610, 31555126, 31555173, 31555346, 31555539, 31555800, 31556139
31556950, 31557160, 31557518, 31557663, 31558194, 31559079, 31559085
31559415, 31559563, 31560323, 31560348, 31560592, 31561886, 31562484
31563138, 31564060, 31564760, 31564795, 31567124, 31567403, 31567441
31567719, 31568423, 31569057, 31569867, 31570054, 31570161, 31571415
31571688, 31571742, 31572006, 31572046, 31572267, 31573269, 31573457
31574122, 31574150, 31574244, 31574267, 31575529, 31575649, 31575665
31576738, 31577569, 31578202, 31578994, 31580079, 31580122, 31580374
31580437, 31581627, 31582179, 31583865, 31584056, 31584555, 31584853
31585040, 31585319, 31585351, 31585491, 31585789, 31586381, 31586862
31588631, 31588933, 31590826, 31591384, 31591400, 31591409, 31591421
31592707, 31594725, 31595025, 31595632, 31597104, 31597668, 31597727
31598146, 31599363, 31599990, 31600023, 31600291, 31600894, 31601385
31602782, 31603199, 31603380, 31603625, 31605119, 31605370, 31605737
31606474, 31607937, 31608753, 31609974, 31610024, 31611125, 31612535
31613275, 31613838, 31615736, 31616101, 31616104, 31617492, 31617523
31619276, 31620252, 31620748, 31620829, 31620944, 31622250, 31623413
31623463, 31625579, 31625618, 31625959, 31626438, 31626493, 31626528
31626572, 31627587, 31627856, 31628155, 31628311, 31628753, 31628975
31629056, 31630551, 31630794, 31630946, 31631985, 31632273, 31632534
31632605, 31632663, 31633224, 31634510, 31634805, 31635875, 31635963
31635980, 31637094, 31637607, 31637680, 31638398, 31638733, 31638943
31639082, 31640139, 31640197, 31640240, 31642462, 31642556, 31642639
31643308, 31644775, 31645288, 31647304, 31647789, 31648120, 31648157
31649223, 31649447, 31649818, 31649819, 31649958, 31649962, 31650046
31650112, 31650202, 31652641, 31652763, 31653080, 31653167, 31653634
31653647, 31653758, 31653913, 31653916, 31653917, 31654116, 31654119
31654122, 31654125, 31654133, 31655807, 31656263, 31656601, 31657084
31657211, 31657324, 31657462, 31657483, 31657681, 31658464, 31658819
31658943, 31659065, 31660283, 31661369, 31661586, 31661865, 31661879
31662131, 31662143, 31662504, 31662625, 31662925, 31663189, 31663788
31664203, 31664399, 31665107, 31666449, 31666684, 31667096, 31667180
31667940, 31668033, 31668061, 31668065, 31668312, 31668694, 31668768
31668872, 31669064, 31670014, 31670263, 31670353, 31671512, 31671568
31672507, 31672605, 31673406, 31674380, 31674801, 31675568, 31675852
31675860, 31676324, 31676927, 31676941, 31677345, 31677460, 31677479
31677587, 31678629, 31679900, 31680709, 31680713, 31680985, 31682766
31683044, 31683260, 31683311, 31683373, 31683708, 31684080, 31684494
31685612, 31685882, 31685989, 31686979, 31688127, 31688241, 31688978

31691030, 31691089, 31691480, 31694070, 31695062, 31695693, 31696043
31696577, 31696853, 31697741, 31699090, 31699230, 31700234, 31701239
31701429, 31701517, 31701910, 31703614, 31705178, 31705265, 31705356
31705704, 31706000, 31706595, 31706758, 31706956, 31707190, 31708133
31708175, 31708529, 31709647, 31709739, 31709777, 31710272, 31710587
31711155, 31711720, 31711889, 31711997, 31712260, 31714645, 31715935
31716510, 31716873, 31717010, 31718000, 31718134, 31718346, 31718842
31719167, 31720344, 31720377, 31720839, 31720942, 31721557, 31721863
31721880, 31722558, 31722646, 31723226, 31723323, 31723651, 31725154
31727229, 31727231, 31727233, 31727560, 31728149, 31728160, 31728440
31728444, 31728447, 31728477, 31728486, 31728858, 31729557, 31730485
31730766, 31731076, 31731407, 31732095, 31732311, 31732672, 31734007
31734012, 31734017, 31734583, 31735662, 31736095, 31737059, 31737603
31739198, 31739891, 31740252, 31741359, 31741938, 31743771, 31744832
31745130, 31745233, 31745528, 31746054, 31747706, 31747818, 31747935
31747989, 31748000, 31748182, 31748233, 31748944, 31750577, 31750581
31750889, 31752492, 31752502, 31752633, 31753202, 31753425, 31753478
31753692, 31754240, 31754546, 31754887, 31754980, 31755245, 31755451
31756415, 31756465, 31756568, 31756650, 31757357, 31757775, 31757824
31758083, 31758344, 31758846, 31758939, 31758960, 31759565, 31760278
31760592, 31760721, 31760738, 31761510, 31762819, 31763030, 31763356
31763707, 31763905, 31764089, 31764239, 31764866, 31764913, 31765068
31765246, 31765257, 31765296, 31766462, 31766499, 31766534, 31766675
31766696, 31767204, 31767237, 31767598, 31767852, 31768490, 31768497
31768505, 31768866, 31769267, 31769373, 31769530, 31770289, 31771302
31771370, 31771410, 31771468, 31771745, 31771836, 31772002, 31772070
31773582, 31773909, 31774019, 31774132, 31775101, 31776121, 31776659
31776785, 31776994, 31777410, 31777489, 31779833, 31780567, 31781897
31781944, 31783422, 31783451, 31783782, 31783872, 31783985, 31783991
31784352, 31785445, 31785572, 31786282, 31786697, 31786838, 31787057
31787655, 31788104, 31788594, 31788704, 31788761, 31788785, 31789167
31789178, 31789335, 31790500, 31790757, 31792397, 31792465, 31792615
31793126, 31793691, 31793713, 31794336, 31794631, 31794882, 31795231
31795696, 31796208, 31796277, 31796882, 31798001, 31798323, 31798669
31798702, 31798742, 31799858, 31800053, 31800059, 31800139, 31800757
31804838, 31805303, 31805812, 31807179, 31807431, 31807516, 31809510
31809729, 31810213, 31812352, 31812824, 31813214, 31813662, 31815099
31815227, 31816158, 31816343, 31816631, 31818080, 31820632, 31820662
31820842, 31820859, 31820926, 31821129, 31821701, 31821835, 31822026
31822951, 31823051, 31823327, 31823716, 31824504, 31824792, 31824934
31825151, 31825324, 31825410, 31827339, 31827605, 31827912, 31828378
31828999, 31829366, 31829617, 31829639, 31831950, 31832785, 31832901
31833172, 31833585, 31833896, 31833948, 31834191, 31834214, 31834611
31834677, 31834871, 31835300, 31835805, 31835854, 31836113, 31836454

31839038, 31839779, 31839888, 31840180, 31840490, 31840516, 31840992
31841147, 31841210, 31841696, 31842545, 31843028, 31843462, 31843476
31843716, 31843842, 31843845, 31844137, 31844357, 31844557, 31844560
31845092, 31845403, 31845803, 31845955, 31846318, 31846454, 31847489
31847541, 31848331, 31848365, 31848391, 31848903, 31849859, 31850132
31850227, 31851383, 31851449, 31852482, 31852506, 31852574, 31854285
31854692, 31855307, 31855484, 31855526, 31855996, 31857143, 31858580
31858621, 31858833, 31859067, 31859143, 31860193, 31860406, 31860760
31862359, 31862593, 31862611, 31863118, 31863250, 31863890, 31864818
31864947, 31865822, 31866141, 31866159, 31866388, 31867037, 31867331
31867351, 31869348, 31869601, 31869944, 31869954, 31869966, 31870010
31870150, 31870164, 31870190, 31870196, 31871384, 31871692, 31872230
31872320, 31873155, 31875140, 31876138, 31876192, 31876368, 31876867
31878256, 31878314, 31878605, 31880154, 31881527, 31883124, 31883343
31883739, 31883845, 31886547, 31886695, 31886745, 31886848, 31887130
31887709, 31888148, 31888731, 31888964, 31889222, 31890230, 31890516
31892029, 31892856, 31895670, 31897023, 31897178, 31897786, 31897854
31898193, 31898257, 31898326, 31900476, 31900585, 31902517, 31902662
31903523, 31903713, 31903786, 31903962, 31904739, 31904933, 31904960
31905033, 31907042, 31907137, 31907510, 31907565, 31907792, 31907962
31908345, 31908482, 31908571, 31908750, 31909295, 31909807, 31912638
31912834, 31913650, 31913839, 31914003, 31914943, 31915444, 31915968
31916096, 31916644, 31917378, 31917494, 31917856, 31917967, 31918462
31919563, 31919952, 31921267, 31922161, 31922580, 31923463, 31923622
31925162, 31925462, 31925765, 31926203, 31926811, 31926848, 31927078
31927510, 31927930, 31930204, 31932042, 31932196, 31933451, 31933837
31933842, 31933846, 31933914, 31934254, 31934301, 31935336, 31935672
31935717, 31935970, 31936588, 31936983, 31938116, 31938288, 31939263
31939461, 31939486, 31939494, 31939767, 31940176, 31940458, 31941148
31941948, 31942136, 31942144, 31942258, 31942274, 31942473, 31943497
31943691, 31944980, 31945038, 31945407, 31945659, 31945701, 31945827
31945928, 31946936, 31947732, 31947861, 31949490, 31950145, 31950244
31950577, 31951599, 31951628, 31952046, 31952052, 31953394, 31953449
31953989, 31954223, 31956113, 31956435, 31956920, 31957152, 31957564
31957674, 31957683, 31958038, 31958958, 31959140, 31959253, 31960124
31960389, 31960603, 31961578, 31961940, 31964519, 31964610, 31965012
31965391, 31965542, 31965574, 31966094, 31968431, 31969646, 31970188
31971792, 31972615, 31972671, 31973203, 31974187, 31974424, 31974597
31974693, 31976303, 31977024, 31977257, 31980125, 31980216, 31980296
31981745, 31981751, 31982879, 31985494, 31985738, 31985961, 31986808
31986836, 31986905, 31987278, 31987922, 31988079, 31988833, 31990386
31991705, 31992242, 31992270, 31992615, 31992953, 31993051, 31993795
31994145, 31994206, 31994298, 31995577, 31995937, 31996264, 31996331
31997107, 31997457, 31997658, 31997660, 31998181, 31998189, 31998861

31999024, 31999453, 32000837, 32001851, 32002411, 32003551, 32003908
32004148, 32004299, 32004977, 32005046, 32005048, 32005053, 32005215
32006467, 32006703, 32006824, 32006883, 32007076, 32007698, 32008408
32008586, 32008716, 32008819, 32009197, 32009334, 32009754, 32010275
32010593, 32010707, 32011107, 32011888, 32012137, 32012400, 32012788
32012891, 32012975, 32013253, 32013403, 32014520, 32015642, 32015820
32016340, 32016884, 32017215, 32017301, 32017422, 32017570, 32017635
32017671, 32018632, 32018953, 32020701, 32021877, 32022223, 32022711
32022814, 32023471, 32025328, 32028155, 32028269, 32032653, 32032733
32032887, 32033795, 32034085, 32034318, 32034766, 32035268, 32035536
32035893, 32035899, 32035902, 32036045, 32037237, 32037962, 32038054
32038780, 32038812, 32038844, 32038996, 32039059, 32040940, 32040971
32041003, 32041799, 32042256, 32042352, 32042706, 32042926, 32043743
32044533, 32044767, 32044903, 32045377, 32046125, 32046412, 32046587
32047226, 32048412, 32048616, 32048921, 32050048, 32051896, 32052587
32052992, 32053746, 32054806, 32055692, 32055733, 32056529, 32057291
32057333, 32057565, 32057639, 32057755, 32058260, 32060164, 32060577
32061018, 32061146, 32061173, 32061648, 32062227, 32064239, 32064682
32064826, 32066061, 32067130, 32067356, 32067675, 32067937, 32068110
32068187, 32068190, 32069160, 32069508, 32069696, 32069834, 32070206
32071183, 32071457, 32071582, 32072747, 32072944, 32073027, 32073710
32074450, 32074708, 32074728, 32075009, 32075020, 32075130, 32075580
32076305, 32076561, 32076599, 32077318, 32078078, 32079097, 32079573
32079739, 32080081, 32080655, 32081074, 32081381, 32082098, 32084068
32087287, 32087331, 32087597, 32087956, 32088132, 32088478, 32089051
32089820, 32090518, 32090725, 32092312, 32092797, 32093558, 32094825
32095097, 32095380, 32095610, 32095658, 32096252, 32096397, 32097387
32097589, 32097604, 32097767, 32097882, 32097962, 32098224, 32098237
32098535, 32099153, 32099539, 32099580, 32101305, 32101419, 32101499
32102542, 32102722, 32102854, 32103383, 32103427, 32103628, 32104324
32104402, 32104578, 32104610, 32105135, 32105239, 32105412, 32105468
32107505, 32107621, 32107664, 32108094, 32108115, 32108566, 32108576
32109384, 32109796, 32111046, 32112798, 32112822, 32113113, 32113530
32113791, 32114541, 32114561, 32114572, 32114746, 32115403, 32115642
32116952, 32117115, 32117253, 32117490, 32118543, 32118727, 32119144
32119339, 32119565, 32120283, 32120453, 32121014, 32121326, 32121673
32121803, 32121885, 32122197, 32122574, 32123331, 32123673, 32124176
32124570, 32124594, 32124607, 32124611, 32125142, 32125160, 32125845
32127227, 32127448, 32127911, 32128142, 32129659, 32130083, 32130485
32130504, 32131010, 32131401, 32131774, 32132464, 32132504, 32133039
32133898, 32138257, 32138478, 32138782, 32139432, 32139659, 32140616
32140800, 32142788, 32143492, 32143562, 32144917, 32147340, 32148419
32148662, 32149848, 32150818, 32150854, 32151098, 32152341, 32153396
32153619, 32153909, 32156194, 32157050, 32157075, 32157078, 32159343

32161260, 32161381, 32162391, 32164053, 32164112, 32164218, 32165367
32165759, 32165814, 32165887, 32166950, 32167592, 32167923, 32169151
32170162, 32170190, 32171622, 32171791, 32172050, 32172773, 32172777
32172783, 32173142, 32173376, 32173543, 32174321, 32174405, 32174492
32174571, 32175329, 32175780, 32176922, 32177701, 32177869, 32178217
32178966, 32179209, 32179306, 32180918, 32181149, 32182097, 32182783
32183102, 32183756, 32183809, 32184235, 32184577, 32184844, 32184855
32185296, 32186186, 32186983, 32187775, 32189400, 32189869, 32189952
32190132, 32190190, 32190284, 32190419, 32190573, 32191427, 32191451
32193431, 32195333, 32195815, 32195946, 32196492, 32196738, 32196943
32197147, 32198292, 32198368, 32198396, 32199681, 32200524, 32201743
32201903, 32201936, 32202976, 32203068, 32203354, 32205455, 32205514
32205825, 32207088, 32207920, 32208144, 32208326, 32208346, 32208691
32209784, 32210660, 32211423, 32212041, 32212062, 32212635, 32212916
32213376, 32213696, 32214021, 32214080, 32214195, 32214654, 32214743
32214782, 32215240, 32215991, 32216027, 32216841, 32216930, 32218369
32218395, 32218498, 32218552, 32219179, 32219318, 32219835, 32219988
32220017, 32220364, 32220709, 32221141, 32222473, 32223045, 32223654
32223669, 32224140, 32224583, 32225117, 32225353, 32225742, 32225899
32227352, 32228188, 32228677, 32229431, 32229625, 32229919, 32230213
32230775, 32230953, 32231049, 32231356, 32233406, 32234148, 32234161
32235513, 32236601, 32236685, 32236798, 32237489, 32237778, 32238935
32239137, 32239730, 32240272, 32241889, 32243007, 32243148, 32243814
32243882, 32243985, 32244187, 32245711, 32245850, 32246090, 32247141
32247420, 32248131, 32248405, 32248649, 32249207, 32249371, 32249509
32249640, 32249674, 32250232, 32250238, 32251364, 32252036, 32252213
32252262, 32252294, 32253703, 32254063, 32254399, 32254686, 32255029
32255073, 32255529, 32255753, 32255762, 32257449, 32258021, 32258388
32258423, 32259063, 32259322, 32259535, 32259785, 32260010, 32260290
32263923, 32264556, 32266406, 32266906, 32267171, 32267610, 32268669
32268800, 32274403, 32277643, 32277793, 32279351, 32280901, 32281066
32283798, 32284241, 32284325, 32284485, 32284608, 32284725, 32285086
32285563, 32285717, 32285789, 32287797, 32287989, 32289552, 32289858
32290227, 32290313, 32290399, 32290812, 32290949, 32290990, 32291114
32291139, 32292180, 32292805, 32293615, 32294031, 32294566, 32294851
32295794, 32296259, 32296941, 32297373, 32297469, 32297849, 32298004
32298173, 32298782, 32300098, 32300822, 32300849, 32301856, 32302470
32302561, 32303160, 32303657, 32304293, 32304712, 32305792, 32306556
32307046, 32307586, 32307983, 32309046, 32309488, 32309723, 32311019
32312131, 32312412, 32312586, 32316070, 32316252, 32316326, 32317012
32317306, 32318528, 32318820, 32318914, 32319410, 32321317, 32321319
32321765, 32322629, 32322738, 32323488, 32323600, 32323816, 32324219
32325525, 32325574, 32325611, 32327201, 32327208, 32327690, 32328231
32329914, 32330269, 32330540, 32331889, 32332107, 32334745, 32335257

32335769, 32336990, 32338220, 32338476, 32338736, 32338897, 32338919
32338953, 32339801, 32340392, 32340885, 32341217, 32341260, 32341820
32342172, 32342345, 32342750, 32342824, 32343092, 32343678, 32344099
32344168, 32344199, 32345001, 32345050, 32345178, 32345272, 32345785
32346649, 32346733, 32347957, 32350182, 32351767, 32353343, 32355765
32355912, 32356340, 32356545, 32356609, 32356628, 32357412, 32357665
32358760, 32359044, 32361175, 32361677, 32362016, 32362066, 32362072
32362698, 32363212, 32363549, 32363711, 32363981, 32364147, 32366154
32366303, 32366461, 32366536, 32367151, 32368161, 32368480, 32368789
32368792, 32369041, 32371828, 32372725, 32374050, 32374431, 32374566
32374616, 32375438, 32375493, 32376614, 32376774, 32376872, 32376922
32377901, 32378953, 32379001, 32379140, 32379303, 32379775, 32380591
32381403, 32381605, 32382021, 32382207, 32382667, 32385068, 32385141
32385832, 32386482, 32386683, 32386720, 32386877, 32387555, 32387818
32388247, 32389047, 32389497, 32390629, 32390855, 32391021, 32392724
32393137, 32393612, 32394623, 32394660, 32394986, 32396085, 32396154
32396326, 32397113, 32397350, 32398714, 32400076, 32401086, 32402243
32402292, 32403509, 32403748, 32404638, 32404933, 32405239, 32406222
32406479, 32407783, 32408640, 32409009, 32409344, 32409942, 32410175
32412340, 32413042, 32413512, 32414944, 32414996, 32415846, 32415989
32416652, 32416655, 32417227, 32417242, 32417274, 32417301, 32417438
32417632, 32417766, 32417870, 32419774, 32421958, 32422965, 32423678
32423985, 32424465, 32425097, 32425124, 32425194, 32425205, 32425778
32425862, 32426213, 32426315, 32426900, 32427158, 32427173, 32427226
32427583, 32427953, 32428097, 32428189, 32428330, 32430745, 32431049
32431067, 32431251, 32431290, 32431413, 32432078, 32432245, 32433687
32434131, 32435911, 32436342, 32436460, 32436721, 32436757, 32437538
32439726, 32440067, 32440681, 32441128, 32441671, 32441834, 32442229
32442404, 32443087, 32443531, 32443744, 32443935, 32444159, 32446565
32449622, 32449909, 32450344, 32453583, 32453611, 32453888, 32455219
32455516, 32455650, 32455742, 32455961, 32457252, 32457974, 32459153
32459632, 32460136, 32460145, 32461726, 32462153, 32464021, 32464584
32465193, 32465209, 32465466, 32465495, 32465853, 32465894, 32466474
32467812, 32468643, 32468791, 32469004, 32469225, 32471100, 32471251
32471346, 32471642, 32472561, 32472589, 32473465, 32474686, 32474827
32474926, 32474997, 32476437, 32477479, 32478452, 32480419, 32480510
32480528, 32480541, 32481807, 32482131, 32483115, 32483966, 32484945
32485859, 32486528, 32486955, 32489206, 32490128, 32490416, 32490804
32491443, 32492343, 32492382, 32492422, 32492452, 32495545, 32495572
32497756, 32498459, 32498569, 32498602, 32498752, 32498783, 32499155
32500117, 32501930, 32503790, 32504340, 32504786, 32505009, 32505439
32505557, 32505634, 32506166, 32506309, 32506473, 32506809, 32507542
32508585, 32509271, 32509318, 32509584, 32509606, 32509814, 32510116
32512048, 32512145, 32512438, 32512918, 32514516, 32515708, 32515850

32516220, 32516336, 32517405, 32517797, 32518029, 32518679, 32519995
32520525, 32520645, 32520691, 32520994, 32522300, 32522472, 32523206
32523613, 32523750, 32524841, 32525039, 32526118, 32526703, 32527621
32529396, 32529483, 32530202, 32531259, 32531627, 32531647, 32533019
32533225, 32533461, 32534925, 32535106, 32535156, 32535159, 32535520
32536006, 32538436, 32538824, 32539300, 32539322, 32539914, 32539936
32540706, 32541049, 32542063, 32542641, 32544124, 32544464, 32544740
32544784, 32545415, 32546408, 32546937, 32548580, 32549168, 32549277
32549351, 32550051, 32550589, 32550751, 32550894, 32551177, 32551246
32552043, 32552602, 32553241, 32555120, 32555592, 32556165, 32556311
32556891, 32557354, 32559543, 32561759, 32561791, 32561841, 32562587
32563106, 32563114, 32563151, 32563940, 32565722, 32565870, 32567750
32567788, 32568163, 32569603, 32569745, 32573197, 32573703, 32573942
32574796, 32576097, 32576508, 32576534, 32577408, 32578113, 32578616
32578792, 32579075, 32579371, 32579529, 32580082, 32580378, 32580852
32583315, 32583355, 32583375, 32583692, 32584347, 32584375, 32584505
32585832, 32586534, 32587305, 32587472, 32587567, 32587793, 32587994
32588298, 32588656, 32588691, 32589147, 32589819, 32589990, 32593845
32593877, 32593886, 32593955, 32594965, 32595551, 32596355, 32596705
32597099, 32597637, 32598380, 32598406, 32601769, 32602194, 32602344
32602599, 32602735, 32602871, 32602990, 32603092, 32603152, 32603319
32603564, 32603619, 32605116, 32606093, 32606489, 32606531, 32607812
32607991, 32608297, 32608821, 32609394, 32609512, 32609730, 32609886
32610185, 32610271, 32613788, 32614157, 32614583, 32615310, 32615776
32616678, 32618819, 32619195, 32619298, 32619327, 32620859, 32620919
32621140, 32621309, 32622507, 32622612, 32625160, 32625356, 32626384
32626756, 32627140, 32628131, 32628221, 32628237, 32629028, 32629772
32629859, 32630060, 32631551, 32631787, 32633251, 32634049, 32635881
32635931, 32636938, 32638991, 32639432, 32639860, 32639950, 32641593
32641748, 32642587, 32642994, 32643533, 32644392, 32645139, 32646025
32647170, 32648248, 32649737, 32649749, 32651063, 32651769, 32651773
32652143, 32652573, 32652605, 32653470, 32653669, 32654962, 32655446
32655691, 32656130, 32656231, 32656275, 32657251, 32658481, 32659438
32659574, 32659930, 32659983, 32660528, 32662165, 32663019, 32664665
32665550, 32665836, 32666862, 32668900, 32668907, 32669149, 32670769
32671437, 32671481, 32672057, 32674819, 32675095, 32675227, 32675756
32676084, 32676350, 32676659, 32677000, 32677702, 32678737, 32682430
32682586, 32682703, 32684009, 32684387, 32685743, 32685989, 32686338
32686850, 32689123, 32690400, 32690581, 32692372, 32693242, 32695999
32697157, 32697431, 32697781, 32697859, 32698508, 32698569, 32700396
32700455, 32700675, 32700989, 32701048, 32702005, 32703155, 32704013
32704119, 32704231, 32704765, 32705734, 32705800, 32706821, 32707007
32707211, 32710165, 32710534, 32710750, 32711099, 32711741, 32712220
32712791, 32712916, 32715346, 32715845, 32715945, 32716726, 32718204

32718316, 32718547, 32718721, 32719288, 32720344, 32720458, 32722118
32724505, 32724654, 32725484, 32726772, 32728216, 32728984, 32730701
32731498, 32732179, 32733671, 32733845, 32734021, 32734171, 32734299
32734800, 32735915, 32735980, 32736370, 32737774, 32737827, 32737969
32738356, 32739966, 32740421, 32740503, 32740515, 32740987, 32743290
32743511, 32746515, 32746831, 32747680, 32747738, 32748974, 32749028
32750264, 32750940, 32751438, 32753371, 32753472, 32753946, 32754044
32754574, 32754845, 32755356, 32755493, 32755517, 32755731, 32756125
32756914, 32757219, 32758096, 32758260, 32759503, 32760795, 32760868
32760906, 32761229, 32761294, 32761932, 32762155, 32762231, 32763283
32763544, 32764690, 32765738, 32766252, 32766397, 32766407, 32766916
32768752, 32769786, 32769880, 32770812, 32771735, 32775512, 32775526
32776891, 32778725, 32780676, 32781826, 32782851, 32783456, 32784393
32784403, 32786308, 32786309, 32788660, 32789228, 32790012, 32793286
32794120, 32794261, 32795016, 32795712, 32797115, 32797486, 32800137
32800539, 32801192, 32801303, 32801337, 32802926, 32803416, 32803807
32804604, 32804609, 32804760, 32806069, 32806112, 32806856, 32806915
32807517, 32809152, 32809234, 32810125, 32810668, 32811069, 32811131
32813351, 32813767, 32816003, 32817950, 32818019, 32818230, 32818242
32818436, 32818545, 32821107, 32822436, 32822847, 32823545, 32823692
32827206, 32828636, 32828738, 32829060, 32829563, 32829937, 32830405
32831451, 32831855, 32831901, 32833378, 32834168, 32834394, 32834426
32835524, 32837435, 32838028, 32838533, 32841689, 32841994, 32842415
32842823, 32843576, 32843672, 32843754, 32846272, 32846876, 32847962
32847975, 32848060, 32848531, 32848816, 32850174, 32850514, 32851615
32851841, 32852484, 32852504, 32853080, 32855257, 32855878, 32856375
32856546, 32856640, 32857370, 32857881, 32857908, 32858446, 32863795
32864736, 32866089, 32867469, 32868116, 32868344, 32868369, 32869560
32870681, 32872839, 32874571, 32874995, 32875003, 32875118, 32875482
32875931, 32877550, 32878039, 32879447, 32879655, 32879990, 32880225
32880390, 32880490, 32881057, 32881462, 32881853, 32883252, 32883853
32887649, 32888458, 32888472, 32889096, 32889434, 32890532, 32891500
32892883, 32893686, 32893951, 32894842, 32895105, 32897184, 32897679
32898672, 32898678, 32898971, 32899387, 32900165, 32900208, 32902635
32903472, 32903625, 32907741, 32907975, 32908241, 32908249, 32908946
32909255, 32909292, 32909936, 32910846, 32912726, 32913527, 32913610
32913791, 32914508, 32914711, 32914795, 32915747, 32915760, 32915847
32915909, 32916025, 32916080, 32917969, 32918041, 32918394, 32920489
32920547, 32922090, 32922635, 32924796, 32925421, 32925703, 32926513
32926653, 32930360, 32930423, 32930665, 32931078, 32931941, 32933936
32935932, 32936005, 32936402, 32936424, 32936537, 32936859, 32936950
32936961, 32936988, 32937167, 32937338, 32939376, 32939883, 32940440
32940714, 32940955, 32941096, 32941509, 32941792, 32943694, 32945404
32946347, 32946711, 32947264, 32947268, 32951181, 32951258, 32952285

32953258, 32955962, 32956092, 32956896, 32957606, 32958616, 32961142
32961939, 32962162, 32965460, 32966389, 32966688, 32967871, 32968221
32968634, 32969466, 32969863, 32970478, 32972633, 32972716, 32973035
32973406, 32976022, 32977489, 32980826, 32982562, 32983419, 32983750
32983871, 32984625, 32984679, 32985908, 32986577, 32987004, 32987206
32987308, 32988028, 32991527, 32992004, 32993522, 32993998, 32994080
32995072, 32995206, 32995242, 32995863, 32996071, 32996974, 32998659
32999086, 32999329, 32999541, 33000440, 33000516, 33000980, 33001094
33001615, 33003817, 33004172, 33004888, 33005241, 33008265, 33009224
33009321, 33009351, 33010173, 33010444, 33011078, 33011198, 33012307
33013379, 33015716, 33016007, 33018951, 33019726, 33020016, 33020510
33021036, 33021100, 33021642, 33022043, 33022140, 33022926, 33023671
33025005, 33026533, 33026796, 33026949, 33027087, 33027377, 33027525
33027539, 33027553, 33028013, 33028286, 33028462, 33030293, 33031619
33032299, 33032400, 33032579, 33033425, 33034103, 33034619, 33034642
33034846, 33035201, 33035710, 33036321, 33037136, 33037150, 33037531
33037895, 33038120, 33038422, 33038479, 33038537, 33039277, 33040335
33043590, 33044062, 33045137, 33046179, 33047645, 33047827, 33048074
33048277, 33048591, 33049012, 33049866, 33049915, 33050587, 33050622
33050626, 33052585, 33053538, 33055560, 33056383, 33056579, 33058363
33059891, 33059924, 33060161, 33060212, 33061152, 33061339, 33061595
33062419, 33063919, 33064324, 33064565, 33065089, 33065343, 33065415
33065437, 33065526, 33065979, 33066892, 33068672, 33069366, 33069583
33069889, 33071321, 33072392, 33072854, 33075133, 33075246, 33075452
33076129, 33080651, 33084064, 33085296, 33085361, 33088863, 33089096
33089130, 33089192, 33090110, 33090127, 33090781, 33090848, 33092087
33093807, 33096609, 33097276, 33097433, 33099666, 33099872, 33100195
33100352, 33101055, 33101058, 33101334, 33102477, 33105276, 33105354
33105656, 33106822, 33106897, 33107872, 33108317, 33109335, 33109981
33110192, 33110642, 33110992, 33111729, 33113848, 33114640, 33115438
33115892, 33116125, 33116131, 33116481, 33117641, 33120284, 33120828
33120920, 33121866, 33121880, 33121934, 33123402, 33123404, 33123985
33125873, 33126216, 33126290, 33127032, 33127141, 33127312, 33129473
33131149, 33131335, 33131526, 33131742, 33132050, 33135083, 33136252
33136601, 33137328, 33139230, 33139277, 33140218, 33141420, 33142123
33142479, 33142533, 33142739, 33144001, 33145153, 33145583, 33146001
33146055, 33147065, 33148063, 33149578, 33150236, 33150645, 33151089
33152388, 33153797, 33157157, 33157547, 33159956, 33161035, 33161424
33161535, 33161726, 33163159, 33163187, 33164865, 33165183, 33165391
33166116, 33166242, 33169254, 33172549, 33172631, 33172679, 33174203
33176523, 33176672, 33177660, 33178223, 33178248, 33179718, 33180354
33181281, 33181349, 33181881, 33182152, 33184467, 33185231, 33185773
33186578, 33186650, 33187513, 33188597, 33189199, 33190454, 33190694
33190761, 33191073, 33191584, 33192462, 33192939, 33193293, 33195096

33195330, 33195897, 33196009, 33196035, 33196475, 33197296, 33198902
33199431, 33201415, 33203951, 33205229, 33205781, 33206160, 33206701
33207143, 33207240, 33207247, 33207342, 33208644, 33211160, 33211334
33211942, 33212112, 33214493, 33214554, 33214707, 33215225, 33216590
33216667, 33218194, 33218259, 33218392, 33218518, 33218694, 33219840
33220466, 33221061, 33223248, 33224375, 33225584, 33225678, 33227044
33227337, 33228119, 33229327, 33230882, 33232128, 33233560, 33234302
33235620, 33236729, 33237523, 33239083, 33239980, 33240921, 33241118
33241692, 33242408, 33243077, 33244297, 33245879, 33245940, 33246099
33246700, 33247240, 33247372, 33247795, 33247862, 33251111, 33251188
33251482, 33252648, 33253370, 33253466, 33253504, 33254019, 33261707
33261786, 33266449, 33268162, 33270914, 33271941, 33273598, 33273638
33275880, 33276748, 33278133, 33278440, 33278509, 33279339, 33279489
33279810, 33280121, 33281287, 33281785, 33282110, 33282502, 33282504
33282605, 33282871, 33282971, 33283122, 33284571, 33287418, 33288427
33289442, 33289604, 33289734, 33290765, 33291305, 33292174, 33292175
33292429, 33292896, 33292950, 33294123, 33294139, 33294845, 33295267
33297275, 33299877, 33301919, 33303486, 33303555, 33303725, 33304435
33304775, 33304830, 33305150, 33305175, 33305254, 33305995, 33306161
33306852, 33307945, 33308107, 33308199, 33308244, 33308736, 33309324
33311488, 33312823, 33312932, 33313374, 33314115, 33314122, 33314422
33314523, 33315230, 33315590, 33315801, 33315835, 33316711, 33316815
33317279, 33317740, 33317752, 33318311, 33318949, 33319065, 33319353
33319802, 33320455, 33322672, 33323634, 33323903, 33324226, 33325981
33327118, 33329027, 33329192, 33329493, 33329960, 33330508, 33331329
33332612, 33332891, 33334218, 33334340, 33334404, 33334945, 33334957
33334972, 33335941, 33337385, 33337799, 33337807, 33338247, 33338891
33339868, 33340595, 33343993, 33344767, 33345269, 33346851, 33347947
33349744, 33349880, 33350643, 33351136, 33351978, 33352629, 33352740
33352794, 33353474, 33354011, 33354662, 33354933, 33354968, 33355007
33355136, 33355766, 33356602, 33356612, 33357029, 33358233, 33358968
33359279, 33360117, 33360246, 33362391, 33364012, 33364820, 33366942
33367076, 33367184, 33367909, 33370332, 33371121, 33373644, 33373693
33375194, 33376694, 33379172, 33379714, 33380058, 33380472, 33380871
33381652, 33381775, 33381839, 33382108, 33382224, 33382529, 33382620
33384092, 33384505, 33387654, 33387767, 33388473, 33388715, 33388927
33389651, 33390561, 33390695, 33390717, 33390917, 33390925, 33392926
33392996, 33393503, 33394330, 33395219, 33397350, 33397495, 33397605
33398383, 33398674, 33401519, 33402361, 33402406, 33402456, 33402847
33403040, 33403843, 33404069, 33407135, 33407139, 33408858, 33409163
33409376, 33409759, 33409841, 33410321, 33415279, 33416041, 33416405
33417145, 33417828, 33417987, 33418439, 33418443, 33420096, 33420249
33420490, 33421125, 33421440, 33422596, 33422675, 33422877, 33423728
33424192, 33425046, 33425127, 33426135, 33427823, 33427991, 33428191

33431382, 33434256, 33434602, 33434897, 33435012, 33435454, 33437800
33440178, 33440442, 33440899, 33441073, 33441786, 33443834, 33444647
33446226, 33446788, 33447015, 33447602, 33447957, 33448908, 33450599
33450736, 33451134, 33452091, 33454288, 33454299, 33454753, 33455225
33456516, 33456703, 33456848, 33457235, 33457584, 33457842, 33458082
33458732, 33459161, 33460265, 33460450, 33460521, 33460870, 33462620
33463044, 33464061, 33464358, 33464378, 33464843, 33466822, 33467243
33467715, 33469785, 33470077, 33470092, 33470254, 33471858, 33473564
33473583, 33473795, 33473815, 33473989, 33474080, 33474386, 33474769
33474916, 33476482, 33476928, 33479415, 33479703, 33480124, 33480765
33482137, 33482590, 33484230, 33484387, 33485134, 33488913, 33489699
33490023, 33490031, 33490293, 33491676, 33492066, 33492136, 33493957
33495024, 33495575, 33496433, 33497160, 33498037, 33499125, 33499867
33500486, 33501425, 33503732, 33504158, 33504432, 33504626, 33504902
33505158, 33507610, 33507953, 33510062, 33510077, 33510171, 33510735
33511329, 33511523, 33512062, 33513037, 33513434, 33513447, 33513526
33513906, 33514038, 33514172, 33514179, 33514440, 33515115, 33516571
33517445, 33517703, 33520658, 33521864, 33522170, 33522372, 33522799
33522941, 33523189, 33523393, 33523982, 33524097, 33525014, 33525448
33527359, 33527630, 33527663, 33527739, 33531067, 33531364, 33531929
33532136, 33532470, 33532517, 33532755, 33533239, 33533269, 33534589
33536140, 33536640, 33537225, 33537630, 33537652, 33538009, 33538063
33538807, 33539504, 33540746, 33541736, 33541865, 33542695, 33544375
33544836, 33545633, 33545698, 33546789, 33546839, 33547527, 33548709
33548869, 33549281, 33550827, 33551931, 33553452, 33553902, 33555482
33556254, 33557344, 33558058, 33558087, 33558251, 33558317, 33558391
33558960, 33559245, 33559316, 33559848, 33560308, 33561671, 33561708
33561845, 33562255, 33563137, 33563167, 33563718, 33564109, 33564809
33566611, 33566851, 33566856, 33567156, 33568355, 33570800, 33571225
33572061, 33573142, 33574722, 33575022, 33575100, 33578015, 33580079
33580595, 33580746, 33583859, 33584585, 33584637, 33585244, 33585591
33589647, 33589667, 33590420, 33590551, 33590607, 33591046, 33596056
33596361, 33596874, 33598703, 33598728, 33598840, 33599665, 33599734
33600479, 33601195, 33601538, 33601673, 33601849, 33603291, 33604939
33606850, 33607081, 33607127, 33607613, 33611438, 33613169, 33613512
33613829, 33613833, 33615478, 33615505, 33616923, 33617587, 33617685
33618962, 33621739, 33621871, 33621893, 33621993, 33622325, 33622575
33624052, 33624356, 33625059, 33625822, 33627360, 33627820, 33628304
33628592, 33628693, 33630464, 33631068, 33631337, 33631562, 33631820
33631959, 33632051, 33632754, 33633469, 33633875, 33633883, 33635094
33635886, 33636280, 33637219, 33641592, 33645932, 33647498, 33647716
33647739, 33647820, 33648273, 33649782, 33651003, 33651993, 33652008
33652234, 33653008, 33653695, 33655399, 33656104, 33656608, 33656679
33657553, 33660093, 33660782, 33660816, 33660838, 33661960, 33662079

33662706, 33663113, 33663444, 33664959, 33664976, 33666228, 33666803
33667505, 33667548, 33667790, 33668078, 33668496, 33670617, 33670793
33674035, 33674065, 33676061, 33676296, 33676842, 33677163, 33677196
33679665, 33679838, 33681238, 33682799, 33684125, 33684377, 33684692
33687039, 33689561, 33690676, 33692669, 33695048, 33695100, 33698504
33699798, 33702035, 33703196, 33704431, 33704635, 33705050, 33706800
33708795, 33708958, 33709660, 33710568, 33711151, 33711938, 33714000
33714495, 33715183, 33715322, 33718837, 33718848, 33720017, 33723325
33725523, 33726388, 33726682, 33726788, 33726841, 33727390, 33727406
33727922, 33727983, 33729692, 33730024, 33731488, 33736618, 33738135
33738702, 33741444, 33741730, 33742827, 33743745, 33745318, 33746114
33748852, 33749367, 33749984, 33750344, 33750791, 33751080, 33751431
33754410, 33755161, 33755486, 33757064, 33758069, 33760298, 33761538
33763570, 33763679, 33764761, 33766130, 33766686, 33766937, 33767425
33768567, 33770079, 33770883, 33770960, 33771433, 33773883, 33774856
33775544, 33775825, 33776598, 33777176, 33779360, 33779364, 33779494
33779786, 33780312, 33782200, 33783365, 33783710, 33784447, 33785175
33786208, 33787804, 33787884, 33788643, 33789142, 33790553, 33792885
33794088, 33794290, 33796040, 33797504, 33798328, 33799368, 33801197
33801237, 33803836, 33804758, 33805155, 33807727, 33808041, 33808955
33809062, 33809642, 33810107, 33810130, 33810360, 33811111, 33811601
33811659, 33812475, 33813801, 33813849, 33814415, 33816129, 33816674
33817457, 33817717, 33817746, 33819404, 33821129, 33821145, 33821234
33821569, 33822187, 33822881, 33824185, 33824830, 33825303, 33826285
33827120, 33827191, 33827202, 33828243, 33832499, 33832583, 33833554
33833783, 33834239, 33835379, 33835574, 33836203, 33837343, 33837484
33838019, 33840911, 33840932, 33840940, 33841610, 33841850, 33842364
33842953, 33843368, 33843512, 33845824, 33846103, 33846146, 33846662
33847898, 33848060, 33848148, 33848294, 33849209, 33849726, 33850434
33850437, 33850535, 33852315, 33852881, 33853330, 33858183, 33858700
33860501, 33860895, 33860900, 33862262, 33862860, 33863150, 33863597
33864784, 33865116, 33865165, 33865495, 33865537, 33866472, 33866585
33867451, 33867491, 33868507, 33870133, 33870373, 33870702, 33871591
33871761, 33872487, 33872610, 33874274, 33874455, 33875167, 33876296
33877868, 33878003, 33878970, 33879044, 33879054, 33880474, 33882024
33883017, 33883347, 33884314, 33886297, 33886487, 33886862, 33886871
33888856, 33888932, 33889459, 33890586, 33891752, 33893127, 33895721
33896341, 33896412, 33896423, 33896760, 33897055, 33898336, 33899027
33899902, 33900807, 33902235, 33902465, 33902539, 33904798, 33904963
33906515, 33906975, 33907094, 33907659, 33907942, 33909666, 33909838
33909842, 33912833, 33912872, 33913384, 33915586, 33916081, 33916206
33916249, 33916311, 33917203, 33918190, 33921410, 33921441, 33921860
33922026, 33922061, 33925702, 33927256, 33927405, 33927483, 33929317
33931668, 33932721, 33932921, 33933784, 33934979, 33935707, 33936939

33937333, 33937866, 33939477, 33940540, 33941905, 33942062, 33943313
33945728, 33945794, 33949153, 33950698, 33951799, 33952245, 33952532
33952976, 33954999, 33955060, 33955371, 33956182, 33957025, 33960379
33960464, 33960647, 33961800, 33963458, 33964258, 33964867, 33964963
33967599, 33969309, 33970659, 33970841, 33972204, 33973155, 33973593
33973695, 33973922, 33974068, 33974560, 33974788, 33974835, 33975649
33976016, 33976581, 33976796, 33976856, 33981298, 33982111, 33982392
33982541, 33983204, 33985986, 33986030, 33987170, 33987911, 33987976
33988339, 33988926, 33988974, 33989017, 33990166, 33990559, 33992920
33993386, 33994084, 33997092, 33997202, 33998060, 33998441, 33998706
34001147, 34001406, 34001696, 34003077, 34003643, 34004063, 34006614
34006650, 34007432, 34009154, 34010877, 34011029, 34011657, 34012165
34013946, 34017363, 34018423, 34019478, 34020905, 34022834, 34023045
34023117, 34023644, 34024924, 34027056, 34027199, 34027791, 34027965
34028486, 34031036, 34034279, 34034799, 34038365, 34039170, 34039802
34039805, 34042084, 34042759, 34042949, 34045021, 34045429, 34045719
34048076, 34048685, 34050156, 34051355, 34052378, 34052471, 34052869
34053296, 34053514, 34054814, 34055289, 34056235, 34056691, 34056918
34058858, 34060122, 34060268, 34060829, 34064415, 34066286, 34066652
34069804, 34070446, 34071627, 34072411, 34075499, 34078255, 34079542
34080081, 34080691, 34083290, 34085116, 34086300, 34088194, 34088299
34088989, 34089934, 34090927, 34091587, 34092979, 34094476, 34096213
34097491, 34098840, 34098862, 34099185, 34100909, 34101724, 34101781
34103647, 34103857, 34104105, 34104403, 34104747, 34105531, 34105578
34106567, 34106830, 34107171, 34110342, 34111239, 34111708, 34113634
34113754, 34115571, 34115674, 34115836, 34116531, 34116534, 34117188
34118219, 34119948, 34120395, 34122000, 34123350, 34125814, 34126068
34126600, 34127787, 34128961, 34129587, 34129689, 34129964, 34130289
34131435, 34132089, 34132318, 34135867, 34136552, 34136598, 34136651
34137325, 34137360, 34137513, 34139110, 34139217, 34141328, 34142034
34142725, 34142884, 34145178, 34145715, 34146833, 34146985, 34146987
34147169, 34148591, 34149263, 34151061, 34153098, 34153238, 34153367
34154847, 34155072, 34157543, 34158902, 34160874, 34162108, 34162325
34162335, 34164486, 34164828, 34166857, 34167286, 34168185, 34171382
34171631, 34171779, 34172434, 34172950, 34172951, 34173003, 34173655
34174125, 34174543, 34175766, 34175987, 34176645, 34177216, 34177554
34182692, 34183461, 34183998, 34186437, 34187150, 34191370, 34191733
34191990, 34194445, 34195569, 34198944, 34200295, 34202065, 34203704
34203713, 34204673, 34205962, 34207008, 34207506, 34207825, 34208572
34208822, 34210475, 34210478, 34212105, 34215091, 34215118, 34215356
34215503, 34216873, 34220609, 34220943, 34220991, 34222165, 34224381
34224955, 34225479, 34226067, 34229104, 34229250, 34229833, 34233694
34234394, 34236849, 34236850, 34238278, 34238326, 34238452, 34239023
34239253, 34240339, 34241948, 34242857, 34248685, 34248786, 34250357

34256822, 34256867, 34257221, 34259077, 34259505, 34261458, 34261536
34261947, 34262719, 34264633, 34269674, 34270419, 34271144, 34272249
34272626, 34276007, 34276035, 34278993, 34279907, 34280456, 34281503
34282948, 34284147, 34284480, 34286361, 34287904, 34288172, 34289040
34289391, 34291104, 34291231, 34292131, 34299927, 34301118, 34303814
34305086, 34309486, 34309870, 34310304, 34314448, 34314510, 34318537
34320078, 34322521, 34329853, 34330202, 34333986, 34339279, 34339332
34339511, 34343228, 34346865, 34348856, 34349149, 34349276, 34349447
34351706, 34352389, 34352605, 34358131, 34358718, 34363214, 34366429
34366627, 34367505, 34368448, 34370261, 34370607, 34371061, 34373053
34373173, 34376468, 34376629, 34377917, 34381597, 34382203, 34382212
34385931, 34386836, 34387852, 34394126, 34394887, 34395591, 34396087
34396210, 34397170, 34400193, 34400514, 34401276, 34405413, 34406030
34408490, 34411060, 34414328, 34417794, 34420448, 34421053, 34422617
34424661, 34424728, 34425846, 34428819, 34430618, 34436025, 34443644
34444824, 34446152, 34446545, 34447012, 34448189, 34449511, 34450366
34450853, 34451554, 34452628, 34453303, 34453468, 34453799, 34453970
34454035, 34458786, 34460273, 34461697, 34462893, 34464036, 34465871
34470389, 34470542, 34471029, 34472508, 34473578, 34476155, 34477555
34482043, 34485380, 34485525, 34485657, 34491739, 34495234, 34497838
34499374, 34505752, 34511443, 34511846, 34512077, 34519783, 34520519
34521072, 34521241, 34523306, 34524704, 34524915, 34525391, 34525691
34530272, 34530839, 34532111, 34533061, 34533150, 34536480, 34538232
34543854, 34543938, 34545238, 34547912, 34549471, 34549620, 34551359
34552065, 34557355, 34557851, 34558586, 34559114, 34559964, 34561402
34562023, 34567061, 34567240, 34567246, 34569338, 34570620, 34572347
34572899, 34574048, 34574650, 34576656, 34577339, 34580665, 34585151
34587326, 34589885, 34592878, 34596863, 34598617, 34599377, 34599777
34601469, 34604941, 34609482, 34609883, 34627724, 34639116, 34647902
34651385, 34653168, 34664941, 34672192, 34673162, 34680126, 34696043
34697861, 34698179, 34699616, 34700228, 34701323, 34709158, 34710569
34713413, 34714760, 34715072, 34715960, 34724125, 34726380, 34743170
34744334, 34744980, 34752011, 34763780, 34769588, 34774426, 34786432
34800180, 34806060, 34808536, 34810533, 34816203, 34830056, 34830523
34839112, 34844505, 34845369, 34860551, 34861159, 34879878, 34894430
34899985, 34958012, 35001966, 35012866

Version 19.0.0.0.ru-2022-10.rur-2022-10.r1

Version 19.0.0.0.ru-2022-10.rur-2022-10.r1 includes the following:

- Patch [34419443](#): DATABASE RELEASE UPDATE 19.17.0.0.0

- Patch [34411846](#): OJVM RELEASE UPDATE 19.17.0.0.0
- Patch [28730253](#): SUPPORT NEW ERA REIWA FOR JAPANESE IMPERIAL CALENDAR
- Patch [29213893](#): DBMS_STATS FAILING WITH ERROR ORA-01422 WHEN GATHERING STATS FOR USER\$ TABLE
- Patch [33125873](#): MAKE CACHE GLOBAL OBJECT INVALIDATION CIC NON-SERIALIZE FOR BETTER PERFORMANCE
- Patch [34446152](#): ORA-16705: INTERNAL ERROR IN DATA GUARD BROKER AFTER RU 19.16
- Patch [34533061](#): RDBMS - DSTV39 UPDATE - TZDATA2022C
- Patch [34533150](#): DSTV39 UPDATE - TZDATA2022C - NEED OJVM FIX
- PreUpgrade Jar: preupgrade_19_cbuild_13_lf.zip

Combined patches for version 19.0.0.0.ru-2022-10.rur-2022-10.r1, released October 2022

Bugs fixed:

```
1297945, 7391838, 8460502, 8476681, 9002767, 10123661, 14570574
14735102, 15931756, 15959416, 16662822, 16664572, 16750494, 17275499
17395507, 17428816, 17468475, 17562236, 17777718, 18534283, 18697534
19080742, 19138896, 19697993, 19884953, 19958239, 20007421, 20083476
20313356, 20319830, 20479545, 20661314, 20867658, 20922160, 21119541
21232786, 21245711, 21374587, 21528318, 21629064, 21639146, 21888352
21965541, 22066547, 22252368, 22325312, 22387320, 22553815, 22580355
22725871, 22729345, 22748979, 23020668, 23066463, 23094775, 23125587
23294761, 23296836, 23311885, 23606241, 23645975, 23734075, 23734111
23763462, 24336782, 24356932, 24559425, 24561942, 24596874, 24597536
24669730, 24687075, 24833686, 24916492, 24957575, 24971456, 25030027
25033515, 25092651, 25093917, 25148135, 25404117, 25415139, 25416731
25467237, 25541233, 25560538, 25562258, 25607406, 25607716, 25632308
25655012, 25661172, 25677036, 25756945, 25792962, 25804387, 25804908
25806201, 25809128, 25883179, 25905368, 25913778, 25979242, 25986062
25997810, 26001677, 26003708, 26108369, 26127355, 26139817, 26173091
26203132, 26247450, 26256280, 26280704, 26284288, 26352569, 26352615
26440142, 26476244, 26497655, 26499997, 26500553, 26516556, 26577716
26587659, 26611353, 26621826, 26668264, 26716835, 26739322, 26758837
26777814, 26785852, 26789742, 26800890, 26819036, 26860844, 26872233
26897528, 26951566, 26957541, 26960568, 26963540, 26978857, 27004798
27004828, 27019512, 27036163, 27044169, 27044246, 27063461, 27086374
```

27091809, 27101798, 27126122, 27126938, 27130348, 27131416, 27155644
27162036, 27166935, 27175854, 27195575, 27195935, 27207214, 27207959
27221350, 27222128, 27243840, 27244999, 27254335, 27260704, 27261477
27275126, 27277677, 27302372, 27329690, 27359766, 27359770, 27362994
27369515, 27378053, 27381279, 27392968, 27406105, 27411022, 27423500
27439716, 27453490, 27458357, 27458493, 27460010, 27489107, 27497101
27525303, 27572040, 27582210, 27589260, 27595082, 27597359, 27604329
27614573, 27622946, 27629928, 27636387, 27639208, 27654410, 27658166
27661222, 27666312, 27684864, 27692173, 27697886, 27700413, 27710072
27722357, 27729678, 27742354, 27745728, 27751111, 27751518, 27760043
27764052, 27768096, 27782078, 27785931, 27786168, 27801144, 27825962
27828892, 27829722, 27841399, 27846298, 27860754, 27873364, 27877830
27880025, 27897090, 27899093, 27907898, 27917890, 27929509, 27933036
27934711, 27935464, 27941110, 27950978, 27951757, 27957203, 27957963
27962025, 27967484, 27979632, 27989365, 27998559, 28001632, 28007516
28031385, 28044739, 28052648, 28064977, 28072567, 28078186, 28089605
28092783, 28104176, 28109326, 28112563, 28125947, 28127569, 28129791
28133903, 28138566, 28138847, 28144569, 28145995, 28156781, 28167557
28173612, 28181021, 28185286, 28187837, 28189466, 28193268, 28198802
28201045, 28204104, 28204262, 28205555, 28209601, 28209985, 28210681
28215483, 28234255, 28248841, 28263142, 28271258, 28271693, 28276054
28279176, 28279456, 28279612, 28294439, 28294563, 28298401, 28302580
28303692, 28313275, 28319114, 28322973, 28326928, 28337860, 28338211
28350595, 28351919, 28362187, 28364580, 28370061, 28371123, 28373960
28375383, 28379065, 28381939, 28383667, 28386259, 28387185, 28387574
28390177, 28390273, 28392179, 28395302, 28397317, 28402823, 28403019
28406374, 28410431, 28414968, 28430240, 28431445, 28432345, 28435333
28436173, 28436414, 28442896, 28451312, 28452123, 28454215, 28461031
28461789, 28463226, 28470673, 28475242, 28479352, 28482048, 28482049
28484299, 28487818, 28489419, 28492006, 28498976, 28499269, 28502773
28503081, 28504631, 28505321, 28513129, 28513333, 28521330, 28522750
28523644, 28526715, 28530171, 28530697, 28534475, 28534493, 28535127
28537481, 28538439, 28541606, 28542455, 28544270, 28546290, 28547068
28547926, 28553649, 28553981, 28558489, 28558645, 28561704, 28564479
28565296, 28567417, 28567819, 28569897, 28570589, 28572165, 28572407
28572533, 28572544, 28572667, 28572834, 28578945, 28587723, 28589194
28589509, 28589644, 28591817, 28592647, 28593127, 28593682, 28594086
28597221, 28598022, 28600107, 28601957, 28602253, 28604647, 28605066
28606598, 28607316, 28607632, 28608211, 28612239, 28618343, 28620697
28621543, 28622202, 28625580, 28625862, 28625873, 28627033, 28628592
28630381, 28632796, 28632799, 28636532, 28639299, 28640772, 28642469
28642551, 28642899, 28643583, 28643654, 28643718, 28644549, 28645570
28646200, 28646939, 28647544, 28649388, 28651078, 28655209, 28657026
28658263, 28659098, 28661333, 28661362, 28663289, 28663782, 28670402

28672124, 28672457, 28673945, 28681153, 28682182, 28682796, 28689483
28690694, 28692103, 28692275, 28692282, 28693954, 28694526, 28694639
28694872, 28694877, 28696373, 28697526, 28698087, 28699321, 28700945
28703812, 28704412, 28705231, 28707931, 28708400, 28708585, 28709063
28710385, 28710469, 28710663, 28710734, 28714461, 28714720, 28715655
28715727, 28717406, 28718302, 28718469, 28719348, 28720204, 28720418
28721497, 28722229, 28729900, 28730079, 28730253, 28734355, 28734910
28740708, 28740799, 28740863, 28741374, 28742555, 28745367, 28747846
28749853, 28751498, 28752923, 28755011, 28755084, 28755309, 28755846
28757960, 28758722, 28760206, 28760662, 28763291, 28765983, 28767240
28769456, 28770865, 28771022, 28771947, 28772390, 28772816, 28774416
28776431, 28776811, 28777073, 28777214, 28777478, 28778754, 28781599
28781754, 28785273, 28785321, 28785531, 28788272, 28789531, 28789533
28791576, 28791852, 28793062, 28794230, 28795551, 28795563, 28795734
28800508, 28802066, 28802734, 28804517, 28805242, 28806517, 28807247
28808314, 28808652, 28808656, 28810381, 28811560, 28811592, 28813317
28813931, 28815123, 28815355, 28815557, 28816871, 28817449, 28818063
28819640, 28820669, 28821847, 28824482, 28827682, 28828390, 28831971
28833912, 28835937, 28836716, 28837979, 28838385, 28839869, 28842408
28844656, 28844738, 28845346, 28846759, 28847541, 28847572, 28849494
28849776, 28850084, 28851458, 28851467, 28852325, 28854004, 28854212
28854733, 28855520, 28855922, 28857364, 28857552, 28861861, 28862532
28863263, 28863432, 28863487, 28865544, 28865569, 28867698, 28867992
28869215, 28870496, 28871040, 28872645, 28872829, 28873575, 28874416
28875089, 28876253, 28876639, 28876926, 28877252, 28878865, 28880218
28880864, 28881191, 28881848, 28882146, 28882751, 28882784, 28884931
28887305, 28888083, 28888327, 28889389, 28889730, 28891867, 28891941
28892794, 28896556, 28897123, 28897512, 28899663, 28900506, 28901126
28902135, 28904380, 28905312, 28905390, 28905457, 28905615, 28907196
28909769, 28909992, 28910498, 28910586, 28911140, 28912691, 28914144
28915561, 28917080, 28918429, 28919145, 28921844, 28922227, 28922485
28922532, 28922608, 28922767, 28925250, 28925460, 28925634, 28925880
28927452, 28928462, 28930944, 28932914, 28933079, 28933158, 28935293
28935956, 28936114, 28937717, 28938167, 28938422, 28938698, 28940179
28940281, 28940472, 28941901, 28942118, 28942455, 28942694, 28945421
28945994, 28946233, 28946574, 28948554, 28949888, 28950868, 28951332
28951493, 28951533, 28952168, 28954762, 28955606, 28955883, 28956145
28956908, 28957260, 28957292, 28957723, 28958088, 28958094, 28958590
28959493, 28960863, 28962271, 28962775, 28963036, 28965084, 28965095
28965231, 28965376, 28966444, 28968211, 28968779, 28970122, 28974083
28974902, 28974999, 28977322, 28978664, 28979289, 28980448, 28980910
28981871, 28983095, 28983486, 28984313, 28985114, 28985272, 28985362
28985478, 28986207, 28986231, 28986257, 28986326, 28986481, 28986696
28988482, 28988864, 28989306, 28990681, 28993295, 28993353, 28994307

28994542, 28994721, 28994783, 28995287, 28996376, 28998369, 28999046
29000000, 29001305, 29001888, 29002273, 29002488, 29002784, 29002927
29003207, 29003407, 29003617, 29003738, 29004934, 29005748, 29006318
29006621, 29007321, 29007353, 29007775, 29008035, 29008669, 29009513
29010126, 29010517, 29011936, 29012609, 29013475, 29013832, 29014076
29014385, 29015118, 29015273, 29016294, 29017265, 29018655, 29018680
29019121, 29020271, 29020423, 29021063, 29021352, 29022986, 29024028
29024054, 29024448, 29024552, 29024732, 29024795, 29024876, 29026154
29026582, 29026606, 29027456, 29027694, 29027914, 29027933, 29027940
29030184, 29030927, 29031575, 29031600, 29032234, 29032276, 29032457
29032607, 29033052, 29033145, 29033164, 29033200, 29033280, 29033655
29034331, 29034587, 29036278, 29037290, 29038528, 29038728, 29038730
29039089, 29039510, 29040032, 29040739, 29041739, 29041775, 29043554
29043651, 29043725, 29044086, 29044763, 29044954, 29046482, 29047127
29047850, 29048178, 29048289, 29048498, 29048605, 29048728, 29048792
29048858, 29049014, 29049673, 29050357, 29050560, 29050765, 29050886
29051263, 29051702, 29051953, 29052726, 29052850, 29053783, 29053902
29055644, 29056024, 29056270, 29056560, 29056767, 29056894, 29058476
29059011, 29060216, 29061016, 29061959, 29062692, 29062848, 29062860
29062868, 29110526, 29110783, 29110790, 29110797, 29110802, 29110805
29111598, 29111631, 29112455, 29113282, 29113305, 29115794, 29115857
29116779, 29117337, 29117526, 29117642, 29118543, 29119077, 29119733
29120223, 29122224, 29122254, 29122367, 29123297, 29123324, 29123432
29123444, 29123482, 29124104, 29124368, 29125036, 29125374, 29125380
29125708, 29125786, 29126345, 29127957, 29128693, 29128935, 29129450
29129476, 29129497, 29129691, 29129712, 29130219, 29131539, 29131772
29132456, 29132869, 29132938, 29133470, 29134447, 29135383, 29135649
29136111, 29138641, 29139070, 29139727, 29139761, 29139780, 29139956
29141316, 29141341, 29141685, 29141886, 29142609, 29142667, 29143516
29144995, 29145214, 29145730, 29146077, 29146157, 29146810, 29147849
29148799, 29149170, 29149829, 29150338, 29151520, 29152357, 29152603
29152752, 29154057, 29154631, 29154636, 29154725, 29154829, 29155099
29155208, 29157051, 29157389, 29158680, 29158899, 29158990, 29159216
29159661, 29159909, 29159936, 29160174, 29160462, 29160824, 29161597
29161923, 29162095, 29162749, 29163073, 29163156, 29163415, 29163437
29163524, 29163567, 29164376, 29164446, 29165682, 29167111, 29167342
29167374, 29167940, 29168137, 29168219, 29168433, 29169073, 29169215
29169540, 29169739, 29170232, 29170717, 29171683, 29171942, 29172618
29172826, 29173140, 29173373, 29173618, 29173817, 29174004, 29174753
29175638, 29175765, 29175829, 29176318, 29177466, 29177543, 29177886
29178385, 29179097, 29180313, 29180455, 29180559, 29180721, 29180893
29181078, 29181153, 29181231, 29181568, 29181620, 29181743, 29181923
29182019, 29182517, 29182535, 29182901, 29182920, 29183298, 29183912
29184297, 29184666, 29185193, 29186091, 29186456, 29186605, 29188255

29189302, 29189307, 29189889, 29190235, 29190474, 29190663, 29190740
29191541, 29191827, 29192419, 29192468, 29192685, 29193207, 29194205
29194367, 29194493, 29194827, 29194981, 29195279, 29195337, 29195758
29196151, 29196725, 29198092, 29198913, 29199163, 29199635, 29199733
29200316, 29200700, 29201143, 29201494, 29201539, 29201695, 29201787
29202104, 29202461, 29202850, 29203041, 29203122, 29203166, 29203227
29203425, 29203443, 29203604, 29205281, 29205323, 29205419, 29205463
29205767, 29205918, 29206109, 29206605, 29206631, 29207073, 29208260
29208732, 29209545, 29210577, 29210610, 29210624, 29210683, 29211457
29211724, 29211895, 29212012, 29212433, 29212611, 29213320, 29213351
29213613, 29213641, 29213775, 29213850, 29213879, 29213893, 29214561
29214960, 29216312, 29216723, 29216746, 29216984, 29217294, 29217472
29217828, 29217848, 29217856, 29218570, 29219205, 29219273, 29219627
29220079, 29221248, 29221745, 29221891, 29221942, 29222031, 29222534
29222784, 29222892, 29223833, 29223859, 29223967, 29224065, 29224294
29224605, 29224710, 29225076, 29225168, 29225758, 29225861, 29227602
29228869, 29229164, 29229754, 29229839, 29229844, 29229955, 29230252
29230565, 29231133, 29232117, 29232154, 29232449, 29232533, 29232653
29233415, 29233810, 29233953, 29234123, 29235934, 29236573, 29237538
29237575, 29237744, 29240307, 29240668, 29240759, 29241345, 29241651
29242017, 29242561, 29242884, 29242906, 29243749, 29243958, 29244495
29244766, 29244968, 29245063, 29245137, 29245160, 29246163, 29246337
29247183, 29247415, 29247712, 29247906, 29248012, 29248495, 29248552
29248723, 29248835, 29248858, 29249289, 29249412, 29249583, 29249991
29250059, 29250317, 29251259, 29251564, 29252218, 29252510, 29252790
29253184, 29253871, 29254031, 29254177, 29254623, 29254930, 29255178
29255273, 29255431, 29255435, 29255616, 29255705, 29255718, 29255973
29256279, 29256426, 29259119, 29259320, 29260224, 29260407, 29260452
29260956, 29261547, 29261548, 29261695, 29261906, 29262143, 29262512
29262887, 29265446, 29265448, 29265780, 29266248, 29266899, 29267292
29268412, 29269171, 29269228, 29269825, 29270585, 29271019, 29273168
29273360, 29273539, 29273570, 29273735, 29273812, 29273847, 29274428
29274564, 29274623, 29274627, 29275461, 29276272, 29277317, 29278218
29278684, 29279658, 29279751, 29279854, 29281112, 29281527, 29281691
29281796, 29282090, 29282233, 29282666, 29282898, 29285197, 29285453
29285503, 29285621, 29285788, 29285956, 29286037, 29286220, 29286229
29287130, 29287705, 29290110, 29290235, 29292232, 29292253, 29292378
29292837, 29293072, 29293574, 29293806, 29294382, 29294753, 29296257
29297863, 29297915, 29298220, 29299049, 29299082, 29299830, 29299844
29301139, 29301463, 29301566, 29302565, 29302614, 29302963, 29303712
29303918, 29304314, 29304640, 29304692, 29304781, 29304853, 29305093
29306226, 29306478, 29306713, 29306790, 29307090, 29307109, 29307638
29309698, 29311336, 29311528, 29311588, 29311927, 29312310, 29312672
29312734, 29312753, 29312889, 29313347, 29313417, 29313525, 29314539

29314636, 29314867, 29314949, 29317756, 29318410, 29319441, 29319558
29320900, 29321489, 29321689, 29323946, 29323999, 29324568, 29324735
29325087, 29325105, 29325257, 29325356, 29325497, 29325765, 29325993
29326233, 29327044, 29327892, 29328305, 29329042, 29329087, 29329675
29329807, 29329848, 29330361, 29330791, 29331066, 29331209, 29331380
29331493, 29332292, 29332395, 29332763, 29332771, 29332966, 29333500
29336843, 29336899, 29337294, 29337310, 29337742, 29338315, 29338348
29338453, 29338780, 29338913, 29339101, 29339155, 29339299, 29339452
29340333, 29341209, 29341782, 29342099, 29343086, 29343156, 29343861
29344541, 29345382, 29345937, 29346057, 29346138, 29346211, 29346943
29347620, 29348176, 29348358, 29350052, 29350712, 29350762, 29350868
29351044, 29351386, 29351662, 29351708, 29351716, 29351735, 29351749
29351771, 29351786, 29352298, 29352724, 29352867, 29352947, 29353271
29353432, 29353718, 29353821, 29353960, 29355654, 29355913, 29356547
29356634, 29356698, 29356704, 29356711, 29356752, 29356782, 29357424
29357821, 29358509, 29358828, 29360252, 29360285, 29360467, 29360672
29360775, 29360911, 29360950, 29361319, 29361472, 29361801, 29362596
29363090, 29363151, 29364171, 29364177, 29366406, 29366818, 29366940
29367019, 29367561, 29367971, 29368253, 29368310, 29368725, 29372069
29372541, 29372562, 29373418, 29373588, 29374179, 29374604, 29374627
29375355, 29375941, 29375984, 29376346, 29377804, 29377986, 29378029
29378287, 29378834, 29378913, 29379299, 29379381, 29379552, 29379750
29379978, 29380527, 29381000, 29382296, 29382641, 29382784, 29382815
29383695, 29384740, 29384781, 29384854, 29384864, 29384960, 29385339
29385429, 29385652, 29385774, 29386125, 29386502, 29386557, 29386635
29386660, 29386835, 29387073, 29387274, 29387310, 29387329, 29387337
29388020, 29388072, 29388094, 29388524, 29388830, 29389408, 29389889
29390011, 29390435, 29390501, 29390785, 29391030, 29391237, 29391301
29391438, 29391849, 29391925, 29392554, 29392966, 29393291, 29393649
29394014, 29394140, 29394749, 29395657, 29396481, 29397841, 29397954
29397996, 29398192, 29398488, 29398863, 29399046, 29399100, 29399121
29399336, 29399938, 29399959, 29402110, 29402131, 29403307, 29404425
29404483, 29405012, 29405462, 29405651, 29405996, 29407488, 29407637
29407804, 29407932, 29408853, 29409149, 29409455, 29410311, 29410834
29411037, 29411427, 29411469, 29411931, 29412066, 29412269, 29413205
29413360, 29413382, 29413517, 29413544, 29413634, 29413956, 29415493
29415774, 29416339, 29416688, 29416700, 29417084, 29417113, 29417173
29417719, 29417884, 29418165, 29418341, 29420254, 29420834, 29421059
29423003, 29423016, 29423156, 29423227, 29423491, 29423826, 29424094
29424999, 29426241, 29426320, 29426521, 29428230, 29429017, 29429087
29429264, 29429336, 29429466, 29429566, 29429895, 29430524, 29430866
29431192, 29431402, 29431485, 29431985, 29432176, 29434301, 29434777
29434869, 29435474, 29435652, 29435966, 29436454, 29436514, 29436522
29436727, 29437029, 29437379, 29437594, 29437712, 29438150, 29438277

29438736, 29439522, 29440651, 29441196, 29442400, 29442936, 29443187
29443250, 29443559, 29444072, 29444275, 29444282, 29444602, 29444906
29445548, 29445707, 29446319, 29446669, 29447460, 29448498, 29449477
29449845, 29449852, 29450162, 29450193, 29450273, 29450421, 29450812
29450936, 29451085, 29451386, 29451660, 29452251, 29452576, 29452736
29452739, 29452809, 29452813, 29452936, 29452953, 29452977, 29453104
29453105, 29453109, 29453681, 29453682, 29454450, 29454467, 29454468
29454469, 29454470, 29454471, 29454978, 29455424, 29455773, 29456538
29456714, 29457312, 29457319, 29457370, 29457502, 29457807, 29457978
29458132, 29460252, 29461420, 29461791, 29461971, 29462594, 29462767
29462957, 29463047, 29463528, 29463553, 29463798, 29464616, 29464779
29465047, 29465177, 29466674, 29466707, 29467622, 29469563, 29469565
29470059, 29470205, 29470291, 29470636, 29470880, 29471633, 29471832
29471857, 29471860, 29472170, 29472172, 29472176, 29472204, 29472235
29472402, 29472404, 29472405, 29472408, 29472411, 29472618, 29473708
29474348, 29475386, 29476473, 29476702, 29477015, 29481584, 29482021
29483452, 29483532, 29483626, 29483672, 29483685, 29483712, 29483723
29483771, 29485099, 29485731, 29485877, 29486181, 29486848, 29487150
29487189, 29487407, 29488894, 29488996, 29489436, 29489546, 29490032
29490256, 29491784, 29492127, 29492939, 29493122, 29493821, 29494101
29494245, 29494788, 29494934, 29495057, 29495171, 29495684, 29496977
29497053, 29497311, 29497588, 29497696, 29497778, 29498198, 29500257
29500826, 29500963, 29501218, 29502561, 29503543, 29503631, 29503827
29504103, 29504492, 29504682, 29505225, 29505589, 29505668, 29506942
29507270, 29507616, 29508681, 29508751, 29508998, 29509777, 29510278
29511064, 29511611, 29511980, 29512125, 29512773, 29512890, 29514284
29514479, 29515134, 29515240, 29515476, 29515766, 29515834, 29516300
29516727, 29516766, 29516943, 29517168, 29517443, 29517883, 29518604
29518767, 29519131, 29521187, 29521688, 29521748, 29521862, 29522358
29522561, 29522662, 29523055, 29523216, 29523511, 29524043, 29524599
29524985, 29525366, 29525467, 29525886, 29526966, 29527595, 29527610
29528184, 29528368, 29529147, 29529436, 29530414, 29530440, 29530515
29530812, 29530909, 29531654, 29531836, 29532112, 29532532, 29534218
29536342, 29536445, 29536794, 29537829, 29538631, 29539027, 29539413
29540327, 29540831, 29540862, 29541517, 29541742, 29541769, 29541973
29542084, 29542449, 29542474, 29542580, 29542643, 29543034, 29543956
29544552, 29546817, 29547010, 29547867, 29548413, 29548427, 29548592
29548687, 29548722, 29549040, 29549071, 29549104, 29549154, 29549730
29550530, 29552402, 29552773, 29553141, 29554092, 29554351, 29554554
29554997, 29555105, 29555239, 29557144, 29557261, 29557336, 29557556
29558238, 29558452, 29558926, 29558975, 29559187, 29559395, 29559446
29559908, 29559981, 29560019, 29564592, 29564593, 29565611, 29579919
29580394, 29580983, 29581460, 29581771, 29583018, 29584261, 29584693
29586143, 29587299, 29587488, 29587720, 29587765, 29588580, 29588732

29589544, 29590666, 29591311, 29591343, 29591641, 29591661, 29592011
29592215, 29592433, 29592595, 29592946, 29593820, 29597158, 29597536
29597716, 29597754, 29598039, 29598040, 29598046, 29598226, 29598233
29598338, 29599008, 29599243, 29599300, 29599552, 29601461, 29602831
29603460, 29603884, 29604002, 29604257, 29606261, 29607136, 29607797
29608000, 29608023, 29609434, 29609468, 29609603, 29610506, 29611020
29611991, 29613733, 29614206, 29614931, 29614987, 29615824, 29616244
29616414, 29617414, 29618074, 29618190, 29620042, 29620564, 29622936
29623323, 29623592, 29624124, 29624408, 29625065, 29625804, 29625827
29625876, 29626154, 29626732, 29628200, 29628647, 29629430, 29629650
29629681, 29629745, 29630221, 29631749, 29632095, 29632265, 29632611
29632751, 29633697, 29633753, 29633936, 29634643, 29635427, 29635717
29635990, 29637362, 29637526, 29637560, 29638285, 29638928, 29641373
29641736, 29642451, 29643721, 29644426, 29644464, 29645167, 29645349
29647176, 29647770, 29648928, 29649694, 29651183, 29651517, 29651520
29652809, 29653132, 29653246, 29655164, 29655416, 29655668, 29655855
29655895, 29656400, 29656819, 29656843, 29657399, 29657422, 29657744
29657960, 29657973, 29658056, 29661028, 29661065, 29661722, 29663191
29663368, 29663494, 29663601, 29663813, 29664087, 29664161, 29665168
29665940, 29666451, 29667527, 29667994, 29668005, 29668253, 29669241
29669413, 29670713, 29670782, 29671363, 29672507, 29675446, 29676089
29676921, 29677051, 29677173, 29677733, 29677927, 29678217, 29679856
29680700, 29681987, 29683039, 29683189, 29683211, 29684518, 29685137
29685276, 29687214, 29687220, 29687459, 29687718, 29687727, 29687763
29688867, 29689145, 29689255, 29690795, 29690806, 29692115, 29692694
29693847, 29694869, 29695425, 29695821, 29695841, 29695964, 29695987
29696242, 29696310, 29697928, 29700125, 29700460, 29700770, 29701425
29701720, 29701755, 29701937, 29703932, 29704426, 29705793, 29706141
29706160, 29707099, 29707493, 29707896, 29708324, 29708353, 29708876
29708915, 29710188, 29710858, 29713810, 29715220, 29715647, 29715703
29716029, 29716194, 29716227, 29716491, 29716602, 29716871, 29717659
29717901, 29718198, 29719146, 29720133, 29720373, 29721418, 29721576
29722026, 29722092, 29722167, 29722389, 29723113, 29724497, 29724658
29725115, 29725421, 29725425, 29725476, 29725781, 29726695, 29737941
29738374, 29738400, 29739576, 29741319, 29741976, 29742223, 29742926
29744225, 29744400, 29744637, 29745288, 29745624, 29746003, 29746962
29747493, 29747648, 29747653, 29748285, 29748325, 29748336, 29748513
29749469, 29749471, 29750673, 29751094, 29753244, 29754196, 29754640
29754951, 29755821, 29756274, 29756444, 29757099, 29757264, 29757651
29757687, 29758203, 29758217, 29758661, 29761678, 29761837, 29761911
29763158, 29764644, 29765035, 29765219, 29765347, 29765393, 29765493
29766207, 29766435, 29766503, 29766679, 29768487, 29768899, 29769549
29769695, 29769901, 29770750, 29771032, 29771242, 29772514, 29772761
29773185, 29773197, 29773205, 29773459, 29773633, 29773842, 29774362

29775393, 29775473, 29779196, 29779368, 29779901, 29780140, 29780459
29780507, 29780633, 29782211, 29782284, 29782501, 29782823, 29782866
29783142, 29784106, 29785169, 29785239, 29785251, 29785311, 29785544
29785550, 29785831, 29787292, 29787766, 29788820, 29789911, 29791152
29791880, 29791916, 29792213, 29792433, 29793141, 29793151, 29793318
29794174, 29794462, 29795712, 29795957, 29796335, 29796378, 29796916
29797209, 29797726, 29801164, 29802382, 29802695, 29803593, 29803948
29804875, 29805368, 29805772, 29806390, 29806964, 29807964, 29809792
29809837, 29810012, 29810013, 29811616, 29811720, 29812084, 29812166
29812489, 29813503, 29813650, 29813671, 29814455, 29814995, 29815341
29815713, 29816887, 29817278, 29817547, 29817784, 29818794, 29819753
29820341, 29821130, 29821582, 29822714, 29825525, 29827647, 29827792
29827852, 29828644, 29829339, 29829453, 29830374, 29831196, 29831404
29831567, 29833406, 29833984, 29834506, 29836096, 29836424, 29838337
29838485, 29838740, 29838773, 29839481, 29839715, 29840619, 29841267
29841687, 29842369, 29843238, 29843277, 29843692, 29843831, 29844131
29844226, 29844275, 29845449, 29845530, 29845691, 29846126, 29846525
29846645, 29846688, 29847627, 29848084, 29848849, 29849100, 29849139
29850083, 29850552, 29850566, 29850930, 29851020, 29851308, 29851401
29851733, 29853485, 29856420, 29856506, 29856859, 29856890, 29858121
29858376, 29858420, 29858929, 29859068, 29860022, 29860994, 29861075
29864203, 29864261, 29865188, 29865590, 29865658, 29867728, 29868639
29868736, 29869052, 29869086, 29869149, 29869404, 29869857, 29869877
29869887, 29869906, 29870065, 29870533, 29871098, 29871312, 29871360
29872401, 29872720, 29872937, 29872983, 29873206, 29873665, 29873751
29874090, 29874761, 29875200, 29875459, 29875565, 29875919, 29876358
29876989, 29877608, 29878076, 29879723, 29881050, 29881478, 29881575
29881643, 29881839, 29882427, 29882454, 29882729, 29884958, 29885182
29885890, 29886809, 29887045, 29887111, 29887840, 29888621, 29889184
29889358, 29890740, 29891075, 29891383, 29891533, 29891853, 29891857
29891916, 29892388, 29892604, 29892634, 29892982, 29893132, 29893197
29893287, 29894021, 29896510, 29897418, 29897720, 29897863, 29899384
29900186, 29900203, 29900824, 29901021, 29901025, 29901419, 29901961
29902299, 29902327, 29902330, 29902659, 29903190, 29903299, 29903357
29903454, 29904002, 29906678, 29907870, 29907942, 29908389, 29908639
29908777, 29909658, 29910218, 29910402, 29912135, 29912286, 29913805
29913934, 29913966, 29914449, 29914544, 29915182, 29915217, 29915848
29916198, 29916975, 29919782, 29919789, 29920025, 29920376, 29920804
29921214, 29921318, 29921559, 29922225, 29922435, 29922461, 29923452
29924147, 29924181, 29924479, 29925177, 29926466, 29927360, 29927756
29928040, 29928210, 29928340, 29928427, 29928564, 29930457, 29931230
29931956, 29932202, 29932310, 29932430, 29932780, 29932953, 29933718
29934048, 29934052, 29934158, 29934557, 29935685, 29936841, 29937565
29937655, 29937956, 29938063, 29938225, 29939075, 29939400, 29939795

29940373, 29941062, 29942096, 29942275, 29942554, 29943670, 29943879
29944035, 29944159, 29944660, 29944963, 29945645, 29946101, 29946388
29947145, 29947242, 29947428, 29948154, 29948165, 29950018, 29950220
29951620, 29951759, 29952700, 29955625, 29956016, 29956222, 29957412
29957493, 29958925, 29960325, 29960884, 29961353, 29961360, 29961609
29961847, 29962160, 29962248, 29962590, 29962834, 29962927, 29962939
29965052, 29965207, 29965603, 29965888, 29966768, 29967223, 29967386
29967911, 29967980, 29968085, 29968703, 29969557, 29969985, 29970081
29970261, 29970273, 29970298, 29970587, 29970861, 29971027, 29971481
29971888, 29971936, 29971951, 29972134, 29972176, 29973012, 29989783
29989845, 29990779, 29991257, 29992299, 29993717, 29997326, 29997553
29997937, 30000518, 30000664, 30001105, 30001331, 30003187, 30004660
30004856, 30006159, 30006280, 30006411, 30006472, 30006705, 30006985
30007450, 30007536, 30007797, 30008035, 30008125, 30008198, 30008214
30008456, 30009528, 30009710, 30012181, 30012235, 30012737, 30013243
30013535, 30014200, 30015070, 30017836, 30018017, 30018126, 30018903
30019864, 30021830, 30024618, 30025814, 30026016, 30026596, 30027614
30027638, 30027649, 30028182, 30028599, 30028649, 30029519, 30029806
30031027, 30031613, 30032233, 30032376, 30032484, 30033040, 30033547
30034456, 30035444, 30035598, 30036258, 30038392, 30038576, 30039796
30039800, 30039959, 30040157, 30040511, 30041501, 30041514, 30042490
30043398, 30043610, 30043930, 30044108, 30044507, 30045242, 30045273
30045389, 30045484, 30045983, 30046497, 30047510, 30047531, 30047702
30047765, 30047931, 30048688, 30049966, 30051176, 30051783, 30051804
30052740, 30052928, 30053036, 30053501, 30053748, 30054980, 30056058
30057718, 30057799, 30058149, 30058453, 30059106, 30059109, 30059821
30060267, 30060330, 30062364, 30062429, 30062736, 30062819, 30064268
30066352, 30067565, 30068101, 30068384, 30068792, 30068871, 30070064
30071446, 30072018, 30072038, 30072905, 30073314, 30073422, 30073744
30074250, 30074296, 30074349, 30074469, 30074472, 30074820, 30075037
30076058, 30076197, 30076253, 30076604, 30078675, 30078934, 30079495
30079949, 30080111, 30080266, 30080297, 30080988, 30081055, 30081546
30081580, 30082145, 30082402, 30083100, 30083216, 30083488, 30083807
30084458, 30084606, 30084971, 30085897, 30086596, 30086992, 30087165
30087509, 30088229, 30088421, 30090568, 30092254, 30092280, 30092859
30094929, 30094948, 30095499, 30095591, 30095952, 30096138, 30097092
30097115, 30098251, 30098719, 30099302, 30099420, 30099454, 30099852
30100354, 30101090, 30101186, 30101541, 30101847, 30102774, 30103551
30103553, 30104348, 30104378, 30104555, 30104722, 30105458, 30106748
30106901, 30108012, 30109365, 30110224, 30110370, 30110518, 30114477
30114489, 30114534, 30116085, 30116203, 30116753, 30116854, 30117209
30117220, 30117335, 30117469, 30117593, 30118261, 30118279, 30120608
30121009, 30122523, 30122583, 30123138, 30124026, 30125765, 30126145
30126470, 30127145, 30127522, 30127805, 30127904, 30128047, 30128231

30130240, 30131286, 30131645, 30132708, 30132989, 30133841, 30134103
30134746, 30135396, 30135731, 30135899, 30135942, 30136102, 30136346
30137792, 30138600, 30138948, 30139392, 30140425, 30141240, 30142527
30142802, 30142812, 30142815, 30142907, 30143470, 30143593, 30145712
30146593, 30146969, 30147195, 30147307, 30147308, 30147473, 30147928
30148343, 30148929, 30148966, 30148999, 30149035, 30149658, 30150606
30150710, 30151636, 30153533, 30153552, 30153885, 30154633, 30155241
30155320, 30155388, 30155489, 30155814, 30155837, 30155999, 30156569
30157526, 30158313, 30159329, 30159488, 30159511, 30159536, 30159690
30159752, 30159760, 30160025, 30160625, 30161094, 30163243, 30164238
30164714, 30165493, 30165503, 30165876, 30165892, 30165897, 30166257
30166352, 30167787, 30169254, 30169841, 30170104, 30172925, 30173113
30173370, 30173556, 30174102, 30174394, 30174401, 30175180, 30175291
30175478, 30175587, 30177597, 30178250, 30178839, 30178990, 30179012
30179038, 30179644, 30179894, 30180208, 30180643, 30181756, 30182498
30183367, 30183696, 30183715, 30183920, 30184102, 30185852, 30186319
30186476, 30186706, 30187627, 30187866, 30188215, 30188631, 30189516
30189535, 30190090, 30191274, 30192691, 30192729, 30192853, 30193165
30193262, 30193505, 30193506, 30193584, 30193736, 30194612, 30194710
30194972, 30195667, 30195668, 30195684, 30195773, 30196195, 30196358
30196629, 30198239, 30198598, 30198861, 30198905, 30199890, 30200034
30200132, 30200237, 30200680, 30200758, 30202349, 30202388, 30202407
30203929, 30204042, 30204542, 30206220, 30206493, 30206675, 30207473
30207519, 30208327, 30208690, 30208723, 30209222, 30209736, 30210027
30210429, 30210753, 30210884, 30211567, 30213031, 30213540, 30214769
30214826, 30215130, 30215302, 30215351, 30217206, 30217562, 30217982
30218044, 30218317, 30218956, 30219222, 30220932, 30221115, 30221237
30221298, 30222187, 30222512, 30222669, 30222975, 30223712, 30223847
30223990, 30224544, 30224650, 30224725, 30224868, 30224950, 30225265
30225439, 30225443, 30225718, 30225837, 30225844, 30226244, 30227400
30228422, 30228567, 30229030, 30229126, 30229683, 30230183, 30232638
30233105, 30233536, 30233934, 30234132, 30234227, 30235878, 30235919
30235979, 30236092, 30236399, 30236554, 30236746, 30236883, 30236964
30237477, 30237640, 30238211, 30238715, 30239480, 30240010, 30240547
30240858, 30240930, 30240972, 30241567, 30241807, 30241829, 30241920
30242120, 30242724, 30243216, 30243720, 30244340, 30244831, 30246053
30246179, 30247305, 30248520, 30248531, 30248564, 30249432, 30249738
30249927, 30251003, 30251130, 30252005, 30252098, 30252156, 30252458
30252977, 30253035, 30253090, 30253608, 30253705, 30253761, 30253835
30254206, 30254525, 30254576, 30254726, 30255143, 30255528, 30256542
30257412, 30257908, 30259120, 30259469, 30260523, 30260595, 30262248
30263013, 30263377, 30264405, 30265523, 30265608, 30265615, 30265703
30266791, 30267155, 30269428, 30269748, 30270647, 30270744, 30271114
30272329, 30273212, 30274090, 30274188, 30274324, 30274662, 30275434

30275548, 30275569, 30275578, 30275784, 30276144, 30276243, 30277120
30277451, 30277589, 30277648, 30277733, 30277884, 30277887, 30278402
30281428, 30281615, 30282501, 30282591, 30282918, 30283296, 30283577
30283579, 30283581, 30283832, 30283932, 30284219, 30284369, 30284751
30285026, 30285166, 30285251, 30285341, 30285457, 30285540, 30285843
30286961, 30288343, 30288491, 30289074, 30289458, 30290700, 30291536
30292305, 30293345, 30293935, 30294267, 30294465, 30294671, 30294865
30295110, 30295137, 30295549, 30295790, 30295808, 30297905, 30299367
30299817, 30299934, 30300030, 30300342, 30300363, 30300523, 30300538
30304037, 30305163, 30305264, 30305395, 30305568, 30305603, 30305880
30306407, 30307814, 30307883, 30308368, 30308578, 30308624, 30308772
30308947, 30309098, 30309798, 30310195, 30311826, 30312094, 30312546
30313749, 30313848, 30313989, 30314079, 30314198, 30314837, 30316667
30316897, 30317005, 30317209, 30317397, 30318638, 30318943, 30319080
30319099, 30320029, 30321076, 30321398, 30322980, 30323219, 30323658
30323820, 30323849, 30324059, 30324180, 30324466, 30324649, 30325407
30325786, 30326115, 30326882, 30327149, 30327581, 30327678, 30327810
30328168, 30328209, 30328690, 30329209, 30329737, 30329751, 30330123
30331254, 30331356, 30331759, 30332505, 30332893, 30334484, 30334563
30335127, 30335832, 30335987, 30336032, 30336383, 30336530, 30336742
30336996, 30337245, 30338434, 30338591, 30339049, 30339103, 30339605
30340540, 30341713, 30342371, 30342878, 30343370, 30343750, 30344614
30345201, 30345432, 30345809, 30345926, 30345950, 30346330, 30346729
30346847, 30346867, 30347215, 30347410, 30349714, 30350177, 30350543
30351059, 30352278, 30352532, 30352581, 30352623, 30352715, 30354034
30355490, 30356060, 30356461, 30357463, 30357698, 30357897, 30358416
30359614, 30360383, 30360653, 30361070, 30361635, 30362003, 30362850
30363088, 30363193, 30363311, 30363658, 30363716, 30364329, 30364481
30364613, 30364835, 30365265, 30365745, 30367193, 30368048, 30368482
30368534, 30368668, 30368917, 30371264, 30371623, 30371909, 30372081
30372782, 30373419, 30373541, 30373550, 30374345, 30374570, 30374739
30375109, 30376986, 30377347, 30377692, 30377729, 30380511, 30380907
30381207, 30381525, 30381614, 30382364, 30382646, 30382982, 30383286
30384121, 30384152, 30387628, 30387666, 30388341, 30388853, 30389229
30389414, 30389507, 30389821, 30390279, 30390382, 30390635, 30391272
30391794, 30392011, 30392870, 30392987, 30393110, 30393317, 30393653
30393944, 30394509, 30394738, 30394974, 30395132, 30396120, 30396946
30396974, 30397100, 30398099, 30398251, 30398257, 30398422, 30398770
30399906, 30402386, 30403284, 30403412, 30403763, 30403877, 30403881
30403902, 30403989, 30404117, 30404153, 30404357, 30404639, 30406227
30406709, 30408128, 30408443, 30408515, 30408808, 30409207, 30409339
30409469, 30409472, 30409590, 30412188, 30412772, 30412863, 30412885
30412921, 30413137, 30413294, 30414491, 30414679, 30414714, 30416034
30416603, 30417648, 30417732, 30418926, 30419024, 30419196, 30419450

30420105, 30420452, 30421009, 30421026, 30421204, 30421439, 30421476
30421706, 30422487, 30423135, 30423218, 30424347, 30430921, 30431274
30431504, 30431582, 30431698, 30431703, 30431717, 30431867, 30432101
30432470, 30433177, 30434793, 30436326, 30436399, 30437003, 30437149
30438224, 30439985, 30440651, 30440712, 30441277, 30441687, 30441959
30442266, 30442749, 30442805, 30442874, 30442884, 30443393, 30446436
30446583, 30446820, 30447060, 30447498, 30447589, 30447994, 30448182
30448348, 30448355, 30448917, 30449194, 30449837, 30450787, 30453442
30454090, 30455427, 30457633, 30457697, 30458080, 30458233, 30458568
30458593, 30460095, 30460558, 30460842, 30460922, 30461123, 30461458
30462439, 30463938, 30464250, 30464655, 30466081, 30466214, 30469579
30469777, 30470402, 30470947, 30472891, 30473634, 30474167, 30474386
30474497, 30474774, 30475041, 30475115, 30475813, 30476768, 30477588
30477685, 30477691, 30477767, 30479252, 30479647, 30479715, 30480591
30480872, 30481004, 30483065, 30483140, 30483217, 30483521, 30484042
30484623, 30484801, 30485255, 30486436, 30486896, 30487387, 30487697
30489582, 30490014, 30490578, 30490671, 30491456, 30492380, 30493331
30493518, 30494087, 30494259, 30494900, 30495035, 30495078, 30495133
30495483, 30496957, 30497057, 30497120, 30497765, 30498824, 30500224
30500297, 30500344, 30500582, 30501574, 30502415, 30503943, 30505029
30505497, 30506794, 30506991, 30506996, 30507032, 30507313, 30508100
30509112, 30509277, 30510347, 30510527, 30510718, 30512690, 30513285
30513353, 30513480, 30513848, 30515886, 30516868, 30517214, 30517516
30517635, 30518114, 30518349, 30518447, 30518923, 30519188, 30520662
30521788, 30522285, 30522998, 30523137, 30523538, 30523601, 30523750
30524736, 30527198, 30527275, 30528547, 30528637, 30528687, 30528704
30528731, 30528935, 30529790, 30529915, 30529940, 30530585, 30532811
30533132, 30533580, 30534351, 30534549, 30534662, 30534827, 30535905
30536237, 30537403, 30537405, 30537533, 30537584, 30538141, 30538818
30539519, 30539866, 30540109, 30540407, 30544247, 30544595, 30544629
30544752, 30545040, 30545281, 30545556, 30549255, 30549368, 30549637
30549789, 30549881, 30549883, 30551000, 30551123, 30554178, 30556326
30556523, 30556581, 30556807, 30557386, 30557803, 30558561, 30559129
30559218, 30559252, 30560365, 30560513, 30561404, 30561590, 30561737
30564139, 30564343, 30564898, 30565004, 30565595, 30565699, 30565805
30566054, 30567372, 30568514, 30568896, 30570083, 30571306, 30572816
30573236, 30573703, 30575243, 30575697, 30576112, 30576393, 30576853
30577071, 30577591, 30578221, 30579051, 30580813, 30580887, 30581448
30582221, 30582500, 30584767, 30585407, 30586493, 30587001, 30588738
30589914, 30591028, 30591475, 30592859, 30593046, 30593104, 30593863
30593899, 30594167, 30595114, 30595408, 30595860, 30596024, 30596320
30596488, 30596694, 30598682, 30598746, 30598919, 30599405, 30599407
30600173, 30600184, 30602230, 30602828, 30603211, 30605215, 30605676
30606345, 30606451, 30608583, 30609799, 30610052, 30610097, 30610406

30610667, 30611527, 30611603, 30612199, 30613035, 30613937, 30613971
30614411, 30614497, 30616406, 30616738, 30616776, 30617002, 30617626
30618056, 30618230, 30618406, 30619112, 30619138, 30619383, 30619414
30619525, 30619728, 30619787, 30620805, 30621255, 30621910, 30622393
30622528, 30622755, 30623138, 30623142, 30624243, 30624792, 30624864
30624874, 30625121, 30626046, 30628834, 30628899, 30629139, 30629643
30629799, 30630391, 30630829, 30630930, 30631393, 30631523, 30633259
30633395, 30633938, 30634548, 30634559, 30635183, 30635302, 30635326
30635360, 30637270, 30637319, 30637841, 30638712, 30639996, 30640436
30641541, 30641755, 30641900, 30642124, 30644358, 30644530, 30644766
30644889, 30645590, 30645896, 30645938, 30646077, 30647133, 30649310
30649766, 30650297, 30650404, 30651231, 30651570, 30651621, 30651674
30652515, 30652595, 30652813, 30652853, 30654131, 30654558, 30655504
30655906, 30656839, 30657196, 30657365, 30657566, 30657624, 30657706
30657875, 30657906, 30657940, 30658421, 30658533, 30658555, 30658702
30659940, 30660412, 30661000, 30661939, 30662634, 30662651, 30662736
30663591, 30663646, 30664266, 30665036, 30665399, 30665720, 30666902
30668407, 30668754, 30670096, 30670328, 30670369, 30670584, 30671606
30671720, 30671813, 30671958, 30674373, 30674959, 30675651, 30676209
30677633, 30679595, 30679707, 30679771, 30679804, 30681085, 30681222
30681462, 30681516, 30681521, 30682289, 30684902, 30685163, 30686017
30686131, 30686809, 30687047, 30689557, 30689988, 30690686, 30691604
30691731, 30691857, 30692462, 30692473, 30692760, 30693791, 30694947
30695670, 30696566, 30696821, 30698289, 30699770, 30702732, 30703610
30704826, 30705448, 30706073, 30707740, 30708735, 30710088, 30710506
30710783, 30710807, 30710917, 30711370, 30711386, 30712670, 30713133
30714151, 30714715, 30716001, 30716863, 30718841, 30718862, 30719327
30719419, 30720736, 30720844, 30722105, 30722705, 30723671, 30724679
30724881, 30726204, 30727629, 30727701, 30727759, 30728196, 30729278
30729604, 30729839, 30730026, 30732711, 30733270, 30733563, 30734242
30734362, 30734707, 30735091, 30735153, 30735624, 30735736, 30736718
30737970, 30739013, 30739876, 30740115, 30740250, 30740440, 30740444
30740669, 30740997, 30741263, 30747820, 30748411, 30748707, 30749181
30749644, 30749722, 30750219, 30750991, 30751171, 30751521, 30751527
30751639, 30751968, 30753432, 30755348, 30758836, 30758854, 30758943
30759573, 30760739, 30761871, 30761878, 30763272, 30763305, 30763639
30763754, 30763970, 30764405, 30764663, 30764706, 30764976, 30765486
30765995, 30767277, 30767654, 30768636, 30769312, 30770717, 30771009
30772069, 30773164, 30773696, 30773797, 30776416, 30776676, 30776929
30777519, 30777759, 30778855, 30779240, 30781032, 30781041, 30781461
30781970, 30782266, 30782300, 30782414, 30783395, 30783551, 30785101
30786237, 30786641, 30786655, 30787365, 30788973, 30789904, 30790047
30790441, 30801050, 30801296, 30801510, 30803210, 30804646, 30806757
30806984, 30807723, 30807888, 30808109, 30808364, 30808869, 30809087

30809267, 30810418, 30810680, 30810765, 30812574, 30814266, 30814285
30815269, 30815495, 30815852, 30815994, 30816760, 30816938, 30819340
30819629, 30819756, 30820155, 30821297, 30822207, 30822502, 30822919
30823744, 30825391, 30825419, 30825656, 30826474, 30827849, 30828205
30828350, 30829779, 30829844, 30830555, 30832466, 30832775, 30833454
30834068, 30834110, 30834705, 30835184, 30835219, 30835853, 30836129
30838605, 30839253, 30839315, 30839451, 30839836, 30839961, 30840150
30840791, 30840793, 30841241, 30842277, 30843271, 30844839, 30845806
30846063, 30846159, 30846263, 30846782, 30847442, 30847871, 30848028
30848097, 30848773, 30851448, 30851951, 30852945, 30852954, 30855101
30856358, 30857501, 30857721, 30858444, 30858810, 30858877, 30858919
30860741, 30860803, 30861988, 30862285, 30863115, 30864607, 30865346
30865805, 30866141, 30866988, 30867685, 30868010, 30868186, 30869131
30870043, 30870248, 30870439, 30870513, 30871716, 30871792, 30873527
30874084, 30874270, 30874337, 30874660, 30876666, 30879169, 30879708
30880774, 30880913, 30881161, 30881407, 30883715, 30883785, 30883877
30886188, 30887435, 30887501, 30887777, 30887976, 30887989, 30889443
30889607, 30889723, 30890720, 30890752, 30890971, 30891760, 30891792
30892319, 30893601, 30895426, 30895577, 30896615, 30896620, 30896685
30898131, 30898366, 30898381, 30898748, 30898939, 30901889, 30902655
30904672, 30905604, 30906274, 30906407, 30909596, 30909907, 30909918
30910264, 30910267, 30913399, 30914272, 30914411, 30914674, 30915781
30919403, 30919587, 30919691, 30919804, 30920082, 30921136, 30921259
30922450, 30922936, 30922996, 30923514, 30923517, 30923597, 30923732
30923940, 30925316, 30925419, 30925828, 30927440, 30927821, 30929206
30930149, 30930339, 30931068, 30931311, 30931981, 30932674, 30932923
30933117, 30936251, 30936831, 30936942, 30937340, 30937391, 30937410
30938413, 30939307, 30939317, 30939934, 30940259, 30940382, 30940868
30940869, 30941056, 30942353, 30944643, 30945005, 30945772, 30946072
30946141, 30946595, 30946768, 30946843, 30946876, 30946896, 30947294
30948278, 30950326, 30950786, 30952104, 30952191, 30953157, 30953266
30953836, 30954062, 30954071, 30955702, 30956571, 30956647, 30957739
30958493, 30960314, 30960356, 30960736, 30961566, 30961824, 30963567
30964194, 30965111, 30965554, 30965649, 30966205, 30967084, 30968737
30968781, 30970518, 30972817, 30972841, 30972887, 30972947, 30972951
30972959, 30972966, 30973085, 30973113, 30973127, 30973137, 30973143
30973197, 30973698, 30973715, 30973877, 30974207, 30974813, 30976603
30977294, 30977411, 30978554, 30978747, 30978868, 30979701, 30980023
30980115, 30980317, 30980733, 30981182, 30981240, 30983064, 30985027
30985906, 30986423, 30987088, 30987105, 30987243, 30987717, 30987724
30988444, 30989951, 30990034, 30992120, 30992330, 30992477, 30992597
30992670, 30993198, 30993518, 30993604, 30994996, 30996945, 30996991
30997375, 30997960, 30998035, 30998662, 30998759, 30998847, 30999219
31000312, 31001017, 31001455, 31001490, 31001859, 31002223, 31002346

31002923, 31003137, 31003659, 31003759, 31004077, 31004719, 31004844
31004871, 31005003, 31006011, 31006259, 31006792, 31006953, 31008240
31008858, 31008907, 31009032, 31009271, 31009545, 31009590, 31009680
31010218, 31010554, 31010976, 31011361, 31011690, 31013127, 31013531
31014323, 31015330, 31016413, 31018218, 31019249, 31019407, 31021068
31021109, 31021157, 31021324, 31021542, 31021780, 31022858, 31025267
31025520, 31025531, 31025859, 31026220, 31026591, 31026860, 31026870
31027747, 31028883, 31028986, 31029936, 31030898, 31031240, 31031955
31032463, 31032725, 31032904, 31032913, 31034794, 31035287, 31035916
31037421, 31038220, 31038447, 31038817, 31039337, 31039627, 31039928
31041540, 31042208, 31042337, 31043483, 31043630, 31043695, 31043747
31044145, 31044460, 31044504, 31044951, 31045929, 31046188, 31046619
31046830, 31047022, 31047169, 31047333, 31047697, 31047740, 31048025
31048741, 31049215, 31049995, 31050103, 31050433, 31050557, 31051056
31051075, 31052735, 31052809, 31053669, 31054031, 31054177, 31054874
31055142, 31056909, 31057402, 31058548, 31061482, 31061504, 31062010
31062645, 31063315, 31063380, 31063769, 31064025, 31065701, 31065838
31066082, 31066250, 31066265, 31066554, 31067456, 31067483, 31067892
31067913, 31069059, 31069872, 31070528, 31071080, 31073424, 31073440
31073586, 31074032, 31075323, 31075960, 31077117, 31077365, 31078391
31078757, 31079204, 31080474, 31081558, 31082719, 31084778, 31084921
31086467, 31086869, 31086954, 31087361, 31087679, 31088115, 31088341
31089259, 31089270, 31090262, 31091402, 31091469, 31091868, 31092129
31092233, 31092581, 31092921, 31094183, 31094228, 31094249, 31094374
31094625, 31094688, 31095972, 31096846, 31097760, 31097961, 31098661
31098870, 31099312, 31099926, 31099981, 31100172, 31101386, 31101840
31103065, 31103804, 31104809, 31105225, 31105733, 31105896, 31106140
31106577, 31107577, 31108603, 31108644, 31109506, 31109924, 31110021
31110225, 31110887, 31112088, 31112209, 31112530, 31112972, 31113089
31113177, 31113249, 31113426, 31113682, 31114116, 31114265, 31114671
31115201, 31115502, 31115653, 31117282, 31118486, 31118702, 31118809
31118844, 31119057, 31119467, 31119846, 31120361, 31122876, 31123976
31124213, 31124363, 31124821, 31124914, 31125773, 31125849, 31125918
31126053, 31126058, 31127043, 31127457, 31127961, 31127968, 31127969
31128086, 31129851, 31130156, 31132732, 31134430, 31137765, 31138106
31138371, 31139643, 31140940, 31141792, 31142377, 31142749, 31142815
31143146, 31143415, 31143870, 31145389, 31145403, 31145525, 31145804
31146338, 31146727, 31151483, 31153120, 31153485, 31155085, 31155305
31155634, 31156301, 31156383, 31156767, 31156898, 31158151, 31158341
31158380, 31159382, 31161861, 31162457, 31162711, 31162915, 31163379
31163498, 31163534, 31165038, 31165577, 31165722, 31166083, 31166801
31168440, 31169366, 31170082, 31171096, 31171147, 31171631, 31172207
31172233, 31172642, 31174836, 31175365, 31176451, 31176502, 31177193
31177204, 31177221, 31178051, 31178058, 31178103, 31180519, 31181375

31181380, 31181989, 31182159, 31182451, 31182756, 31182793, 31183413
31184230, 31184370, 31185224, 31188038, 31188398, 31189749, 31190624
31191224, 31192039, 31192261, 31192739, 31193292, 31193511, 31193695
31193745, 31193936, 31194015, 31194264, 31195090, 31195430, 31195600
31195838, 31196164, 31196272, 31196310, 31196395, 31196812, 31200057
31200845, 31201001, 31201366, 31201611, 31202536, 31204002, 31204412
31204878, 31205834, 31206070, 31206201, 31207446, 31208287, 31213034
31214119, 31214928, 31215422, 31215438, 31215548, 31215854, 31216823
31216995, 31217946, 31218837, 31218904, 31219047, 31219975, 31220188
31220549, 31220837, 31220850, 31220881, 31220912, 31221454, 31222780
31223382, 31224819, 31225538, 31226448, 31226534, 31228670, 31230250
31230775, 31233170, 31233235, 31234765, 31234790, 31234983, 31235797
31236624, 31240626, 31240864, 31242319, 31242976, 31243859, 31244165
31244968, 31245856, 31247532, 31247838, 31248496, 31249008, 31249406
31249689, 31249696, 31250120, 31250152, 31250221, 31251325, 31252659
31253451, 31254243, 31254297, 31254535, 31254929, 31255369, 31255869
31256383, 31257740, 31257826, 31258101, 31258344, 31258697, 31258995
31260692, 31261467, 31261641, 31262275, 31262388, 31265651, 31265773
31266236, 31268557, 31270711, 31270847, 31271032, 31274074, 31279670
31281708, 31282037, 31283557, 31287091, 31287296, 31287741, 31287871
31289115, 31290017, 31290300, 31290427, 31291986, 31292298, 31293484
31293791, 31293867, 31298871, 31301460, 31303032, 31303249, 31304573
31304945, 31304975, 31305114, 31305309, 31305624, 31306248, 31306261
31306470, 31306867, 31306927, 31307715, 31309379, 31309867, 31310564
31310624, 31311732, 31311830, 31312450, 31312976, 31313117, 31313177
31313214, 31313444, 31313812, 31314323, 31314885, 31315441, 31315495
31315876, 31315923, 31316250, 31317032, 31321092, 31322720, 31323383
31324442, 31324507, 31325584, 31326320, 31326608, 31326977, 31326998
31327046, 31327259, 31327278, 31327349, 31327391, 31327896, 31331354
31331372, 31333156, 31334606, 31334961, 31335037, 31336298, 31336371
31338249, 31338673, 31338686, 31338769, 31339457, 31339643, 31339744
31341138, 31341746, 31343110, 31344046, 31344097, 31346493, 31348711
31348922, 31349426, 31350348, 31353098, 31353610, 31355339, 31356601
31356954, 31357581, 31357737, 31358308, 31358474, 31358511, 31359215
31359366, 31360146, 31360155, 31360214, 31360282, 31360314, 31360323
31360469, 31360529, 31362408, 31362692, 31364001, 31364383, 31366716
31367188, 31367364, 31368027, 31369444, 31370500, 31371071, 31372498
31373825, 31373837, 31373843, 31374283, 31374449, 31374738, 31375865
31376011, 31376708, 31377129, 31377206, 31377487, 31377701, 31377808
31377936, 31380443, 31381174, 31381389, 31381701, 31382518, 31383049
31383396, 31383464, 31383814, 31384324, 31385668, 31386394, 31386696
31387033, 31387123, 31387426, 31387443, 31388201, 31388288, 31390936
31390955, 31391991, 31393208, 31393600, 31393991, 31394341, 31394347
31394365, 31394544, 31395222, 31395247, 31396027, 31396609, 31396695

31396980, 31398505, 31398617, 31398663, 31398721, 31398761, 31399131
31399883, 31400754, 31401831, 31402078, 31402598, 31403177, 31403565
31404014, 31404130, 31404263, 31404487, 31404550, 31405300, 31405751
31408636, 31408732, 31409483, 31409912, 31409964, 31410289, 31411163
31412209, 31414023, 31414524, 31415324, 31416193, 31416213, 31416250
31417007, 31417192, 31417242, 31417336, 31417844, 31417990, 31418442
31419363, 31420295, 31420316, 31420320, 31420337, 31421316, 31422440
31422620, 31423645, 31424838, 31425167, 31425761, 31425800, 31427345
31429020, 31429501, 31429590, 31429770, 31429784, 31429809, 31429844
31429971, 31430722, 31430735, 31430910, 31431005, 31431326, 31431771
31431964, 31431969, 31431971, 31431973, 31431975, 31431986, 31432906
31433092, 31433579, 31433749, 31434421, 31434805, 31434870, 31434915
31435163, 31435308, 31435735, 31437030, 31437448, 31440252, 31440426
31440813, 31441916, 31441920, 31442332, 31442714, 31443030, 31444353
31444516, 31445356, 31446431, 31447733, 31448642, 31448680, 31449354
31450392, 31450653, 31450942, 31451019, 31453375, 31453585, 31454428
31454972, 31454988, 31455051, 31455597, 31456383, 31456857, 31457334
31458049, 31458537, 31458634, 31458739, 31459231, 31459242, 31459369
31461990, 31462082, 31462940, 31462969, 31463613, 31464165, 31465389
31466433, 31468060, 31468705, 31469001, 31469418, 31471441, 31471589
31471856, 31472077, 31473148, 31474315, 31475085, 31475378, 31475635
31476093, 31476603, 31476701, 31476736, 31477424, 31477695, 31479072
31479075, 31479106, 31479272, 31479772, 31481750, 31481893, 31483949
31484385, 31484603, 31485340, 31485386, 31485507, 31486061, 31486557
31487441, 31487491, 31487775, 31487826, 31487844, 31488085, 31488464
31489032, 31489137, 31489481, 31489590, 31489672, 31489936, 31490604
31491634, 31492171, 31492191, 31492588, 31492655, 31492856, 31493153
31493840, 31494095, 31494264, 31494420, 31494794, 31495254, 31495564
31496174, 31497550, 31498559, 31499370, 31499700, 31500699, 31500719
31500971, 31501139, 31502301, 31503349, 31503674, 31503688, 31503934
31504723, 31505088, 31506095, 31507107, 31507129, 31508229, 31508460
31508712, 31509279, 31510891, 31510910, 31511142, 31511519, 31511940
31512044, 31512262, 31513011, 31515163, 31515869, 31515879, 31515911
31515929, 31516164, 31516184, 31516255, 31516265, 31517395, 31517502
31517652, 31518371, 31521504, 31521701, 31522560, 31522708, 31523548
31523578, 31523585, 31523620, 31523646, 31523736, 31523836, 31525310
31525463, 31525609, 31525783, 31526250, 31526903, 31527103, 31527199
31527381, 31528724, 31528738, 31528962, 31529594, 31529967, 31530985
31530995, 31531079, 31532084, 31532176, 31532308, 31532339, 31533050
31533113, 31533274, 31533799, 31533817, 31533833, 31534841, 31535073
31535516, 31535782, 31535870, 31535955, 31536401, 31536731, 31537521
31537736, 31538274, 31538363, 31538891, 31539566, 31541805, 31541864
31541895, 31541905, 31542347, 31542356, 31542851, 31542956, 31543810
31544097, 31545400, 31545477, 31546864, 31547220, 31547445, 31547480

31548675, 31549221, 31549468, 31551142, 31552563, 31552615, 31552738
31552755, 31553289, 31553674, 31553813, 31553968, 31554610, 31555126
31555173, 31555346, 31555539, 31555800, 31556139, 31556950, 31557160
31557518, 31557663, 31558194, 31559079, 31559085, 31559415, 31559563
31560323, 31560348, 31560592, 31561886, 31562484, 31563138, 31564060
31564760, 31564795, 31567124, 31567403, 31567441, 31567719, 31568423
31569057, 31569867, 31570054, 31570161, 31571415, 31571688, 31571742
31572006, 31572046, 31572267, 31573269, 31573457, 31574122, 31574150
31574244, 31574267, 31575529, 31575649, 31575665, 31576738, 31577569
31578202, 31578994, 31580079, 31580122, 31580374, 31580437, 31581627
31582179, 31583865, 31584056, 31584555, 31584853, 31585040, 31585319
31585351, 31585491, 31585789, 31586381, 31586862, 31588631, 31588933
31590826, 31591384, 31591400, 31591409, 31591421, 31592707, 31594725
31595025, 31595632, 31597104, 31597727, 31598146, 31599363, 31599990
31600023, 31600291, 31600894, 31601385, 31602782, 31603199, 31603380
31603625, 31605119, 31605370, 31605737, 31606474, 31607937, 31608753
31609974, 31610024, 31611125, 31612535, 31613275, 31613838, 31615736
31616101, 31616104, 31617492, 31617523, 31619276, 31620252, 31620748
31620829, 31620944, 31622250, 31623413, 31623463, 31625579, 31625618
31625959, 31626438, 31626493, 31626528, 31626572, 31627587, 31628155
31628311, 31628753, 31628975, 31629056, 31630551, 31630794, 31630946
31631985, 31632273, 31632534, 31632605, 31632663, 31633224, 31634510
31634805, 31635875, 31635963, 31635980, 31637094, 31637607, 31637680
31638398, 31638733, 31638943, 31639082, 31640139, 31640197, 31640240
31642462, 31642556, 31642639, 31644775, 31645288, 31647304, 31647789
31648120, 31648157, 31649223, 31649447, 31649818, 31649819, 31649958
31649962, 31650046, 31650112, 31650202, 31652641, 31652763, 31653080
31653167, 31653634, 31653647, 31653758, 31653913, 31653916, 31653917
31654116, 31654119, 31654122, 31654125, 31654133, 31655807, 31656263
31656601, 31657084, 31657211, 31657324, 31657462, 31657483, 31657681
31658464, 31658819, 31658943, 31659065, 31660283, 31661865, 31661879
31662131, 31662143, 31662504, 31662625, 31662925, 31663189, 31663788
31664203, 31664399, 31665107, 31666449, 31666684, 31667096, 31667180
31667940, 31668033, 31668061, 31668065, 31668312, 31668694, 31668872
31669064, 31670014, 31670263, 31670353, 31671512, 31671568, 31672605
31673406, 31674380, 31674801, 31675568, 31675852, 31675860, 31676324
31676941, 31677345, 31677460, 31677479, 31677587, 31678629, 31679900
31680709, 31680713, 31680985, 31682766, 31683044, 31683260, 31683311
31683373, 31683708, 31684080, 31684494, 31685612, 31685882, 31685989
31686979, 31688127, 31688241, 31688978, 31691030, 31691089, 31691480
31694070, 31695062, 31695693, 31696043, 31696577, 31696853, 31697741
31699090, 31699230, 31700234, 31701239, 31701517, 31701910, 31703614
31705178, 31705265, 31705356, 31705704, 31706000, 31706595, 31706758
31706956, 31707190, 31708133, 31708175, 31708529, 31709647, 31709739

31709777, 31710272, 31710587, 31711155, 31711720, 31711889, 31711997
31712260, 31714645, 31715935, 31716510, 31716873, 31717010, 31718000
31718134, 31718346, 31718842, 31719167, 31720344, 31720377, 31720839
31720942, 31721557, 31721863, 31721880, 31722558, 31722646, 31723226
31723323, 31723651, 31725154, 31727229, 31727231, 31727233, 31727560
31728149, 31728160, 31728440, 31728444, 31728447, 31728477, 31728486
31728858, 31730485, 31730766, 31731076, 31731407, 31732311, 31732672
31734007, 31734012, 31734017, 31734583, 31735662, 31736095, 31737059
31737603, 31739198, 31739891, 31740252, 31741359, 31741938, 31743771
31744832, 31745130, 31745233, 31745528, 31746054, 31747706, 31747818
31747935, 31747989, 31748000, 31748182, 31748233, 31748944, 31750577
31750581, 31750889, 31752492, 31752502, 31752633, 31753202, 31753425
31753478, 31753692, 31754240, 31754546, 31754887, 31754980, 31755245
31755451, 31756415, 31756465, 31756568, 31756650, 31757357, 31757775
31757824, 31758083, 31758344, 31758846, 31758939, 31758960, 31759565
31760278, 31760592, 31760738, 31761510, 31762819, 31763030, 31763356
31763707, 31763905, 31764089, 31764239, 31764866, 31764913, 31765068
31765246, 31765257, 31765296, 31766499, 31766534, 31766675, 31766696
31767204, 31767237, 31767598, 31767852, 31768490, 31768497, 31768505
31768866, 31769267, 31769373, 31769530, 31770289, 31771302, 31771370
31771410, 31771468, 31771745, 31771836, 31772002, 31772070, 31773582
31773909, 31774019, 31774132, 31775101, 31776121, 31776659, 31776785
31776994, 31777410, 31777489, 31779833, 31780567, 31781897, 31781944
31783422, 31783451, 31783782, 31783985, 31785445, 31785572, 31786282
31786838, 31787057, 31787655, 31788104, 31788594, 31788704, 31788761
31788785, 31789167, 31789178, 31789335, 31790500, 31790757, 31792397
31792465, 31792615, 31793126, 31793691, 31793713, 31794336, 31794631
31794882, 31795231, 31796208, 31796277, 31796882, 31798001, 31798323
31798669, 31798702, 31798742, 31799858, 31800053, 31800059, 31800139
31800757, 31804838, 31805303, 31805812, 31807179, 31807431, 31807516
31809510, 31809729, 31810213, 31812352, 31812824, 31813214, 31815099
31815227, 31816158, 31816343, 31816631, 31818080, 31820632, 31820662
31820842, 31820859, 31820926, 31821129, 31821835, 31822026, 31822951
31823051, 31823327, 31823716, 31824504, 31824792, 31824934, 31825151
31825324, 31825410, 31827339, 31827605, 31827912, 31828378, 31828999
31829366, 31829617, 31829639, 31831950, 31832785, 31832901, 31833172
31833585, 31833896, 31833948, 31834191, 31834214, 31834611, 31834677
31834871, 31835805, 31835854, 31836113, 31836454, 31839038, 31839779
31839888, 31840180, 31840490, 31840516, 31840992, 31841147, 31841210
31841696, 31842545, 31843028, 31843462, 31843476, 31843716, 31843842
31843845, 31844137, 31844357, 31844557, 31844560, 31845092, 31845403
31845803, 31845955, 31846318, 31846454, 31847489, 31847541, 31848331
31848365, 31848391, 31848903, 31849859, 31850132, 31850227, 31851383
31851449, 31852482, 31852506, 31852574, 31854285, 31854692, 31855307

31855484, 31855526, 31855996, 31857143, 31858580, 31858621, 31858833
31859067, 31859143, 31860193, 31860406, 31860760, 31862359, 31862593
31862611, 31863118, 31863250, 31863890, 31864818, 31864947, 31865822
31866141, 31866159, 31866388, 31867037, 31867331, 31867351, 31869348
31869601, 31869944, 31869954, 31869966, 31870010, 31870150, 31870164
31870190, 31870196, 31871384, 31871692, 31872230, 31872320, 31873155
31875140, 31876138, 31876192, 31876368, 31876867, 31878256, 31878314
31880154, 31881527, 31883124, 31883343, 31883739, 31883845, 31886547
31886695, 31886745, 31886848, 31887130, 31887709, 31888148, 31888731
31888964, 31889222, 31890230, 31890516, 31892029, 31892856, 31895670
31897023, 31897178, 31897786, 31897854, 31898193, 31898257, 31900476
31900585, 31902517, 31902662, 31903523, 31903786, 31903962, 31904739
31904933, 31905033, 31907042, 31907137, 31907510, 31907565, 31907792
31907962, 31908345, 31908482, 31908571, 31908750, 31909295, 31909807
31912638, 31912834, 31913650, 31913839, 31914003, 31914943, 31915444
31915968, 31916096, 31916644, 31917378, 31917494, 31917856, 31918462
31919563, 31919952, 31921267, 31922161, 31922580, 31923463, 31923622
31925162, 31925462, 31926203, 31926811, 31926848, 31927078, 31927510
31927930, 31930204, 31932042, 31932196, 31933451, 31933837, 31933842
31933846, 31933914, 31934254, 31934301, 31935672, 31935717, 31935970
31936588, 31936983, 31938116, 31938288, 31939263, 31939461, 31939486
31939494, 31939767, 31940176, 31940458, 31941148, 31941948, 31942136
31942144, 31942258, 31942274, 31942473, 31943497, 31943691, 31944980
31945038, 31945407, 31945659, 31945701, 31945827, 31945928, 31946936
31947732, 31947861, 31949490, 31950145, 31950244, 31950577, 31951599
31951628, 31952046, 31952052, 31953394, 31953449, 31953989, 31954223
31956113, 31956435, 31956920, 31957152, 31957564, 31957674, 31957683
31958038, 31958958, 31959140, 31959253, 31960124, 31960389, 31960603
31961578, 31961940, 31964519, 31964610, 31965012, 31965391, 31965542
31965574, 31966094, 31968431, 31969646, 31970188, 31971792, 31972615
31972671, 31973203, 31974187, 31974424, 31974597, 31974693, 31976303
31977024, 31977257, 31980216, 31980296, 31981745, 31981751, 31982879
31985494, 31985738, 31985961, 31986808, 31986836, 31986905, 31987278
31987922, 31988079, 31988833, 31990386, 31991705, 31992242, 31992270
31992615, 31992953, 31993051, 31993795, 31994145, 31994206, 31994298
31995577, 31995937, 31996264, 31996331, 31997107, 31997457, 31997658
31997660, 31998181, 31998189, 31998861, 31999453, 32001851, 32002411
32003551, 32003908, 32004148, 32004299, 32004977, 32005046, 32005048
32005053, 32005215, 32006467, 32006703, 32006824, 32006883, 32007076
32007698, 32008408, 32008586, 32008716, 32008819, 32009197, 32009334
32009754, 32010275, 32010593, 32010707, 32011107, 32011888, 32012137
32012400, 32012788, 32012975, 32013253, 32013403, 32014520, 32015642
32015820, 32016340, 32016884, 32017215, 32017301, 32017422, 32017570
32017635, 32017671, 32018632, 32018953, 32020701, 32021877, 32022223

32022711, 32022814, 32023471, 32025328, 32028155, 32028269, 32032653
32032733, 32032887, 32033795, 32034085, 32034318, 32034766, 32035268
32035536, 32035893, 32035899, 32035902, 32036045, 32037237, 32037962
32038054, 32038780, 32038812, 32038844, 32038996, 32040940, 32040971
32041003, 32041799, 32042256, 32042352, 32042706, 32042926, 32043743
32044533, 32044903, 32045377, 32046125, 32046587, 32047226, 32048412
32048616, 32048921, 32050048, 32051896, 32052587, 32052992, 32053746
32054806, 32055692, 32056529, 32057291, 32057333, 32057565, 32057639
32057755, 32058260, 32060164, 32060577, 32061018, 32061146, 32061173
32061648, 32062227, 32064239, 32064682, 32066061, 32067130, 32067356
32067675, 32068110, 32068187, 32068190, 32069160, 32069508, 32069696
32069834, 32070206, 32071183, 32071457, 32071582, 32072944, 32073027
32073710, 32074450, 32074728, 32075009, 32075020, 32075130, 32075580
32076305, 32076561, 32076599, 32077318, 32078078, 32079097, 32079573
32079739, 32080081, 32080655, 32081074, 32081381, 32082098, 32087287
32087331, 32087597, 32087956, 32088132, 32088478, 32089051, 32089820
32090518, 32090725, 32092797, 32093558, 32094825, 32095097, 32095380
32095610, 32095658, 32096252, 32097387, 32097589, 32097604, 32097767
32097882, 32097962, 32098224, 32098535, 32099153, 32099539, 32099580
32101305, 32101499, 32102542, 32102722, 32102854, 32103383, 32103427
32103628, 32104324, 32104402, 32104578, 32104610, 32105135, 32105239
32105412, 32107505, 32107621, 32108094, 32108115, 32108566, 32108576
32109384, 32109796, 32111046, 32112798, 32112822, 32113113, 32113530
32113791, 32114541, 32114561, 32114572, 32114746, 32115403, 32115642
32116952, 32117115, 32117253, 32117490, 32118543, 32118727, 32119144
32119339, 32119565, 32120283, 32120453, 32121014, 32121326, 32121673
32121803, 32121885, 32122197, 32122574, 32123331, 32123673, 32124176
32124570, 32124594, 32124607, 32124611, 32125142, 32125160, 32125845
32127227, 32127448, 32127911, 32128142, 32129659, 32130083, 32130485
32130504, 32131010, 32131401, 32131774, 32132464, 32132504, 32133039
32133898, 32138257, 32138478, 32138782, 32139432, 32139659, 32140616
32140800, 32142788, 32143492, 32143562, 32144917, 32147340, 32148419
32148662, 32149848, 32150818, 32150854, 32151098, 32152341, 32153396
32153619, 32153909, 32156194, 32157050, 32157075, 32157078, 32159343
32161260, 32161381, 32162391, 32164053, 32164112, 32164218, 32165367
32165759, 32165814, 32165887, 32166950, 32167592, 32167923, 32169151
32170162, 32170190, 32171622, 32171791, 32172050, 32172773, 32172777
32173142, 32173543, 32174321, 32174405, 32174492, 32174571, 32175329
32175780, 32176922, 32177701, 32177869, 32178217, 32178966, 32179209
32179306, 32180918, 32181149, 32182097, 32182783, 32183102, 32183756
32184235, 32184577, 32184844, 32184855, 32185296, 32186186, 32186983
32187775, 32189400, 32189869, 32189952, 32190132, 32190190, 32190284
32190419, 32190573, 32191427, 32191451, 32193431, 32195333, 32195815
32195946, 32196492, 32196738, 32196943, 32197147, 32198292, 32198368

32198396, 32199681, 32200524, 32201743, 32201903, 32201936, 32203068
32203354, 32205455, 32205514, 32205825, 32207088, 32207920, 32208144
32208326, 32208346, 32208691, 32209784, 32210660, 32211423, 32212041
32212062, 32212635, 32212916, 32213376, 32213696, 32214021, 32214080
32214195, 32214654, 32214743, 32214782, 32215240, 32215991, 32216027
32216841, 32216930, 32218369, 32218395, 32218498, 32218552, 32219179
32219318, 32219835, 32219988, 32220017, 32220364, 32220709, 32221141
32222473, 32223045, 32223654, 32223669, 32224140, 32224583, 32225117
32225353, 32225742, 32225899, 32227352, 32228188, 32228677, 32229431
32229919, 32230213, 32230775, 32230953, 32231049, 32231356, 32233406
32234148, 32234161, 32235513, 32236601, 32236685, 32236798, 32237489
32237778, 32238935, 32239137, 32239730, 32240272, 32241889, 32243007
32243148, 32243814, 32243882, 32243985, 32244187, 32245711, 32245850
32246090, 32247141, 32247420, 32248131, 32248405, 32248649, 32249207
32249371, 32249509, 32249640, 32249674, 32250232, 32250238, 32251364
32252036, 32252213, 32252262, 32252294, 32253703, 32254063, 32254399
32254686, 32255029, 32255073, 32255529, 32255753, 32255762, 32258021
32258388, 32258423, 32259063, 32259322, 32259535, 32259785, 32260010
32260290, 32263923, 32264556, 32266406, 32266906, 32267171, 32267610
32268669, 32268800, 32274403, 32277643, 32277793, 32279351, 32280901
32281066, 32283798, 32284241, 32284325, 32284485, 32284608, 32284725
32285086, 32285717, 32285789, 32287797, 32287989, 32289552, 32289858
32290227, 32290313, 32290399, 32290812, 32290949, 32290990, 32291114
32291139, 32292180, 32292805, 32293615, 32294031, 32294566, 32294851
32296259, 32296941, 32297373, 32297469, 32297849, 32298173, 32298782
32300098, 32300822, 32300849, 32301856, 32302470, 32302561, 32303160
32303657, 32304293, 32304712, 32305792, 32307046, 32307586, 32307983
32309046, 32309488, 32309723, 32312131, 32312412, 32312586, 32316070
32316252, 32316326, 32317012, 32317306, 32318528, 32318820, 32318914
32319410, 32321317, 32321319, 32321765, 32322629, 32322738, 32323488
32323600, 32323816, 32324219, 32325574, 32325611, 32327201, 32327690
32328231, 32329914, 32330269, 32330540, 32331889, 32332107, 32334745
32335257, 32335769, 32336990, 32338220, 32338476, 32338736, 32338919
32338953, 32339801, 32340392, 32340885, 32341217, 32341260, 32341820
32342172, 32342345, 32342750, 32342824, 32343092, 32343678, 32344099
32344168, 32344199, 32345001, 32345050, 32345178, 32345272, 32345785
32346649, 32346733, 32347957, 32350182, 32351767, 32353343, 32355765
32355912, 32356340, 32356545, 32356609, 32356628, 32357412, 32357665
32359044, 32361175, 32361677, 32362016, 32362066, 32362072, 32362698
32363212, 32363549, 32363711, 32363981, 32364147, 32366303, 32366461
32366536, 32367151, 32368161, 32368480, 32368789, 32368792, 32369041
32371828, 32372725, 32374050, 32374431, 32374566, 32374616, 32375438
32375493, 32376614, 32376774, 32376872, 32376922, 32377901, 32379001
32379140, 32379303, 32379775, 32380591, 32381403, 32381605, 32382021

32382207, 32385068, 32385141, 32385832, 32386482, 32386683, 32386720
32386877, 32387555, 32387818, 32388247, 32389047, 32389497, 32390629
32390855, 32391021, 32392724, 32393137, 32393612, 32394623, 32394660
32394986, 32396085, 32396326, 32397113, 32397350, 32398714, 32400076
32401086, 32402243, 32402292, 32403509, 32403748, 32404638, 32404933
32405239, 32406222, 32408640, 32409009, 32409344, 32409942, 32410175
32412340, 32413042, 32413512, 32414944, 32414996, 32415846, 32415989
32416652, 32416655, 32417227, 32417242, 32417274, 32417301, 32417438
32417632, 32417766, 32417870, 32419774, 32421958, 32422965, 32423678
32423985, 32424465, 32425097, 32425124, 32425194, 32425778, 32425862
32426213, 32426315, 32426900, 32427158, 32427173, 32427226, 32427583
32427953, 32428097, 32428189, 32428330, 32430745, 32431049, 32431067
32431251, 32431290, 32431413, 32432078, 32432245, 32433687, 32434131
32435911, 32436342, 32436460, 32436721, 32436757, 32437538, 32439726
32440681, 32441128, 32441671, 32441834, 32442229, 32442404, 32443087
32443531, 32443744, 32443935, 32444159, 32446565, 32449622, 32449909
32450344, 32453583, 32453611, 32453888, 32455219, 32455516, 32455650
32455742, 32455961, 32457252, 32459153, 32459632, 32460136, 32460145
32461726, 32462153, 32464021, 32464584, 32465193, 32465209, 32465466
32465495, 32465853, 32465894, 32466474, 32467812, 32468643, 32468791
32469004, 32469225, 32471100, 32471251, 32471346, 32471642, 32472561
32472589, 32473465, 32474686, 32474827, 32474926, 32474997, 32477479
32478452, 32480419, 32480510, 32480528, 32480541, 32481807, 32483115
32483966, 32484945, 32485859, 32486528, 32486955, 32489206, 32490128
32490416, 32490804, 32491443, 32492343, 32492382, 32492422, 32492452
32495545, 32495572, 32497756, 32498459, 32498569, 32498752, 32498783
32499155, 32500117, 32501930, 32503790, 32504340, 32504786, 32505009
32505439, 32505557, 32505634, 32506166, 32506309, 32506473, 32506809
32507542, 32508585, 32509271, 32509318, 32509584, 32509606, 32509814
32510116, 32512048, 32512145, 32512918, 32514516, 32515708, 32515850
32516220, 32516336, 32517405, 32517797, 32518029, 32518679, 32519995
32520525, 32520645, 32520691, 32520994, 32522300, 32522472, 32523206
32523613, 32523750, 32524841, 32525039, 32526118, 32526703, 32527621
32529396, 32529483, 32530202, 32531259, 32531627, 32531647, 32533019
32533225, 32533461, 32534925, 32535106, 32535156, 32535159, 32535520
32536006, 32538436, 32538824, 32539300, 32539322, 32539914, 32539936
32540706, 32541049, 32542063, 32542641, 32544124, 32544464, 32544740
32544784, 32545415, 32546408, 32546937, 32548580, 32549168, 32549277
32549351, 32550051, 32550589, 32550751, 32550894, 32551177, 32551246
32552602, 32553241, 32555120, 32555592, 32556165, 32556311, 32556891
32557354, 32559543, 32561759, 32561791, 32561841, 32562587, 32563106
32563114, 32563151, 32563940, 32565722, 32565870, 32567750, 32567788
32568163, 32569603, 32569745, 32573197, 32573703, 32573942, 32574796
32576097, 32576508, 32576534, 32577408, 32578113, 32578616, 32578792

32579075, 32579529, 32580082, 32580378, 32580852, 32583315, 32583355
32583375, 32583692, 32584375, 32584505, 32585832, 32586534, 32587305
32587472, 32587567, 32587793, 32587994, 32588298, 32588656, 32588691
32589147, 32589990, 32593845, 32593877, 32593886, 32593955, 32594965
32595551, 32596355, 32596705, 32597099, 32597637, 32598406, 32601769
32602194, 32602344, 32602599, 32602735, 32602871, 32602990, 32603092
32603152, 32603564, 32603619, 32605116, 32606093, 32606489, 32607812
32607991, 32608297, 32608821, 32609394, 32609512, 32609730, 32609886
32610185, 32610271, 32613788, 32614157, 32614583, 32615310, 32615776
32616678, 32618819, 32619195, 32619298, 32619327, 32620859, 32620919
32621140, 32621309, 32622507, 32622612, 32625160, 32625356, 32626384
32626756, 32627140, 32628131, 32628221, 32628237, 32629028, 32629772
32629859, 32630060, 32631551, 32631787, 32633251, 32634049, 32635881
32635931, 32638991, 32639432, 32639860, 32639950, 32641593, 32641748
32642587, 32642994, 32643533, 32644392, 32645139, 32646025, 32647170
32648248, 32649737, 32649749, 32651063, 32651769, 32651773, 32652143
32652573, 32652605, 32653470, 32653669, 32654962, 32655446, 32655691
32656130, 32656231, 32656275, 32657251, 32658481, 32659438, 32659574
32659930, 32659983, 32662165, 32663019, 32664665, 32665550, 32665836
32666862, 32668900, 32668907, 32669149, 32670769, 32671437, 32671481
32672057, 32674819, 32675095, 32675227, 32675756, 32676084, 32676350
32676659, 32677000, 32677702, 32682430, 32682586, 32684009, 32685989
32686338, 32686850, 32689123, 32690400, 32692372, 32693242, 32695999
32697157, 32697431, 32697781, 32697859, 32698508, 32698569, 32700396
32700455, 32700675, 32700989, 32701048, 32702005, 32703155, 32704013
32704119, 32704231, 32704765, 32705734, 32705800, 32706821, 32707007
32707211, 32710165, 32710534, 32710750, 32711099, 32711741, 32712220
32712791, 32712916, 32715346, 32715845, 32715945, 32716726, 32718204
32718316, 32718547, 32718721, 32719288, 32720344, 32720458, 32722118
32724505, 32724654, 32725484, 32726772, 32728216, 32728984, 32730701
32731498, 32732179, 32733671, 32733845, 32734021, 32734171, 32734800
32735915, 32735980, 32736370, 32737774, 32737827, 32737969, 32738356
32739966, 32740421, 32740503, 32740515, 32740987, 32743290, 32743511
32746515, 32746831, 32747680, 32747738, 32748974, 32749028, 32750264
32750940, 32751438, 32753371, 32753472, 32753946, 32754044, 32754574
32754845, 32755493, 32755517, 32755731, 32756125, 32756914, 32757219
32758096, 32758260, 32760868, 32760906, 32761229, 32761294, 32761932
32762155, 32762231, 32763283, 32763544, 32764690, 32765738, 32766252
32766397, 32766407, 32766916, 32768752, 32769786, 32769880, 32771735
32775512, 32775526, 32776891, 32780676, 32781826, 32782851, 32783456
32784393, 32784403, 32786308, 32786309, 32788660, 32789228, 32790012
32793286, 32794120, 32794261, 32795016, 32795712, 32797486, 32800137
32800539, 32801192, 32801303, 32801337, 32802926, 32803416, 32803807
32804604, 32804609, 32806069, 32806112, 32806856, 32806915, 32807517

32809152, 32810125, 32810668, 32811069, 32811131, 32813351, 32813767
32816003, 32817950, 32818019, 32818230, 32818242, 32818436, 32818545
32821107, 32822436, 32822847, 32823545, 32823692, 32827206, 32828636
32828738, 32829060, 32829563, 32829937, 32831451, 32831855, 32831901
32833378, 32834168, 32834394, 32834426, 32835524, 32837435, 32838028
32838533, 32841689, 32841994, 32842415, 32842823, 32843576, 32843672
32843754, 32846272, 32846876, 32847962, 32847975, 32848060, 32848531
32848816, 32850174, 32851615, 32851841, 32852484, 32852504, 32855257
32855878, 32856375, 32856640, 32857370, 32857881, 32858446, 32863795
32864736, 32866089, 32867469, 32868116, 32868344, 32868369, 32869560
32870681, 32872839, 32874571, 32874995, 32875003, 32875118, 32875482
32877550, 32878039, 32879447, 32879990, 32880225, 32880390, 32881057
32881462, 32881853, 32883252, 32883853, 32887649, 32888458, 32888472
32889096, 32889434, 32891500, 32892883, 32893686, 32893951, 32894842
32895105, 32897184, 32897679, 32898672, 32898678, 32898971, 32899387
32900165, 32900208, 32902635, 32903472, 32903625, 32907741, 32907975
32908241, 32908249, 32908946, 32909255, 32909292, 32909936, 32910846
32913527, 32913610, 32913791, 32914508, 32914711, 32914795, 32915747
32915760, 32915847, 32915909, 32916025, 32917969, 32918041, 32918394
32920489, 32920547, 32922090, 32922635, 32924796, 32925421, 32925703
32926513, 32926653, 32930360, 32930423, 32930665, 32931078, 32931941
32935932, 32936005, 32936402, 32936424, 32936537, 32936859, 32936950
32936961, 32936988, 32937167, 32937338, 32939376, 32939883, 32940440
32940714, 32940955, 32941096, 32941509, 32941792, 32943694, 32945404
32946347, 32946711, 32947264, 32947268, 32951181, 32951258, 32952285
32953258, 32955962, 32956092, 32956896, 32958616, 32961142, 32961939
32962162, 32965460, 32966389, 32966688, 32967871, 32968221, 32968634
32969466, 32969863, 32970478, 32972633, 32972716, 32973035, 32973406
32976022, 32977489, 32980826, 32982562, 32983419, 32983750, 32983871
32984625, 32984679, 32985908, 32986577, 32987004, 32987206, 32987308
32988028, 32991527, 32992004, 32993522, 32993998, 32994080, 32995206
32995242, 32995863, 32996071, 32996974, 32998659, 32999086, 32999329
32999541, 33000440, 33000980, 33001094, 33001615, 33003817, 33004172
33004888, 33005241, 33008265, 33009224, 33009321, 33009351, 33010173
33010444, 33011078, 33011198, 33012307, 33013379, 33015716, 33016007
33018951, 33019726, 33020016, 33020510, 33021036, 33021100, 33021642
33022043, 33022140, 33022926, 33023671, 33025005, 33026533, 33026796
33026949, 33027087, 33027377, 33027525, 33027539, 33027553, 33028013
33028286, 33028462, 33030293, 33031619, 33032299, 33032400, 33032579
33033425, 33034103, 33034619, 33034642, 33034846, 33035201, 33035710
33036321, 33037136, 33037150, 33037531, 33037895, 33038120, 33038479
33038537, 33039277, 33040335, 33043590, 33044062, 33045137, 33046179
33047645, 33047827, 33048074, 33048277, 33048591, 33049012, 33049866
33050587, 33050622, 33050626, 33052585, 33056383, 33056579, 33059891

33059924, 33060161, 33061152, 33061339, 33061595, 33062419, 33063919
33064324, 33064565, 33065343, 33065415, 33065437, 33065526, 33065979
33068672, 33069366, 33069583, 33069889, 33072392, 33072854, 33075133
33075246, 33075452, 33076129, 33080651, 33084064, 33085296, 33085361
33088863, 33089096, 33089130, 33089192, 33090110, 33090127, 33090781
33090848, 33092087, 33093807, 33096609, 33097276, 33097433, 33099666
33099872, 33100352, 33101055, 33101058, 33102477, 33105276, 33105354
33105656, 33106822, 33106897, 33107872, 33108317, 33109335, 33110192
33110642, 33110992, 33111729, 33113848, 33114640, 33115438, 33115892
33116131, 33116481, 33117641, 33120284, 33120828, 33120920, 33121866
33121880, 33121934, 33123402, 33123404, 33123985, 33125873, 33126216
33127032, 33127141, 33127312, 33129473, 33131526, 33131742, 33132050
33135083, 33136252, 33136601, 33137328, 33139230, 33140218, 33141420
33142123, 33142479, 33142533, 33142739, 33144001, 33145153, 33145583
33146001, 33146055, 33147065, 33148063, 33149578, 33150236, 33150645
33151089, 33152388, 33157547, 33159956, 33161035, 33161424, 33161535
33161726, 33163159, 33163187, 33164865, 33165183, 33165391, 33166116
33166242, 33169254, 33172549, 33172631, 33172679, 33174203, 33176672
33177660, 33178223, 33178248, 33179718, 33180354, 33181281, 33181349
33181881, 33182152, 33184467, 33185231, 33185773, 33186578, 33186650
33188597, 33189199, 33190454, 33190694, 33190761, 33191073, 33191584
33192462, 33193293, 33195096, 33195897, 33196009, 33196035, 33196475
33197296, 33199431, 33201415, 33203951, 33205229, 33205781, 33206160
33207143, 33207247, 33207342, 33208644, 33211160, 33211334, 33212112
33214493, 33214554, 33214707, 33215225, 33216590, 33216667, 33218194
33218259, 33218518, 33218694, 33219840, 33221061, 33223248, 33225584
33225678, 33227044, 33228119, 33230882, 33232128, 33233560, 33234302
33235620, 33236729, 33237523, 33239083, 33239980, 33240921, 33241118
33241692, 33242408, 33244297, 33245879, 33245940, 33246700, 33247240
33247372, 33247795, 33247862, 33251111, 33251188, 33251482, 33252648
33253466, 33253504, 33254019, 33261707, 33261786, 33266449, 33268162
33270914, 33271941, 33273598, 33273638, 33275880, 33276748, 33278133
33278440, 33278509, 33279339, 33279489, 33279810, 33281287, 33281785
33282110, 33282502, 33282504, 33282605, 33282871, 33282971, 33287418
33288427, 33289442, 33289604, 33289734, 33292174, 33292175, 33292429
33292896, 33292950, 33294123, 33295267, 33297275, 33299877, 33303486
33303555, 33303725, 33304435, 33304775, 33304830, 33305150, 33305175
33305254, 33306161, 33306852, 33307945, 33308107, 33308199, 33308244
33308736, 33309324, 33311488, 33312823, 33312932, 33313374, 33314122
33314422, 33314523, 33315230, 33315835, 33316711, 33316815, 33317279
33317740, 33317752, 33318311, 33318949, 33319065, 33320455, 33322672
33323634, 33323903, 33324226, 33325981, 33327118, 33329027, 33329192
33329493, 33329960, 33330508, 33331329, 33332612, 33332891, 33334218
33334340, 33334404, 33334945, 33334957, 33334972, 33335941, 33337385

33337799, 33337807, 33338247, 33338891, 33339868, 33340595, 33343993
33344767, 33345269, 33346851, 33347947, 33349744, 33350643, 33351136
33351978, 33352629, 33352740, 33352794, 33353474, 33354011, 33354933
33355007, 33355136, 33356602, 33357029, 33358968, 33359279, 33360117
33360246, 33362391, 33364012, 33367076, 33367184, 33367909, 33370332
33371121, 33373644, 33373693, 33375194, 33376694, 33379714, 33380058
33380472, 33380871, 33381652, 33381775, 33381839, 33382108, 33382224
33382529, 33382620, 33384092, 33384505, 33387654, 33387767, 33388473
33388927, 33389651, 33390561, 33390717, 33390917, 33390925, 33392926
33392996, 33393503, 33394330, 33395219, 33397495, 33397605, 33398383
33401519, 33402361, 33402406, 33402456, 33402847, 33403843, 33404069
33407135, 33407139, 33408858, 33409163, 33409376, 33409759, 33409841
33410321, 33415279, 33416405, 33417145, 33417828, 33417987, 33418443
33420096, 33420249, 33420490, 33421440, 33422596, 33422877, 33423728
33424192, 33425046, 33425127, 33426135, 33427823, 33427991, 33428191
33434256, 33434602, 33435012, 33440178, 33440442, 33440899, 33441073
33441786, 33443834, 33444647, 33446226, 33446788, 33447015, 33447602
33447957, 33448908, 33451134, 33452091, 33454288, 33454299, 33455225
33456516, 33456703, 33456848, 33457235, 33457584, 33457842, 33458082
33458732, 33459161, 33460450, 33460521, 33460870, 33462620, 33463044
33464061, 33464358, 33464378, 33464843, 33466822, 33467715, 33469785
33470092, 33470254, 33471858, 33473795, 33473815, 33473989, 33474080
33474386, 33474916, 33476482, 33476928, 33479415, 33479703, 33480124
33480765, 33482590, 33484230, 33484387, 33485134, 33489699, 33490023
33490031, 33491676, 33492066, 33492136, 33493957, 33495024, 33495575
33496433, 33497160, 33498037, 33499125, 33499867, 33500486, 33501425
33503732, 33504158, 33504432, 33504626, 33504902, 33505158, 33507610
33507953, 33510062, 33510171, 33511329, 33511523, 33513037, 33513434
33513447, 33513526, 33513906, 33514038, 33514172, 33514179, 33514440
33515115, 33516571, 33517445, 33517703, 33520658, 33521864, 33522170
33522372, 33522799, 33522941, 33523393, 33523982, 33524097, 33525448
33527359, 33527630, 33527663, 33531067, 33531364, 33531929, 33532136
33532470, 33532517, 33532755, 33533269, 33534589, 33536140, 33536640
33537225, 33538009, 33538063, 33539504, 33540746, 33541736, 33541865
33542695, 33544836, 33545633, 33545698, 33546789, 33546839, 33547527
33548709, 33548869, 33549281, 33550827, 33551931, 33553452, 33553902
33555482, 33556254, 33557344, 33558058, 33558087, 33558251, 33558317
33558391, 33558960, 33559316, 33561671, 33561708, 33561845, 33562255
33563137, 33563167, 33563718, 33564109, 33564809, 33566611, 33566851
33568355, 33570800, 33571225, 33572061, 33573142, 33574722, 33575022
33575100, 33580595, 33580746, 33584585, 33584637, 33590420, 33590551
33591046, 33596056, 33596361, 33598703, 33598840, 33599665, 33599734
33601195, 33601673, 33601849, 33604939, 33607081, 33607613, 33611438
33613169, 33613512, 33613829, 33615478, 33615505, 33616923, 33617587

33617685, 33618962, 33621871, 33621893, 33621993, 33622325, 33624052
33624356, 33625059, 33625822, 33628304, 33628592, 33630464, 33631068
33631562, 33631820, 33631959, 33632051, 33632754, 33633469, 33633875
33635094, 33635886, 33636280, 33637219, 33641592, 33647498, 33647716
33647739, 33647820, 33648273, 33649782, 33651003, 33651993, 33652008
33652234, 33655399, 33656104, 33656608, 33656679, 33657553, 33660093
33660782, 33660816, 33661960, 33662706, 33663113, 33663444, 33664959
33664976, 33666228, 33666803, 33667548, 33667790, 33668078, 33670617
33670793, 33674035, 33674065, 33676061, 33676296, 33676842, 33677163
33679665, 33679838, 33681238, 33682799, 33684377, 33690676, 33692669
33695048, 33695100, 33698504, 33703196, 33704431, 33704635, 33706800
33708795, 33708958, 33710568, 33711151, 33711938, 33714000, 33714495
33715183, 33715322, 33718848, 33720017, 33723325, 33725523, 33726682
33726788, 33726841, 33727390, 33727406, 33727922, 33727983, 33729692
33730024, 33731488, 33736618, 33738702, 33741444, 33743745, 33745318
33746114, 33749984, 33750344, 33750791, 33751080, 33751431, 33754410
33755161, 33755486, 33757064, 33758069, 33760298, 33761538, 33763570
33763679, 33764761, 33767425, 33768567, 33770883, 33770960, 33774856
33775544, 33776598, 33777176, 33779360, 33779364, 33779494, 33780312
33783710, 33784447, 33785175, 33786208, 33788643, 33789142, 33790553
33792885, 33794088, 33794290, 33796040, 33797504, 33798328, 33799368
33801197, 33801237, 33805155, 33807727, 33808041, 33808955, 33809062
33809642, 33810107, 33810130, 33810360, 33811111, 33811601, 33811659
33812475, 33813801, 33813849, 33814415, 33816129, 33817717, 33817746
33821129, 33821145, 33821234, 33821569, 33822187, 33822881, 33824830
33825303, 33826285, 33827191, 33827202, 33828243, 33832499, 33832583
33833783, 33835379, 33836203, 33837343, 33840911, 33840932, 33840940
33841610, 33841850, 33842364, 33842953, 33843368, 33843512, 33845824
33846103, 33846146, 33846662, 33847898, 33848060, 33848148, 33848294
33850437, 33850535, 33852881, 33853330, 33858183, 33860900, 33862262
33862860, 33863150, 33863597, 33864784, 33865116, 33865165, 33865495
33865537, 33866472, 33866585, 33867451, 33867491, 33868507, 33870133
33870373, 33870702, 33871591, 33871761, 33872610, 33874274, 33874455
33875167, 33877868, 33878003, 33879054, 33882024, 33883017, 33884314
33886297, 33886487, 33886862, 33886871, 33888856, 33888932, 33889459
33890586, 33891752, 33893127, 33895721, 33896341, 33896412, 33896760
33897055, 33898336, 33899902, 33900807, 33902235, 33902465, 33902539
33904963, 33906515, 33906975, 33907942, 33909838, 33912833, 33916081
33916206, 33916249, 33916311, 33918190, 33921410, 33921441, 33921860
33925702, 33927256, 33931668, 33932721, 33932921, 33933784, 33936939
33937333, 33937866, 33940540, 33941905, 33945794, 33949153, 33950698
33952245, 33952532, 33952976, 33954999, 33955060, 33956182, 33957025
33960464, 33960647, 33961800, 33964258, 33964867, 33964963, 33967599
33969309, 33970659, 33970841, 33972204, 33973155, 33973593, 33973695

33973922, 33974068, 33974788, 33975649, 33976016, 33976581, 33976796
33982111, 33982392, 33982541, 33983204, 33985986, 33986030, 33987170
33987911, 33987976, 33988339, 33988974, 33989017, 33992920, 33997092
33998706, 34001406, 34003643, 34004063, 34006614, 34007432, 34009154
34010877, 34013946, 34018423, 34020905, 34022834, 34023045, 34023644
34024924, 34027791, 34027965, 34028486, 34034279, 34034799, 34038365
34039170, 34039802, 34042759, 34045021, 34045719, 34048685, 34050156
34051355, 34052471, 34052869, 34053296, 34053514, 34054814, 34056235
34060829, 34064415, 34066652, 34070446, 34072411, 34078255, 34080081
34086300, 34088194, 34088989, 34090927, 34092979, 34094476, 34096213
34097491, 34098840, 34098862, 34099185, 34100909, 34101781, 34103647
34104105, 34104403, 34104747, 34105578, 34106567, 34107171, 34110342
34111239, 34113634, 34115571, 34116531, 34118219, 34119948, 34120395
34122000, 34126600, 34128961, 34129689, 34132089, 34132318, 34136552
34136651, 34137325, 34137513, 34139217, 34141328, 34142884, 34146833
34147169, 34149263, 34151061, 34153098, 34153238, 34153367, 34157543
34160874, 34162108, 34162335, 34164828, 34167286, 34168185, 34171382
34172434, 34172950, 34172951, 34175766, 34175987, 34176645, 34177216
34182692, 34183461, 34183998, 34186437, 34191370, 34194445, 34195569
34198944, 34203704, 34203713, 34204673, 34207008, 34210475, 34212105
34215091, 34215356, 34215503, 34220943, 34220991, 34233694, 34238278
34240339, 34256867, 34261458, 34261536, 34261947, 34264633, 34279907
34281503, 34284147, 34286361, 34287904, 34291104, 34291231, 34301118
34320078, 34339279, 34339332, 34346865, 34349149, 34351706, 34363214
34367505, 34371061, 34373053, 34387852, 34395591, 34396210, 34400514
34405413, 34408490, 34421053, 34424728, 34428819, 34443644, 34446152
34446545, 34447012, 34450366, 34451554, 34453799, 34458786, 34461697
34472508, 34473578, 34491739, 34495234, 34511846, 34521072, 34533061
34533150, 34543938, 34570620, 34572347, 34574650, 34596863, 34599377
34604941

Version 19.0.0.0.ru-2022-07.rur-2022-07.r1

Version 19.0.0.0.ru-2022-07.rur-2022-07.r1 includes the following:

- Patch [34133642](#): DATABASE RELEASE UPDATE 19.16.0.0.0
- Patch [34086870](#): OJVM RELEASE UPDATE 19.16.0.0.0
- Patch [34533061](#): RDBMS - DSTV39 UPDATE - TZDATA2022C
- Patch [34533150](#): DSTV39 UPDATE - TZDATA2022C - NEED OJVM FIX
- Patch [28730253](#): SUPPORT NEW ERA REIWA FOR JAPANESE IMPERIAL CALENDAR

- Patch [29213893](#): DBMS_STATS FAILING WITH ERROR ORA-01422 WHEN GATHERING STATS FOR USER\$ TABLE
- Patch [33125873](#): MAKE CACHE GLOBAL OBJECT INVALIDATION CIC NON-SERIALIZE FOR BETTER PERFORMANCE
- Patch [34476155](#): INTERMITTENT DURATION NOT ACTIVE ISSUE WITH SDO FUNCTIONS
- PreUpgrade Jar: preupgrade_19_cbuild_13_lf.zip

Combined patches for version 19.0.0.0.ru-2022-07.rur-2022-07.r1, released July 2022

Bugs fixed:

1297945, 7391838, 8460502, 8476681, 14570574, 14735102, 15931756
15959416, 16662822, 16664572, 16750494, 17275499, 17395507, 17428816
17468475, 17562236, 17777718, 18534283, 18697534, 19080742, 19138896
19697993, 19884953, 19958239, 20007421, 20083476, 20313356, 20319830
20479545, 20661314, 20867658, 20922160, 21119541, 21232786, 21245711
21374587, 21528318, 21629064, 21639146, 21888352, 21965541, 22066547
22252368, 22325312, 22387320, 22553815, 22580355, 22725871, 22729345
22748979, 23020668, 23066463, 23094775, 23125587, 23294761, 23296836
23311885, 23606241, 23645975, 23734075, 23734111, 23763462, 24336782
24356932, 24559425, 24561942, 24596874, 24597536, 24669730, 24687075
24833686, 24916492, 24957575, 24971456, 25030027, 25033515, 25092651
25093917, 25148135, 25404117, 25415139, 25416731, 25467237, 25541233
25560538, 25562258, 25607406, 25607716, 25632308, 25655012, 25661172
25677036, 25756945, 25792962, 25804387, 25804908, 25806201, 25809128
25883179, 25905368, 25913778, 25979242, 25986062, 25997810, 26001677
26003708, 26108369, 26127355, 26139817, 26173091, 26203132, 26247450
26256280, 26280704, 26284288, 26352569, 26352615, 26440142, 26476244
26497655, 26499997, 26500553, 26516556, 26577716, 26587659, 26611353
26621826, 26668264, 26716835, 26739322, 26758837, 26777814, 26785852
26789742, 26800890, 26819036, 26860844, 26872233, 26897528, 26951566
26957541, 26963540, 26978857, 27004798, 27004828, 27019512, 27036163
27044169, 27044246, 27063461, 27086374, 27091809, 27101798, 27126122
27126938, 27130348, 27131416, 27155644, 27162036, 27166935, 27195575
27195935, 27207214, 27207959, 27221350, 27222128, 27243840, 27244999
27254335, 27260704, 27261477, 27275126, 27277677, 27302372, 27329690
27359766, 27359770, 27362994, 27369515, 27378053, 27381279, 27392968
27406105, 27411022, 27423500, 27439716, 27453490, 27458357, 27458493
27460010, 27489107, 27497101, 27525303, 27572040, 27582210, 27589260

27595082, 27597359, 27604329, 27614573, 27622946, 27629928, 27636387
27639208, 27654410, 27658166, 27661222, 27666312, 27684864, 27692173
27697886, 27700413, 27710072, 27729678, 27742354, 27745728, 27751111
27751518, 27760043, 27764052, 27768096, 27782078, 27785931, 27786168
27801144, 27825962, 27828892, 27829722, 27841399, 27846298, 27860754
27873364, 27877830, 27880025, 27897090, 27899093, 27907898, 27917890
27929509, 27933036, 27934711, 27935464, 27941110, 27950978, 27951757
27957203, 27957963, 27962025, 27967484, 27979632, 27989365, 27998559
28001632, 28007516, 28031385, 28044739, 28052648, 28064977, 28072567
28078186, 28089605, 28092783, 28104176, 28109326, 28112563, 28125947
28127569, 28129791, 28133903, 28138566, 28138847, 28144569, 28145995
28156781, 28167557, 28173612, 28181021, 28185286, 28187837, 28189466
28193268, 28198802, 28201045, 28204104, 28204262, 28205555, 28209601
28209985, 28210681, 28215483, 28234255, 28248841, 28263142, 28271258
28271693, 28276054, 28279176, 28279456, 28279612, 28294439, 28294563
28298401, 28302580, 28313275, 28319114, 28322973, 28326928, 28337860
28338211, 28350595, 28351919, 28362187, 28364580, 28370061, 28371123
28373960, 28375383, 28379065, 28381939, 28383667, 28386259, 28387185
28387574, 28390177, 28390273, 28392179, 28395302, 28397317, 28402823
28403019, 28406374, 28410431, 28414968, 28431445, 28432345, 28435333
28436173, 28436414, 28442896, 28451312, 28452123, 28454215, 28461031
28461789, 28463226, 28470673, 28475242, 28479352, 28482048, 28482049
28484299, 28487818, 28489419, 28492006, 28498976, 28499269, 28502773
28503081, 28504631, 28505321, 28513129, 28513333, 28521330, 28522750
28523644, 28526715, 28530171, 28530697, 28534475, 28534493, 28535127
28537481, 28538439, 28541606, 28542455, 28544270, 28546290, 28547068
28547926, 28553649, 28553981, 28558489, 28558645, 28561704, 28564479
28565296, 28567417, 28567819, 28569897, 28570589, 28572165, 28572407
28572533, 28572544, 28572667, 28572834, 28578945, 28587723, 28589194
28589509, 28589644, 28591817, 28592647, 28593127, 28593682, 28594086
28597221, 28598022, 28601957, 28602253, 28604647, 28605066, 28606598
28607316, 28607632, 28608211, 28612239, 28618343, 28620697, 28621543
28622202, 28625580, 28625862, 28625873, 28627033, 28628592, 28630381
28632796, 28632799, 28636532, 28639299, 28640772, 28642469, 28642551
28642899, 28643583, 28643654, 28643718, 28644549, 28645570, 28646200
28646939, 28649388, 28651078, 28655209, 28657026, 28659098, 28661333
28661362, 28663289, 28663782, 28670402, 28672124, 28672457, 28673945
28681153, 28682182, 28682796, 28689483, 28690694, 28692103, 28692275
28692282, 28693954, 28694526, 28694639, 28694872, 28694877, 28696373
28697526, 28698087, 28699321, 28700945, 28703812, 28704412, 28705231
28707931, 28708400, 28708585, 28709063, 28710385, 28710469, 28710663
28710734, 28714461, 28714720, 28715655, 28715727, 28717406, 28718302
28718469, 28719348, 28720204, 28720418, 28721497, 28722229, 28729900
28730079, 28730253, 28734355, 28734910, 28740708, 28740799, 28741374

28742555, 28745367, 28747846, 28749853, 28751498, 28752923, 28755011
28755084, 28755309, 28755846, 28757960, 28758722, 28760206, 28760662
28763291, 28765983, 28767240, 28769456, 28770865, 28771022, 28771947
28772390, 28772816, 28774416, 28776431, 28776811, 28777073, 28777214
28777478, 28778754, 28781599, 28781754, 28785273, 28785321, 28785531
28788272, 28789531, 28789533, 28791576, 28791852, 28793062, 28794230
28795551, 28795563, 28795734, 28800508, 28802066, 28802734, 28804517
28805242, 28806517, 28807247, 28808314, 28808652, 28808656, 28810381
28811560, 28811592, 28813317, 28813931, 28815123, 28815355, 28815557
28816871, 28817449, 28818063, 28819640, 28820669, 28821847, 28824482
28827682, 28828390, 28831971, 28833912, 28835937, 28836716, 28837979
28838385, 28839869, 28842408, 28844656, 28844738, 28845346, 28846759
28847541, 28847572, 28849494, 28849776, 28850084, 28851458, 28851467
28852325, 28854004, 28854212, 28854733, 28855520, 28855922, 28857552
28861861, 28862532, 28863263, 28863432, 28863487, 28865544, 28865569
28867698, 28867992, 28869215, 28870496, 28871040, 28872645, 28872829
28873575, 28874416, 28875089, 28876253, 28876639, 28876926, 28877252
28878865, 28880218, 28880864, 28881191, 28881848, 28882146, 28882751
28882784, 28884931, 28887305, 28888083, 28888327, 28889389, 28889730
28891867, 28891941, 28892794, 28897123, 28897512, 28899663, 28900506
28901126, 28902135, 28904380, 28905312, 28905390, 28905457, 28905615
28907196, 28909769, 28909992, 28910498, 28910586, 28911140, 28912691
28914144, 28915561, 28917080, 28918429, 28919145, 28921844, 28922227
28922485, 28922532, 28922608, 28922767, 28925250, 28925460, 28925634
28925880, 28927452, 28928462, 28930944, 28932914, 28933079, 28933158
28935293, 28935956, 28936114, 28937717, 28938167, 28938422, 28938698
28940179, 28940281, 28940472, 28941901, 28942118, 28942455, 28942694
28945421, 28945994, 28946233, 28946574, 28948554, 28949888, 28950868
28951332, 28951493, 28951533, 28952168, 28954762, 28955606, 28955883
28956145, 28956908, 28957260, 28957292, 28957723, 28958088, 28958094
28958590, 28959493, 28960863, 28962271, 28962775, 28963036, 28965084
28965095, 28965231, 28965376, 28966444, 28968211, 28968779, 28970122
28974083, 28974902, 28974999, 28977322, 28978664, 28979289, 28980448
28980910, 28981871, 28983095, 28983486, 28984313, 28985114, 28985272
28985362, 28985478, 28986207, 28986231, 28986257, 28986326, 28986481
28986696, 28988482, 28988864, 28989306, 28990681, 28993295, 28993353
28994307, 28994542, 28994721, 28994783, 28995287, 28996376, 28998369
28999046, 29000000, 29001305, 29001888, 29002273, 29002488, 29002784
29002927, 29003207, 29003407, 29003617, 29003738, 29004934, 29005748
29006318, 29006621, 29007321, 29007353, 29007775, 29008035, 29008669
29009513, 29010126, 29010517, 29011936, 29012609, 29013475, 29013832
29014076, 29014385, 29015118, 29016294, 29017265, 29018655, 29018680
29019121, 29020271, 29020423, 29021063, 29021352, 29022986, 29024028
29024054, 29024448, 29024552, 29024732, 29024795, 29024876, 29026154

29026582, 29026606, 29027456, 29027694, 29027914, 29027933, 29027940
29030184, 29030927, 29031575, 29031600, 29032234, 29032276, 29032457
29032607, 29033052, 29033145, 29033164, 29033200, 29033280, 29033655
29034331, 29034587, 29036278, 29037290, 29038528, 29038728, 29038730
29039089, 29039510, 29040032, 29040739, 29041739, 29041775, 29043554
29043651, 29043725, 29044086, 29044763, 29044954, 29046482, 29047127
29047850, 29048178, 29048289, 29048498, 29048605, 29048728, 29048792
29048858, 29049014, 29049673, 29050357, 29050560, 29050765, 29050886
29051263, 29051702, 29051953, 29052726, 29052850, 29053783, 29053902
29055644, 29056024, 29056270, 29056560, 29056767, 29056894, 29058476
29059011, 29060216, 29061016, 29061959, 29062692, 29062848, 29062860
29062868, 29110526, 29110783, 29110790, 29110797, 29110802, 29110805
29111598, 29111631, 29112455, 29113282, 29113305, 29115794, 29115857
29116779, 29117337, 29117526, 29117642, 29118543, 29119077, 29119733
29120223, 29122224, 29122254, 29122367, 29123297, 29123324, 29123432
29123444, 29123482, 29124104, 29124368, 29125036, 29125374, 29125380
29125708, 29125786, 29126345, 29127957, 29128693, 29128935, 29129450
29129476, 29129497, 29129691, 29129712, 29130219, 29131539, 29131772
29132456, 29132869, 29132938, 29133470, 29134447, 29135383, 29135649
29136111, 29138641, 29139070, 29139727, 29139761, 29139780, 29139956
29141316, 29141341, 29141685, 29141886, 29142609, 29142667, 29143516
29144995, 29145214, 29145730, 29146077, 29146157, 29146810, 29147849
29148799, 29149170, 29149829, 29150338, 29151520, 29152357, 29152603
29152752, 29154631, 29154636, 29154725, 29154829, 29155099, 29155208
29157051, 29157389, 29158680, 29158899, 29158990, 29159216, 29159661
29159909, 29159936, 29160174, 29160462, 29160824, 29161597, 29161923
29162095, 29162749, 29163073, 29163156, 29163415, 29163437, 29163524
29163567, 29164376, 29164446, 29165682, 29167111, 29167342, 29167374
29167940, 29168137, 29168219, 29168433, 29169073, 29169215, 29169540
29169739, 29170232, 29170717, 29171683, 29171942, 29172618, 29172826
29173140, 29173373, 29173618, 29173817, 29174004, 29174753, 29175638
29175829, 29176318, 29177466, 29177543, 29177886, 29178385, 29179097
29180313, 29180455, 29180559, 29180721, 29180893, 29181078, 29181153
29181231, 29181568, 29181620, 29181743, 29181923, 29182019, 29182517
29182901, 29182920, 29183298, 29183912, 29184297, 29184666, 29185193
29186091, 29186456, 29186605, 29188255, 29189302, 29189307, 29189889
29190235, 29190474, 29190663, 29190740, 29191541, 29191827, 29192419
29192468, 29192685, 29193207, 29194205, 29194367, 29194493, 29194827
29194981, 29195279, 29195337, 29195758, 29196151, 29196725, 29198092
29198913, 29199163, 29199635, 29199733, 29200316, 29200700, 29201143
29201494, 29201539, 29201695, 29201787, 29202104, 29202461, 29202850
29203041, 29203122, 29203166, 29203227, 29203425, 29203443, 29203604
29205281, 29205323, 29205419, 29205463, 29205767, 29205918, 29206109
29206605, 29206631, 29207073, 29208260, 29208732, 29209545, 29210577

29210610, 29210624, 29210683, 29211457, 29211724, 29211895, 29212012
29212433, 29212611, 29213320, 29213351, 29213613, 29213641, 29213775
29213850, 29213879, 29213893, 29214561, 29214960, 29216312, 29216723
29216746, 29216984, 29217294, 29217472, 29217828, 29217848, 29217856
29218570, 29219205, 29219273, 29219627, 29220079, 29221248, 29221745
29221891, 29221942, 29222031, 29222534, 29222784, 29222892, 29223833
29223859, 29223967, 29224065, 29224294, 29224605, 29224710, 29225076
29225168, 29225758, 29225861, 29227602, 29228869, 29229164, 29229754
29229839, 29229844, 29229955, 29230252, 29230565, 29231133, 29232117
29232154, 29232449, 29232533, 29232653, 29233415, 29233810, 29233953
29234123, 29235934, 29236573, 29237538, 29237575, 29237744, 29240307
29240668, 29240759, 29241345, 29241651, 29242017, 29242561, 29242884
29242906, 29243749, 29243958, 29244495, 29244766, 29244968, 29245063
29245137, 29245160, 29246163, 29246337, 29247183, 29247415, 29247712
29247906, 29248012, 29248495, 29248552, 29248723, 29248835, 29248858
29249289, 29249412, 29249583, 29249991, 29250059, 29250317, 29251259
29251564, 29252510, 29252790, 29253184, 29253871, 29254031, 29254177
29254623, 29254930, 29255178, 29255273, 29255431, 29255435, 29255616
29255705, 29255718, 29255973, 29256279, 29256426, 29259119, 29259320
29260224, 29260407, 29260452, 29260956, 29261547, 29261548, 29261695
29261906, 29262143, 29262512, 29262887, 29265446, 29265448, 29265780
29266248, 29266899, 29267292, 29268412, 29269171, 29269228, 29269825
29270585, 29271019, 29273168, 29273360, 29273539, 29273570, 29273735
29273812, 29273847, 29274428, 29274564, 29274623, 29274627, 29275461
29276272, 29277317, 29278218, 29278684, 29279658, 29279751, 29279854
29281112, 29281527, 29281691, 29281796, 29282090, 29282233, 29282666
29282898, 29285197, 29285453, 29285503, 29285621, 29285788, 29285956
29286037, 29286220, 29286229, 29287130, 29287705, 29290110, 29290235
29292232, 29292253, 29292378, 29292837, 29293072, 29293574, 29293806
29294753, 29296257, 29297863, 29297915, 29298220, 29299049, 29299082
29299830, 29299844, 29301139, 29301463, 29301566, 29302565, 29302614
29302963, 29303712, 29303918, 29304314, 29304640, 29304692, 29304781
29304853, 29305093, 29306226, 29306478, 29306713, 29306790, 29307090
29307109, 29307638, 29309698, 29311336, 29311528, 29311588, 29311927
29312310, 29312672, 29312734, 29312753, 29312889, 29313347, 29313417
29313525, 29314539, 29314636, 29314867, 29314949, 29317756, 29318410
29319441, 29319558, 29320900, 29321489, 29321689, 29323946, 29323999
29324568, 29324735, 29325087, 29325105, 29325257, 29325356, 29325497
29325765, 29325993, 29326233, 29327044, 29327892, 29328305, 29329042
29329087, 29329675, 29329807, 29329848, 29330361, 29330791, 29331066
29331209, 29331380, 29331493, 29332292, 29332395, 29332763, 29332771
29332966, 29333500, 29336843, 29336899, 29337294, 29337310, 29337742
29338315, 29338348, 29338453, 29338780, 29338913, 29339101, 29339155
29339299, 29339452, 29340333, 29341209, 29341782, 29342099, 29343086

29343156, 29343861, 29344541, 29345382, 29345937, 29346057, 29346138
29346211, 29346943, 29347620, 29348176, 29348358, 29350052, 29350712
29350762, 29350868, 29351044, 29351386, 29351662, 29351708, 29351716
29351735, 29351749, 29351771, 29351786, 29352298, 29352724, 29352867
29352947, 29353271, 29353432, 29353718, 29353821, 29353960, 29355654
29355913, 29356547, 29356634, 29356704, 29356711, 29356752, 29356782
29357821, 29358509, 29358828, 29360252, 29360285, 29360467, 29360672
29360775, 29360911, 29360950, 29361319, 29361472, 29361801, 29362596
29363090, 29363151, 29364171, 29364177, 29366406, 29366818, 29366940
29367019, 29367561, 29367971, 29368253, 29368310, 29368725, 29372069
29372541, 29372562, 29373418, 29373588, 29374179, 29374604, 29374627
29375355, 29375941, 29375984, 29376346, 29377804, 29377986, 29378029
29378287, 29378834, 29378913, 29379299, 29379381, 29379552, 29379750
29379978, 29380527, 29381000, 29382296, 29382641, 29382784, 29382815
29383695, 29384740, 29384781, 29384854, 29384864, 29384960, 29385339
29385429, 29385652, 29385774, 29386125, 29386502, 29386557, 29386635
29386660, 29386835, 29387073, 29387274, 29387310, 29387329, 29387337
29388020, 29388072, 29388094, 29388524, 29388830, 29389408, 29389889
29390011, 29390435, 29390785, 29391030, 29391237, 29391301, 29391438
29391849, 29391925, 29392554, 29392966, 29393291, 29393649, 29394014
29394140, 29394749, 29395657, 29396481, 29397841, 29397954, 29397996
29398192, 29398488, 29398863, 29399046, 29399100, 29399121, 29399336
29399938, 29399959, 29402110, 29402131, 29404425, 29404483, 29405012
29405462, 29405651, 29405996, 29407488, 29407637, 29407804, 29408853
29409149, 29409455, 29410311, 29410834, 29411037, 29411427, 29411469
29411931, 29412066, 29412269, 29413205, 29413360, 29413382, 29413517
29413544, 29413634, 29413956, 29415493, 29415774, 29416339, 29416688
29416700, 29417084, 29417113, 29417173, 29417719, 29417884, 29418165
29418341, 29420254, 29420834, 29421059, 29423003, 29423016, 29423156
29423227, 29423491, 29423826, 29424094, 29424999, 29426241, 29426320
29426521, 29428230, 29429017, 29429087, 29429264, 29429336, 29429466
29429566, 29429895, 29430524, 29430866, 29431192, 29431402, 29431485
29431985, 29432176, 29434301, 29434777, 29434869, 29435474, 29435652
29435966, 29436454, 29436514, 29436522, 29436727, 29437029, 29437379
29437594, 29437712, 29438150, 29438277, 29438736, 29439522, 29440651
29441196, 29442400, 29442936, 29443187, 29443250, 29443559, 29444072
29444275, 29444282, 29444602, 29444906, 29445548, 29446319, 29446669
29447460, 29448498, 29449477, 29449845, 29449852, 29450162, 29450193
29450273, 29450421, 29450812, 29450936, 29451085, 29451386, 29451660
29452251, 29452576, 29452736, 29452739, 29452809, 29452813, 29452936
29452953, 29452977, 29453104, 29453105, 29453109, 29453681, 29453682
29454450, 29454467, 29454468, 29454469, 29454470, 29454471, 29454978
29455424, 29455773, 29456538, 29456714, 29457312, 29457319, 29457370
29457502, 29457807, 29457978, 29458132, 29460252, 29461420, 29461791

29461971, 29462594, 29462767, 29462957, 29463047, 29463528, 29463553
29463798, 29464616, 29464779, 29465047, 29465177, 29466674, 29466707
29467622, 29469563, 29469565, 29470059, 29470205, 29470291, 29470636
29470880, 29471633, 29471832, 29471857, 29471860, 29472170, 29472172
29472176, 29472204, 29472235, 29472402, 29472404, 29472405, 29472408
29472411, 29472618, 29473708, 29474348, 29475386, 29476473, 29476702
29477015, 29481584, 29482021, 29483452, 29483532, 29483626, 29483672
29483685, 29483712, 29483723, 29483771, 29485099, 29485731, 29485877
29486181, 29486848, 29487150, 29487189, 29487407, 29488894, 29488996
29489436, 29489546, 29490032, 29490256, 29491784, 29492127, 29492939
29493122, 29493821, 29494101, 29494245, 29494788, 29494934, 29495057
29495171, 29495684, 29496977, 29497053, 29497311, 29497588, 29497696
29497778, 29498198, 29500257, 29500826, 29500963, 29501218, 29502561
29503543, 29503631, 29503827, 29504103, 29504492, 29504682, 29505225
29505589, 29505668, 29506942, 29507270, 29507616, 29508681, 29508998
29509777, 29510278, 29511064, 29511611, 29511980, 29512125, 29512773
29512890, 29514284, 29514479, 29515134, 29515240, 29515476, 29515766
29515834, 29516300, 29516727, 29516766, 29516943, 29517168, 29517443
29517883, 29518604, 29518767, 29519131, 29521187, 29521688, 29521748
29521862, 29522358, 29522561, 29522662, 29523055, 29523216, 29523511
29524043, 29524599, 29524985, 29525366, 29525467, 29525886, 29526966
29527595, 29527610, 29528184, 29528368, 29529147, 29529436, 29530414
29530440, 29530515, 29530812, 29530909, 29531654, 29531836, 29532112
29532532, 29534218, 29536342, 29536445, 29536794, 29537829, 29538631
29539027, 29539413, 29540327, 29540831, 29540862, 29541517, 29541742
29541769, 29541973, 29542084, 29542449, 29542474, 29542580, 29542643
29543034, 29543956, 29544552, 29546817, 29547010, 29547867, 29548413
29548427, 29548592, 29548687, 29548722, 29549040, 29549071, 29549104
29549154, 29549730, 29550530, 29552402, 29552773, 29553141, 29554092
29554351, 29554554, 29554997, 29555105, 29555239, 29557144, 29557261
29557336, 29557556, 29558238, 29558452, 29558926, 29558975, 29559187
29559395, 29559446, 29559908, 29559981, 29560019, 29564592, 29564593
29565611, 29579919, 29580394, 29580983, 29581460, 29581771, 29583018
29584261, 29584693, 29586143, 29587299, 29587488, 29587720, 29587765
29588580, 29588732, 29589544, 29590666, 29591311, 29591343, 29591641
29591661, 29592011, 29592215, 29592433, 29592595, 29592946, 29593820
29597158, 29597536, 29597716, 29597754, 29598039, 29598040, 29598046
29598226, 29598233, 29598338, 29599008, 29599243, 29599300, 29599552
29601461, 29602831, 29603460, 29603884, 29604002, 29604257, 29606261
29607136, 29607797, 29608000, 29608023, 29609434, 29609603, 29610506
29611020, 29611991, 29613733, 29614206, 29614931, 29614987, 29615824
29616244, 29616414, 29617414, 29618074, 29618190, 29620042, 29620564
29622936, 29623323, 29623592, 29624124, 29624408, 29625065, 29625804
29625827, 29625876, 29626154, 29626732, 29628200, 29628647, 29629430

29629650, 29629681, 29629745, 29630221, 29631749, 29632095, 29632265
29632611, 29632751, 29633697, 29633753, 29633936, 29634643, 29635427
29635717, 29635990, 29637362, 29637526, 29637560, 29638285, 29638928
29641373, 29641736, 29642451, 29643721, 29644426, 29644464, 29645167
29645349, 29647176, 29647770, 29648928, 29649694, 29651183, 29651517
29651520, 29652809, 29653132, 29653246, 29655164, 29655416, 29655668
29655855, 29655895, 29656400, 29656819, 29656843, 29657399, 29657422
29657744, 29657960, 29657973, 29658056, 29661028, 29661065, 29661722
29663191, 29663368, 29663494, 29663601, 29663813, 29664087, 29664161
29665168, 29665940, 29666451, 29667527, 29667994, 29668005, 29669241
29669413, 29670713, 29670782, 29671363, 29672507, 29675446, 29676089
29676921, 29677051, 29677173, 29677733, 29677927, 29678217, 29679856
29680700, 29681987, 29683039, 29683189, 29683211, 29684518, 29685137
29685276, 29687214, 29687220, 29687459, 29687718, 29687727, 29687763
29688867, 29689145, 29689255, 29690795, 29690806, 29692115, 29692694
29693847, 29694869, 29695425, 29695821, 29695841, 29695964, 29695987
29696242, 29696310, 29697928, 29700125, 29700460, 29700770, 29701720
29701755, 29701937, 29703932, 29704426, 29705793, 29706141, 29706160
29707099, 29707493, 29707896, 29708324, 29708353, 29708876, 29708915
29710188, 29710858, 29713810, 29715220, 29715647, 29715703, 29716029
29716194, 29716227, 29716491, 29716602, 29716871, 29717659, 29717901
29718198, 29719146, 29720133, 29720373, 29721418, 29721576, 29722026
29722092, 29722167, 29722389, 29723113, 29724497, 29724658, 29725115
29725421, 29725425, 29725476, 29725781, 29726695, 29737941, 29738374
29738400, 29739576, 29741319, 29741976, 29742223, 29742926, 29744225
29744400, 29744637, 29745288, 29745624, 29746962, 29747493, 29747648
29747653, 29748285, 29748325, 29748336, 29748513, 29749469, 29749471
29750673, 29751094, 29753244, 29754196, 29754640, 29754951, 29755821
29756274, 29756444, 29757099, 29757264, 29757651, 29757687, 29758203
29758217, 29758661, 29761678, 29761837, 29761911, 29763158, 29764644
29765035, 29765219, 29765347, 29765393, 29765493, 29766207, 29766435
29766503, 29766679, 29768487, 29768899, 29769549, 29769695, 29769901
29770750, 29771032, 29771242, 29772514, 29772761, 29773185, 29773197
29773205, 29773459, 29773633, 29773842, 29774362, 29775393, 29775473
29779196, 29779368, 29779901, 29780140, 29780507, 29780633, 29782211
29782284, 29782501, 29782823, 29782866, 29783142, 29784106, 29785169
29785239, 29785251, 29785311, 29785544, 29785550, 29785831, 29787292
29787766, 29788820, 29789911, 29791152, 29791880, 29791916, 29792213
29792433, 29793141, 29793151, 29793318, 29794174, 29794462, 29795712
29795957, 29796335, 29796378, 29796916, 29797209, 29797726, 29801164
29802382, 29802695, 29803593, 29803948, 29804875, 29805368, 29805772
29806390, 29806964, 29807964, 29809792, 29809837, 29810012, 29810013
29811616, 29811720, 29812084, 29812166, 29812489, 29813503, 29813650
29813671, 29814455, 29814995, 29815341, 29815713, 29816887, 29817278

29817547, 29817784, 29818794, 29819753, 29820341, 29821130, 29821582
29822714, 29825525, 29827647, 29827792, 29827852, 29828644, 29829339
29830374, 29831196, 29831404, 29831567, 29833406, 29833984, 29834506
29836096, 29836424, 29838337, 29838485, 29838740, 29838773, 29839481
29839715, 29840619, 29841267, 29841687, 29842369, 29843238, 29843277
29843692, 29843831, 29844131, 29844226, 29844275, 29845449, 29845530
29845691, 29846126, 29846525, 29846645, 29846688, 29847627, 29848084
29848849, 29849100, 29849139, 29850083, 29850552, 29850566, 29850930
29851020, 29851308, 29851401, 29851733, 29853485, 29856420, 29856506
29856859, 29856890, 29858121, 29858376, 29858420, 29859068, 29860022
29860994, 29861075, 29864203, 29864261, 29865188, 29865590, 29865658
29867728, 29868639, 29868736, 29869052, 29869086, 29869149, 29869404
29869857, 29869877, 29869887, 29869906, 29870065, 29870533, 29871098
29871312, 29871360, 29872401, 29872720, 29872937, 29872983, 29873206
29873665, 29873751, 29874090, 29874761, 29875200, 29875459, 29875565
29875919, 29876358, 29876989, 29877608, 29878076, 29879723, 29881050
29881478, 29881575, 29881643, 29881839, 29882427, 29882454, 29882729
29884958, 29885182, 29885890, 29886809, 29887045, 29887111, 29887840
29888621, 29889184, 29889358, 29890740, 29891075, 29891533, 29891853
29891857, 29891916, 29892388, 29892604, 29892634, 29893132, 29893197
29893287, 29894021, 29896510, 29897418, 29897720, 29897863, 29899384
29900186, 29900203, 29900824, 29901021, 29901025, 29901419, 29901961
29902299, 29902327, 29902330, 29902659, 29903190, 29903299, 29903357
29903454, 29904002, 29906678, 29907942, 29908389, 29908639, 29908777
29909658, 29910218, 29910402, 29912135, 29912286, 29913805, 29913934
29913966, 29914449, 29914544, 29915182, 29915217, 29915848, 29916198
29916975, 29919782, 29919789, 29920025, 29920376, 29920804, 29921214
29921318, 29921559, 29922225, 29922435, 29922461, 29923452, 29924147
29924181, 29924479, 29925177, 29926466, 29927360, 29927756, 29928040
29928210, 29928340, 29928427, 29928564, 29930457, 29931230, 29931956
29932202, 29932310, 29932430, 29932780, 29932953, 29933718, 29934048
29934052, 29934158, 29934557, 29935685, 29936841, 29937565, 29937655
29937956, 29938063, 29938225, 29939075, 29939400, 29939795, 29940373
29941062, 29942096, 29942275, 29942554, 29943670, 29943879, 29944035
29944159, 29944660, 29944963, 29945645, 29946101, 29946388, 29947145
29947242, 29947428, 29948154, 29948165, 29950018, 29950220, 29951620
29951759, 29952700, 29955625, 29956016, 29956222, 29957412, 29957493
29958925, 29960325, 29960884, 29961353, 29961360, 29961609, 29961847
29962160, 29962248, 29962834, 29962927, 29962939, 29965052, 29965207
29965603, 29965888, 29966768, 29967223, 29967386, 29967911, 29968085
29968703, 29969557, 29969985, 29970081, 29970261, 29970273, 29970298
29970587, 29970861, 29971027, 29971481, 29971888, 29971936, 29971951
29972134, 29972176, 29973012, 29989783, 29989845, 29990779, 29991257
29992299, 29993717, 29997326, 29997553, 29997937, 30000518, 30000664

30001105, 30001331, 30003187, 30004660, 30004856, 30006159, 30006280
30006411, 30006472, 30006705, 30006985, 30007450, 30007536, 30007797
30008035, 30008125, 30008198, 30008214, 30008456, 30009528, 30009710
30012181, 30012737, 30013243, 30013535, 30014200, 30015070, 30017836
30018017, 30018126, 30018903, 30019864, 30021830, 30024618, 30025814
30026016, 30026596, 30027614, 30027638, 30027649, 30028182, 30028599
30028649, 30029519, 30029806, 30031027, 30031613, 30032233, 30032376
30032484, 30033040, 30033547, 30034456, 30035444, 30035598, 30036258
30038392, 30038576, 30039796, 30039800, 30039959, 30040157, 30040511
30041501, 30041514, 30042490, 30043398, 30043610, 30043930, 30044108
30044507, 30045242, 30045273, 30045389, 30045484, 30045983, 30046497
30047510, 30047531, 30047702, 30047765, 30047931, 30048688, 30049966
30051176, 30051783, 30051804, 30052740, 30052928, 30053036, 30053501
30053748, 30054980, 30056058, 30057718, 30057799, 30058149, 30058453
30059106, 30059109, 30059821, 30060267, 30060330, 30062364, 30062429
30062736, 30062819, 30064268, 30066352, 30067565, 30068101, 30068384
30068792, 30068871, 30070064, 30071446, 30072018, 30072038, 30072905
30073314, 30073422, 30073744, 30074250, 30074296, 30074349, 30074469
30074472, 30074820, 30075037, 30076058, 30076197, 30076253, 30076604
30078675, 30078934, 30079949, 30080111, 30080266, 30080297, 30080988
30081055, 30081546, 30081580, 30082145, 30082402, 30083100, 30083216
30083488, 30083807, 30084458, 30084606, 30084971, 30085897, 30086596
30086992, 30087165, 30087509, 30088229, 30088421, 30090568, 30092254
30092280, 30092859, 30094929, 30094948, 30095499, 30095591, 30095952
30096138, 30097092, 30097115, 30098251, 30098719, 30099302, 30099420
30099454, 30099852, 30100354, 30101090, 30101186, 30101541, 30101847
30102774, 30103551, 30103553, 30104348, 30104378, 30104555, 30105458
30106748, 30106901, 30108012, 30109365, 30110224, 30110370, 30110518
30114477, 30114489, 30114534, 30116085, 30116203, 30116753, 30116854
30117209, 30117335, 30117469, 30117593, 30118261, 30118279, 30120608
30121009, 30122523, 30122583, 30123138, 30124026, 30125765, 30126145
30126470, 30127145, 30127522, 30127805, 30127904, 30128047, 30128231
30130240, 30131286, 30131645, 30132708, 30132989, 30133841, 30134103
30134746, 30135396, 30135731, 30135942, 30136102, 30136346, 30137792
30138600, 30138948, 30139392, 30140425, 30141240, 30142527, 30142802
30142812, 30142815, 30142907, 30143470, 30143593, 30145712, 30146593
30146969, 30147195, 30147307, 30147308, 30147473, 30147928, 30148343
30148929, 30148966, 30148999, 30149035, 30149658, 30150606, 30150710
30151636, 30153533, 30153552, 30153885, 30154633, 30155241, 30155320
30155388, 30155489, 30155814, 30155837, 30155999, 30156569, 30157526
30158313, 30159329, 30159488, 30159511, 30159536, 30159690, 30159752
30159760, 30160025, 30160625, 30161094, 30163243, 30164238, 30164714
30165493, 30165503, 30165876, 30165892, 30165897, 30166257, 30166352
30167787, 30169254, 30170104, 30172925, 30173113, 30173370, 30173556

30174102, 30174394, 30174401, 30175180, 30175291, 30175478, 30175587
30177597, 30178250, 30178839, 30178990, 30179012, 30179038, 30179644
30179894, 30180208, 30180643, 30181756, 30182498, 30183367, 30183696
30183715, 30183920, 30184102, 30185852, 30186319, 30186476, 30186706
30187627, 30187866, 30188631, 30189516, 30189535, 30190090, 30191274
30192691, 30192729, 30192853, 30193165, 30193262, 30193505, 30193506
30193584, 30193736, 30194612, 30194710, 30194972, 30195667, 30195668
30195684, 30195773, 30196195, 30196358, 30196629, 30198239, 30198598
30198861, 30198905, 30199890, 30200034, 30200132, 30200237, 30200680
30200758, 30202349, 30202388, 30202407, 30203929, 30204042, 30204542
30206220, 30206493, 30206675, 30207473, 30207519, 30208327, 30208690
30208723, 30209222, 30209736, 30210027, 30210429, 30210753, 30210884
30211567, 30213031, 30213540, 30214769, 30214826, 30215130, 30215302
30215351, 30217206, 30217562, 30217982, 30218044, 30218317, 30218956
30219222, 30220932, 30221115, 30221237, 30221298, 30222512, 30222669
30222975, 30223712, 30223847, 30223990, 30224544, 30224650, 30224725
30224868, 30224950, 30225265, 30225439, 30225443, 30225718, 30225837
30225844, 30226244, 30227400, 30228422, 30228567, 30229030, 30229126
30229683, 30230183, 30232638, 30233105, 30233536, 30233934, 30234132
30234227, 30235878, 30235919, 30235979, 30236092, 30236399, 30236554
30236746, 30236883, 30236964, 30237477, 30237640, 30238211, 30238715
30239480, 30240010, 30240547, 30240858, 30240930, 30240972, 30241567
30241807, 30241829, 30241920, 30242120, 30242724, 30243216, 30243720
30244340, 30244831, 30246053, 30246179, 30247305, 30248520, 30248531
30248564, 30249432, 30249738, 30249927, 30251003, 30251130, 30252005
30252098, 30252156, 30252458, 30252977, 30253035, 30253090, 30253608
30253705, 30253761, 30253835, 30254206, 30254525, 30254576, 30254726
30255143, 30255528, 30256542, 30257412, 30257908, 30259120, 30259469
30260523, 30260595, 30262248, 30263013, 30263377, 30264405, 30265523
30265608, 30265615, 30265703, 30266791, 30267155, 30269428, 30269748
30270647, 30270744, 30271114, 30272329, 30273212, 30274090, 30274188
30274324, 30274662, 30275434, 30275548, 30275569, 30275578, 30275784
30276144, 30276243, 30277120, 30277451, 30277589, 30277648, 30277733
30277884, 30277887, 30278402, 30281428, 30281615, 30282501, 30282591
30282918, 30283296, 30283577, 30283579, 30283581, 30283832, 30283932
30284219, 30284369, 30284751, 30285026, 30285166, 30285251, 30285341
30285457, 30285540, 30285843, 30286961, 30288343, 30288491, 30289074
30289458, 30290700, 30291536, 30292305, 30293345, 30294267, 30294465
30294671, 30294865, 30295110, 30295137, 30295549, 30295790, 30295808
30297905, 30299367, 30299817, 30299934, 30300030, 30300342, 30300363
30300523, 30300538, 30304037, 30305163, 30305264, 30305395, 30305568
30305603, 30305880, 30306407, 30307814, 30307883, 30308368, 30308578
30308624, 30308772, 30308947, 30309098, 30309798, 30310195, 30311826
30312094, 30312546, 30313749, 30313848, 30313989, 30314079, 30314198

30314837, 30316667, 30316897, 30317005, 30317209, 30317397, 30318638
30318943, 30319080, 30319099, 30320029, 30321076, 30321398, 30322980
30323219, 30323658, 30323820, 30323849, 30324059, 30324180, 30324466
30324649, 30325407, 30325786, 30326115, 30326882, 30327149, 30327581
30327678, 30327810, 30328168, 30328209, 30328690, 30329209, 30329737
30329751, 30330123, 30331254, 30331356, 30331759, 30332505, 30332893
30334484, 30334563, 30335127, 30335832, 30335987, 30336032, 30336383
30336530, 30336742, 30336996, 30337245, 30338434, 30338591, 30339049
30339103, 30339605, 30340540, 30341713, 30342371, 30342878, 30343370
30343750, 30344614, 30345201, 30345432, 30345809, 30345926, 30345950
30346330, 30346729, 30346847, 30346867, 30347215, 30347410, 30349714
30350177, 30350543, 30352278, 30352532, 30352581, 30352623, 30352715
30354034, 30355490, 30356060, 30356461, 30357463, 30357698, 30357897
30358416, 30359614, 30360383, 30360653, 30361070, 30361635, 30362003
30362850, 30363088, 30363193, 30363311, 30363658, 30363716, 30364329
30364481, 30364613, 30364835, 30365745, 30367193, 30368048, 30368482
30368534, 30368668, 30368917, 30371264, 30371623, 30371909, 30372081
30373419, 30373541, 30373550, 30374345, 30374570, 30374739, 30375109
30376986, 30377347, 30377692, 30377729, 30380511, 30380907, 30381207
30381525, 30381614, 30382364, 30382646, 30382982, 30383286, 30384121
30384152, 30387628, 30387666, 30388341, 30388853, 30389229, 30389414
30389507, 30389821, 30390279, 30390382, 30390635, 30391272, 30391794
30392011, 30392870, 30392987, 30393110, 30393317, 30393653, 30393944
30394509, 30394738, 30394974, 30395132, 30396120, 30396946, 30396974
30397100, 30398099, 30398251, 30398257, 30398422, 30398770, 30399906
30402386, 30403284, 30403412, 30403763, 30403877, 30403881, 30403902
30403989, 30404117, 30404153, 30404357, 30404639, 30406227, 30406709
30408128, 30408515, 30408808, 30409207, 30409339, 30409472, 30409590
30412188, 30412772, 30412863, 30412885, 30412921, 30413137, 30413294
30414491, 30414679, 30414714, 30416034, 30416603, 30417648, 30417732
30418926, 30419024, 30419196, 30419450, 30420105, 30420452, 30421009
30421026, 30421204, 30421439, 30421476, 30421706, 30422487, 30423135
30423218, 30424347, 30430921, 30431274, 30431504, 30431582, 30431698
30431703, 30431717, 30431867, 30432101, 30432470, 30433177, 30434793
30436326, 30436399, 30437003, 30437149, 30438224, 30439985, 30440651
30440712, 30441277, 30441687, 30441959, 30442266, 30442749, 30442805
30442874, 30442884, 30443393, 30446436, 30446583, 30446820, 30447060
30447498, 30447589, 30447994, 30448182, 30448348, 30448355, 30448917
30449194, 30449837, 30450787, 30453442, 30454090, 30455427, 30457633
30457697, 30458080, 30458568, 30458593, 30460095, 30460558, 30460842
30460922, 30461123, 30461458, 30462439, 30463938, 30464250, 30464655
30466081, 30466214, 30469579, 30469777, 30470402, 30470947, 30472891
30473634, 30474167, 30474386, 30474774, 30475041, 30475115, 30475813
30476768, 30477588, 30477685, 30477691, 30477767, 30479252, 30479647

30479715, 30480591, 30480872, 30481004, 30483065, 30483140, 30483217
30483521, 30484042, 30484623, 30484801, 30485255, 30486436, 30486896
30487387, 30487697, 30489582, 30490014, 30490578, 30490671, 30491456
30492380, 30493331, 30493518, 30494259, 30494900, 30495035, 30495078
30495133, 30495483, 30496957, 30497057, 30497120, 30497765, 30498824
30500224, 30500297, 30500344, 30500582, 30501574, 30502415, 30503943
30505029, 30505497, 30506794, 30506991, 30506996, 30507032, 30507313
30508100, 30509112, 30509277, 30510347, 30510527, 30510718, 30512690
30513285, 30513353, 30513480, 30513848, 30515886, 30516868, 30517214
30517516, 30517635, 30518114, 30518349, 30518447, 30518923, 30519188
30520662, 30521788, 30522285, 30522998, 30523137, 30523538, 30523601
30523750, 30524736, 30527198, 30527275, 30528547, 30528637, 30528687
30528704, 30528731, 30528935, 30529790, 30529915, 30529940, 30530585
30532811, 30533132, 30533580, 30534351, 30534549, 30534662, 30534827
30535905, 30536237, 30537403, 30537405, 30537533, 30537584, 30538141
30538818, 30539519, 30539866, 30540109, 30540407, 30544247, 30544595
30544629, 30544752, 30545040, 30545281, 30545556, 30549255, 30549368
30549637, 30549789, 30549881, 30551000, 30551123, 30554178, 30556326
30556523, 30556581, 30556807, 30557386, 30557803, 30558561, 30559129
30559218, 30559252, 30560365, 30560513, 30561404, 30561590, 30561737
30564139, 30564343, 30564898, 30565004, 30565595, 30565805, 30566054
30567372, 30568514, 30568896, 30570083, 30571306, 30572816, 30573236
30573703, 30575243, 30575697, 30576112, 30576393, 30576853, 30577071
30577591, 30578221, 30579051, 30580813, 30580887, 30581448, 30582221
30582500, 30584767, 30585407, 30586493, 30587001, 30588738, 30589914
30591028, 30591475, 30592859, 30593046, 30593104, 30593863, 30593899
30594167, 30595114, 30595408, 30595860, 30596024, 30596320, 30596488
30596694, 30598682, 30598746, 30598919, 30599405, 30599407, 30600173
30600184, 30602230, 30602828, 30603211, 30605215, 30605676, 30606345
30606451, 30608583, 30609799, 30610052, 30610097, 30610406, 30610667
30611527, 30611603, 30612199, 30613035, 30613937, 30613971, 30614411
30614497, 30616406, 30616738, 30616776, 30617002, 30617626, 30618056
30618230, 30618406, 30619112, 30619138, 30619383, 30619414, 30619525
30619728, 30619787, 30620805, 30621255, 30621910, 30622393, 30622528
30622755, 30623138, 30623142, 30624243, 30624792, 30624864, 30624874
30625121, 30628834, 30628899, 30629139, 30629643, 30629799, 30630391
30630829, 30630930, 30631393, 30631523, 30633259, 30633395, 30633938
30634548, 30634559, 30635183, 30635302, 30635326, 30635360, 30637270
30637319, 30637841, 30638712, 30639996, 30640436, 30641541, 30641755
30641900, 30642124, 30644358, 30644530, 30644766, 30644889, 30645590
30645896, 30645938, 30646077, 30647133, 30649310, 30650297, 30650404
30651231, 30651570, 30651621, 30651674, 30652515, 30652595, 30652813
30652853, 30654131, 30654558, 30655504, 30655906, 30656839, 30657196
30657365, 30657566, 30657624, 30657706, 30657875, 30657906, 30657940

30658421, 30658533, 30658555, 30658702, 30659940, 30660412, 30661000
30661939, 30662634, 30662651, 30662736, 30663591, 30663646, 30664266
30665036, 30665399, 30665720, 30666902, 30668407, 30668754, 30670096
30670328, 30670369, 30670584, 30671606, 30671720, 30671813, 30671958
30674373, 30674959, 30676209, 30677633, 30679595, 30679707, 30679771
30679804, 30681085, 30681462, 30681516, 30681521, 30682289, 30684902
30685163, 30686017, 30686131, 30686809, 30687047, 30689557, 30689988
30690686, 30691604, 30691731, 30691857, 30692462, 30692473, 30692760
30693791, 30694947, 30695670, 30696566, 30696821, 30698289, 30699770
30702732, 30703610, 30704826, 30705448, 30706073, 30707740, 30708735
30710088, 30710506, 30710783, 30710807, 30710917, 30711370, 30711386
30712670, 30713133, 30714151, 30714715, 30716001, 30716863, 30718841
30718862, 30719327, 30719419, 30720736, 30720844, 30722105, 30722705
30723671, 30724679, 30724881, 30726204, 30727701, 30727759, 30728196
30729278, 30729604, 30729839, 30730026, 30732711, 30733270, 30733563
30734242, 30734362, 30734707, 30735091, 30735153, 30735624, 30735736
30737970, 30739013, 30739876, 30740115, 30740250, 30740444, 30740669
30740997, 30741263, 30747820, 30748411, 30748707, 30749181, 30749644
30749722, 30750219, 30750991, 30751171, 30751521, 30751527, 30751639
30751968, 30753432, 30755348, 30758836, 30758854, 30758943, 30759573
30760739, 30761871, 30761878, 30763272, 30763305, 30763639, 30763754
30763970, 30764405, 30764663, 30764706, 30764976, 30765486, 30765995
30767277, 30767654, 30768636, 30769312, 30770717, 30771009, 30772069
30773164, 30773696, 30773797, 30776416, 30776676, 30776929, 30777519
30777759, 30778855, 30779240, 30781032, 30781041, 30781461, 30781970
30782266, 30782300, 30782414, 30783395, 30783551, 30785101, 30786237
30786641, 30786655, 30787365, 30788973, 30789904, 30790047, 30790441
30801050, 30801296, 30801510, 30803210, 30804646, 30806757, 30806984
30807723, 30807888, 30808109, 30808364, 30808869, 30809087, 30809267
30810418, 30810680, 30810765, 30812574, 30814266, 30814285, 30815269
30815495, 30815852, 30815994, 30816760, 30816938, 30819340, 30819629
30819756, 30820155, 30821297, 30822207, 30822502, 30822919, 30823744
30825391, 30825419, 30825656, 30826474, 30827849, 30828205, 30828350
30829779, 30829844, 30830555, 30832775, 30833454, 30834068, 30834110
30834705, 30835184, 30835219, 30835853, 30836129, 30838605, 30839253
30839315, 30839451, 30839836, 30839961, 30840150, 30840791, 30840793
30841241, 30842277, 30843271, 30844839, 30845806, 30846063, 30846159
30846263, 30846782, 30847442, 30847871, 30848028, 30848097, 30848773
30851448, 30851951, 30852945, 30852954, 30855101, 30856358, 30857501
30857721, 30858444, 30858810, 30858877, 30858919, 30860741, 30860803
30861988, 30862285, 30863115, 30864607, 30865346, 30865805, 30866141
30866988, 30867685, 30868010, 30868186, 30869131, 30870043, 30870248
30870439, 30870513, 30871716, 30871792, 30873527, 30874084, 30874270
30874337, 30874660, 30876666, 30879169, 30879708, 30880774, 30880913

30881161, 30881407, 30883715, 30883785, 30883877, 30886188, 30887501
30887777, 30887976, 30887989, 30889443, 30889607, 30889723, 30890720
30890752, 30890971, 30891760, 30891792, 30893601, 30895426, 30895577
30896615, 30896620, 30896685, 30898131, 30898366, 30898381, 30898748
30898939, 30901889, 30902655, 30904672, 30905604, 30906274, 30906407
30909596, 30909918, 30910264, 30910267, 30913399, 30914272, 30914411
30914674, 30915781, 30919403, 30919587, 30919691, 30919804, 30920082
30921136, 30921259, 30922450, 30922936, 30922996, 30923514, 30923517
30923597, 30923732, 30923940, 30925316, 30925419, 30925828, 30927440
30927821, 30929206, 30930149, 30930339, 30931068, 30931311, 30931981
30932674, 30932923, 30933117, 30936251, 30936831, 30936942, 30937340
30937391, 30937410, 30938413, 30939307, 30939317, 30939934, 30940259
30940382, 30940868, 30940869, 30941056, 30944643, 30945005, 30945772
30946072, 30946141, 30946595, 30946768, 30946843, 30946876, 30946896
30947294, 30948278, 30950326, 30950786, 30952104, 30952191, 30953157
30953266, 30953836, 30954062, 30955702, 30956571, 30956647, 30957739
30958493, 30960314, 30960356, 30960736, 30961566, 30961824, 30964194
30965111, 30965554, 30965649, 30966205, 30967084, 30968737, 30968781
30970518, 30972817, 30972841, 30972887, 30972947, 30972951, 30972959
30972966, 30973085, 30973113, 30973127, 30973137, 30973143, 30973197
30973698, 30973715, 30973877, 30974207, 30974813, 30976603, 30977294
30977411, 30978554, 30978747, 30979701, 30980023, 30980115, 30980317
30980733, 30981182, 30981240, 30983064, 30985027, 30985906, 30986423
30987088, 30987105, 30987243, 30987717, 30987724, 30988444, 30989951
30990034, 30992120, 30992330, 30992477, 30992597, 30993198, 30993518
30993604, 30994996, 30996945, 30996991, 30997375, 30997960, 30998035
30998662, 30998759, 30998847, 30999219, 31000312, 31001017, 31001455
31001490, 31001859, 31002223, 31002346, 31002923, 31003137, 31003659
31003759, 31004077, 31004719, 31004844, 31004871, 31005003, 31006011
31006259, 31006792, 31006953, 31008240, 31008858, 31008907, 31009032
31009271, 31009545, 31009590, 31009680, 31010218, 31010554, 31010976
31011361, 31013127, 31013531, 31014323, 31015330, 31016413, 31018218
31019249, 31019407, 31021068, 31021109, 31021157, 31021324, 31021542
31021780, 31022858, 31025267, 31025520, 31025531, 31025859, 31026220
31026591, 31026860, 31026870, 31027747, 31028883, 31028986, 31029936
31030898, 31031240, 31031955, 31032463, 31032904, 31032913, 31034794
31035287, 31035916, 31037421, 31038220, 31038447, 31038817, 31039337
31039627, 31039928, 31041540, 31042208, 31042337, 31043483, 31043630
31043695, 31043747, 31044145, 31044460, 31044504, 31044951, 31045929
31046188, 31046619, 31046830, 31047022, 31047169, 31047333, 31047697
31047740, 31048025, 31048741, 31049215, 31049995, 31050103, 31050433
31050557, 31051056, 31051075, 31052735, 31052809, 31053669, 31054177
31054874, 31055142, 31056909, 31057402, 31058548, 31061482, 31061504
31062010, 31062645, 31063315, 31063380, 31063769, 31064025, 31065701

31065838, 31066082, 31066250, 31066265, 31066554, 31067456, 31067483
31067892, 31067913, 31069059, 31070528, 31071080, 31073424, 31073440
31073586, 31074032, 31075323, 31075960, 31077117, 31077365, 31078391
31078757, 31079204, 31080474, 31081558, 31082719, 31084778, 31084921
31086467, 31086869, 31086954, 31087361, 31087679, 31088115, 31088341
31089259, 31089270, 31090262, 31091402, 31091469, 31091868, 31092129
31092233, 31092581, 31092921, 31094183, 31094228, 31094249, 31094374
31094688, 31095972, 31096846, 31097760, 31097961, 31098661, 31098870
31099312, 31099926, 31099981, 31100172, 31101386, 31101840, 31103065
31103804, 31104809, 31105225, 31105733, 31105896, 31106140, 31106577
31107577, 31108603, 31108644, 31109506, 31109924, 31110021, 31110887
31112088, 31112209, 31112530, 31112972, 31113089, 31113177, 31113249
31113426, 31113682, 31114116, 31114265, 31114671, 31115201, 31115502
31115653, 31117282, 31118486, 31118702, 31118809, 31118844, 31119057
31119467, 31119846, 31120361, 31122876, 31123976, 31124213, 31124363
31124821, 31124914, 31125773, 31125849, 31125918, 31126053, 31126058
31127043, 31127457, 31127961, 31127968, 31127969, 31128086, 31129851
31130156, 31132732, 31134430, 31137765, 31138106, 31138371, 31139643
31140940, 31141792, 31142377, 31142749, 31142815, 31143146, 31143415
31143870, 31145389, 31145403, 31145525, 31145804, 31146338, 31146727
31151483, 31153120, 31153485, 31155085, 31155305, 31155634, 31156301
31156383, 31156767, 31156898, 31158151, 31158341, 31158380, 31159382
31161861, 31162457, 31162711, 31162915, 31163379, 31163498, 31163534
31165038, 31165577, 31165722, 31166083, 31166801, 31168440, 31169366
31170082, 31171096, 31171147, 31171631, 31172207, 31172233, 31172642
31174836, 31175365, 31176451, 31176502, 31177193, 31177204, 31177221
31178051, 31178058, 31178103, 31180519, 31181375, 31181380, 31181989
31182159, 31182451, 31182756, 31182793, 31183413, 31184230, 31185224
31188038, 31188398, 31189749, 31190624, 31191224, 31192039, 31192261
31192739, 31193292, 31193511, 31193695, 31193745, 31193936, 31194015
31194264, 31195090, 31195430, 31195600, 31195838, 31196272, 31196310
31196395, 31196812, 31200057, 31200845, 31201001, 31201366, 31201611
31202536, 31204002, 31204412, 31204878, 31205834, 31206070, 31206201
31207446, 31208287, 31213034, 31214119, 31214928, 31215422, 31215438
31215548, 31215854, 31216823, 31216995, 31217946, 31218837, 31218904
31219047, 31219975, 31220188, 31220549, 31220837, 31220881, 31220912
31221454, 31222780, 31223382, 31224819, 31225538, 31226448, 31226534
31228670, 31230250, 31230775, 31233170, 31233235, 31234765, 31234790
31234983, 31235797, 31236624, 31240626, 31240864, 31242319, 31242976
31243859, 31244165, 31244968, 31245856, 31247532, 31247838, 31248496
31249008, 31249406, 31249689, 31249696, 31250120, 31250152, 31250221
31251325, 31252659, 31253451, 31254243, 31254297, 31254535, 31254929
31255369, 31255869, 31256383, 31257740, 31257826, 31258101, 31258344
31258697, 31258995, 31260692, 31261467, 31261641, 31262275, 31262388

31265651, 31265773, 31266236, 31268557, 31270711, 31270847, 31271032
31274074, 31279670, 31281708, 31282037, 31283557, 31287091, 31287296
31287741, 31287871, 31289115, 31290017, 31290300, 31290427, 31291986
31292298, 31293484, 31293791, 31293867, 31298871, 31301460, 31303032
31304573, 31304945, 31305114, 31305309, 31305624, 31306248, 31306261
31306867, 31306927, 31307715, 31309379, 31309867, 31310564, 31310624
31311732, 31311830, 31312450, 31312976, 31313117, 31313177, 31313214
31313444, 31313812, 31314323, 31314885, 31315441, 31315495, 31315876
31316250, 31317032, 31321092, 31322720, 31323383, 31324442, 31324507
31325584, 31326320, 31326608, 31326977, 31326998, 31327046, 31327259
31327278, 31327349, 31327391, 31327896, 31331354, 31331372, 31333156
31334606, 31334961, 31335037, 31336298, 31336371, 31338249, 31338673
31338686, 31338769, 31339457, 31339643, 31339744, 31341138, 31341746
31343110, 31344046, 31344097, 31348711, 31348922, 31349426, 31350348
31353098, 31353610, 31355339, 31356601, 31356954, 31357581, 31357737
31358308, 31358474, 31358511, 31359215, 31359366, 31360146, 31360155
31360214, 31360282, 31360314, 31360323, 31360469, 31360529, 31362408
31362692, 31364001, 31364383, 31366716, 31367188, 31367364, 31368027
31369444, 31370500, 31372498, 31373825, 31373837, 31373843, 31374283
31374449, 31374738, 31375865, 31376011, 31376708, 31377129, 31377206
31377487, 31377701, 31377808, 31377936, 31380443, 31381174, 31381701
31382518, 31383049, 31383396, 31383464, 31383814, 31384324, 31385668
31386394, 31386696, 31387033, 31387123, 31387426, 31387443, 31388201
31388288, 31390936, 31390955, 31391991, 31393208, 31393600, 31393991
31394341, 31394347, 31394365, 31394544, 31395222, 31395247, 31396027
31396609, 31396695, 31396980, 31398505, 31398617, 31398663, 31398721
31398761, 31399131, 31399883, 31400754, 31401831, 31402078, 31402598
31403177, 31403565, 31404014, 31404130, 31404263, 31404487, 31404550
31405300, 31405751, 31408636, 31408732, 31409483, 31409912, 31409964
31410289, 31411163, 31412209, 31414023, 31414524, 31415324, 31416193
31416213, 31416250, 31417007, 31417192, 31417242, 31417336, 31417844
31417990, 31418442, 31419363, 31420295, 31420316, 31420320, 31420337
31421316, 31422440, 31422620, 31423645, 31424838, 31425167, 31425761
31425800, 31427345, 31429501, 31429590, 31429770, 31429784, 31429844
31429971, 31430722, 31430735, 31430910, 31431005, 31431326, 31431771
31431964, 31431969, 31431971, 31431973, 31431975, 31431986, 31432906
31433092, 31433579, 31433749, 31434421, 31434805, 31434870, 31434915
31435163, 31435308, 31435735, 31437030, 31437448, 31440252, 31440426
31440813, 31441916, 31441920, 31442332, 31442714, 31443030, 31444353
31444516, 31445356, 31446431, 31447733, 31448642, 31448680, 31449354
31450392, 31450653, 31450942, 31451019, 31453375, 31453585, 31454428
31454972, 31454988, 31455051, 31455597, 31456857, 31457334, 31458049
31458537, 31458634, 31458739, 31459231, 31459242, 31459369, 31461990
31462082, 31462940, 31462969, 31463613, 31464165, 31465389, 31466433

31468060, 31468705, 31469001, 31469418, 31471441, 31471589, 31471856
31472077, 31473148, 31474315, 31475378, 31475635, 31476093, 31476603
31476701, 31476736, 31477424, 31477695, 31479072, 31479075, 31479106
31479272, 31479772, 31481750, 31481893, 31483949, 31484385, 31484603
31485340, 31485386, 31485507, 31486061, 31486557, 31487441, 31487491
31487775, 31487826, 31487844, 31488085, 31488464, 31489032, 31489137
31489481, 31489590, 31489672, 31489936, 31490604, 31491634, 31492171
31492191, 31492588, 31492655, 31492856, 31493153, 31493840, 31494095
31494264, 31494420, 31494794, 31495254, 31495564, 31496174, 31497550
31498559, 31499370, 31499700, 31500699, 31500719, 31500971, 31501139
31502301, 31503349, 31503674, 31503934, 31504723, 31505088, 31506095
31507107, 31507129, 31508229, 31508460, 31508712, 31509279, 31510891
31510910, 31511142, 31511519, 31511940, 31512044, 31512262, 31513011
31515163, 31515869, 31515879, 31515911, 31515929, 31516164, 31516184
31516255, 31516265, 31517395, 31517502, 31518371, 31521504, 31522708
31523548, 31523578, 31523585, 31523620, 31523646, 31523736, 31523836
31525310, 31525463, 31525609, 31525783, 31526250, 31526903, 31527103
31527199, 31527381, 31528724, 31528738, 31528962, 31529594, 31529967
31530985, 31530995, 31531079, 31532084, 31532176, 31532308, 31532339
31533050, 31533113, 31533274, 31533799, 31533817, 31533833, 31534841
31535073, 31535516, 31535782, 31535870, 31535955, 31536401, 31536731
31537521, 31537736, 31538274, 31538363, 31538891, 31539566, 31541805
31541864, 31541895, 31541905, 31542347, 31542356, 31542851, 31542956
31543810, 31544097, 31545400, 31545477, 31546864, 31547220, 31547445
31547480, 31548675, 31549221, 31549468, 31551142, 31552563, 31552615
31552738, 31552755, 31553289, 31553674, 31553813, 31553968, 31554610
31555126, 31555173, 31555346, 31555539, 31555800, 31556139, 31556950
31557518, 31557663, 31558194, 31559079, 31559085, 31559415, 31559563
31560348, 31560592, 31561886, 31562484, 31563138, 31564060, 31564795
31567124, 31567403, 31567441, 31567719, 31568423, 31569057, 31569867
31570054, 31570161, 31571415, 31571688, 31571742, 31572006, 31572046
31572267, 31573269, 31573457, 31574122, 31574150, 31574244, 31574267
31575529, 31575649, 31575665, 31576738, 31577569, 31578202, 31578994
31580079, 31580122, 31580374, 31580437, 31581627, 31583865, 31584056
31584555, 31584853, 31585040, 31585319, 31585351, 31585491, 31585789
31586381, 31586862, 31588631, 31588933, 31590826, 31591384, 31591400
31591409, 31591421, 31592707, 31594725, 31595025, 31595632, 31597104
31597727, 31598146, 31599363, 31599990, 31600023, 31600291, 31600894
31601385, 31602782, 31603199, 31603380, 31603625, 31605119, 31605370
31605737, 31606474, 31607937, 31608753, 31609974, 31610024, 31611125
31612535, 31613275, 31613838, 31615736, 31616101, 31616104, 31617492
31619276, 31620252, 31620748, 31620944, 31622250, 31623413, 31623463
31625579, 31625618, 31625959, 31626438, 31626493, 31626528, 31626572
31627587, 31628155, 31628311, 31628753, 31628975, 31629056, 31630551

31630794, 31630946, 31631985, 31632273, 31632534, 31632605, 31632663
31633224, 31634510, 31634805, 31635875, 31635963, 31635980, 31637094
31637607, 31637680, 31638398, 31638733, 31638943, 31639082, 31640139
31640197, 31640240, 31642462, 31642556, 31642639, 31644775, 31645288
31647304, 31648120, 31648157, 31649223, 31649447, 31649818, 31649819
31649958, 31649962, 31650046, 31650112, 31650202, 31652641, 31652763
31653080, 31653167, 31653634, 31653647, 31653758, 31653913, 31653916
31653917, 31654116, 31654119, 31654122, 31654125, 31654133, 31655807
31656263, 31656601, 31657084, 31657211, 31657324, 31657462, 31657483
31657681, 31658464, 31658819, 31658943, 31659065, 31660283, 31661865
31661879, 31662143, 31662504, 31662625, 31662925, 31663189, 31663788
31664203, 31664399, 31666449, 31666684, 31667096, 31667180, 31667940
31668033, 31668061, 31668065, 31668312, 31668694, 31668872, 31669064
31670014, 31670263, 31670353, 31671512, 31671568, 31672605, 31673406
31674380, 31674801, 31675568, 31675852, 31675860, 31676324, 31676941
31677345, 31677460, 31677479, 31677587, 31678629, 31679900, 31680709
31680713, 31680985, 31682766, 31683044, 31683260, 31683311, 31683373
31683708, 31684080, 31684494, 31685612, 31685882, 31685989, 31686979
31688127, 31688241, 31688978, 31691030, 31691089, 31691480, 31694070
31695062, 31695693, 31696043, 31696577, 31696853, 31697741, 31699230
31700234, 31701239, 31701517, 31701910, 31703614, 31705178, 31705265
31705356, 31705704, 31706595, 31706956, 31707190, 31708133, 31708175
31709647, 31709739, 31709777, 31710272, 31710587, 31711155, 31711720
31711889, 31711997, 31712260, 31714645, 31715935, 31716510, 31716873
31717010, 31718000, 31718134, 31718346, 31718842, 31719167, 31720344
31720377, 31720839, 31720942, 31721557, 31721863, 31721880, 31722558
31722646, 31723226, 31723323, 31723651, 31725154, 31727229, 31727231
31727233, 31727560, 31728149, 31728160, 31728440, 31728444, 31728447
31728477, 31728486, 31728858, 31730485, 31730766, 31731076, 31731407
31732311, 31732672, 31734007, 31734012, 31734017, 31734583, 31735662
31736095, 31737059, 31737603, 31739198, 31739891, 31740252, 31741359
31741938, 31743771, 31744832, 31745130, 31745233, 31745528, 31746054
31747706, 31747818, 31747935, 31747989, 31748000, 31748182, 31748233
31748944, 31750577, 31750581, 31750889, 31752492, 31752502, 31752633
31753202, 31753425, 31753478, 31753692, 31754240, 31754546, 31754887
31754980, 31755245, 31755451, 31756415, 31756465, 31756568, 31756650
31757357, 31757775, 31757824, 31758083, 31758344, 31758846, 31758939
31758960, 31759565, 31760278, 31760592, 31760738, 31761510, 31762819
31763030, 31763707, 31763905, 31764089, 31764239, 31764866, 31764913
31765068, 31765246, 31765257, 31765296, 31766499, 31766534, 31766675
31766696, 31767204, 31767237, 31767598, 31767852, 31768490, 31768497
31768505, 31768866, 31769267, 31769373, 31769530, 31770289, 31771302
31771370, 31771410, 31771468, 31771745, 31771836, 31772002, 31772070
31773582, 31773909, 31774019, 31774132, 31775101, 31776121, 31776659

31776785, 31776994, 31777410, 31777489, 31779833, 31780567, 31781897
31781944, 31783422, 31783451, 31783782, 31783985, 31785445, 31785572
31786282, 31786838, 31787057, 31787655, 31788104, 31788594, 31788704
31788761, 31788785, 31789167, 31789178, 31789335, 31790500, 31790757
31792397, 31792465, 31792615, 31793126, 31793691, 31793713, 31794336
31794882, 31795231, 31796208, 31796277, 31796882, 31798001, 31798669
31798702, 31798742, 31799858, 31800053, 31800059, 31800139, 31800757
31804838, 31805812, 31807179, 31807431, 31807516, 31809510, 31809729
31810213, 31812352, 31812824, 31813214, 31815099, 31815227, 31816158
31816343, 31816631, 31818080, 31820632, 31820662, 31820842, 31820859
31820926, 31821129, 31821835, 31822026, 31822951, 31823051, 31823327
31823716, 31824504, 31824792, 31824934, 31825151, 31825324, 31825410
31827339, 31827605, 31827912, 31828378, 31828999, 31829366, 31829617
31829639, 31831950, 31832785, 31832901, 31833172, 31833585, 31833896
31833948, 31834191, 31834214, 31834611, 31834677, 31834871, 31835805
31835854, 31836113, 31836454, 31839038, 31839779, 31839888, 31840180
31840490, 31840516, 31840992, 31841147, 31841210, 31841696, 31842545
31843028, 31843462, 31843476, 31843716, 31843845, 31844137, 31844357
31844557, 31844560, 31845092, 31845403, 31845803, 31845955, 31846318
31846454, 31847489, 31847541, 31848331, 31848365, 31848391, 31848903
31849859, 31850132, 31850227, 31851383, 31851449, 31852482, 31852506
31852574, 31854285, 31854692, 31855307, 31855484, 31855526, 31855996
31857143, 31858580, 31858621, 31858833, 31859067, 31859143, 31860193
31860406, 31860760, 31862359, 31862593, 31862611, 31863118, 31863250
31863890, 31864818, 31864947, 31865822, 31866141, 31866159, 31867037
31867331, 31867351, 31869348, 31869601, 31869944, 31869954, 31869966
31870010, 31870150, 31870164, 31870190, 31870196, 31871384, 31871692
31872230, 31872320, 31873155, 31875140, 31876138, 31876192, 31876368
31876867, 31878256, 31878314, 31880154, 31881527, 31883124, 31883343
31883739, 31883845, 31886547, 31886695, 31886745, 31886848, 31887130
31887709, 31888148, 31888731, 31889222, 31890230, 31890516, 31892029
31892856, 31895670, 31897023, 31897178, 31897786, 31897854, 31898193
31898257, 31900585, 31902517, 31902662, 31903523, 31903786, 31903962
31904739, 31904933, 31905033, 31907042, 31907137, 31907510, 31907565
31907792, 31907962, 31908345, 31908482, 31908571, 31908750, 31909295
31909807, 31912638, 31912834, 31913650, 31913839, 31914003, 31914943
31915444, 31915968, 31916096, 31916644, 31917378, 31917494, 31917856
31918462, 31919563, 31919952, 31921267, 31922161, 31922580, 31923463
31923622, 31925162, 31925462, 31926203, 31926811, 31926848, 31927078
31927510, 31927930, 31930204, 31932042, 31932196, 31933451, 31933837
31933842, 31933846, 31933914, 31934254, 31934301, 31935672, 31935717
31935970, 31936588, 31936983, 31938116, 31938288, 31939461, 31939486
31939767, 31940176, 31940458, 31941148, 31941948, 31942136, 31942144
31942258, 31942274, 31942473, 31943497, 31943691, 31945038, 31945407

31945659, 31945701, 31945827, 31945928, 31946936, 31947732, 31947861
31949490, 31950244, 31950577, 31951599, 31951628, 31952046, 31952052
31953394, 31953989, 31954223, 31956113, 31956435, 31956920, 31957152
31957564, 31957674, 31957683, 31958038, 31958958, 31959140, 31959253
31960389, 31960603, 31961578, 31961940, 31964519, 31965012, 31965391
31965542, 31966094, 31968431, 31969646, 31970188, 31971792, 31972615
31972671, 31973203, 31974187, 31974424, 31974597, 31974693, 31976303
31977024, 31977257, 31980216, 31980296, 31981745, 31981751, 31982879
31985494, 31985738, 31985961, 31986808, 31986836, 31986905, 31987278
31987922, 31988079, 31988833, 31990386, 31991705, 31992242, 31992615
31992953, 31993051, 31993795, 31994145, 31994206, 31994298, 31995577
31996264, 31996331, 31997107, 31997457, 31997658, 31997660, 31998181
31998189, 31998861, 31999453, 32001851, 32002411, 32003551, 32003908
32004148, 32004299, 32004977, 32005046, 32005048, 32005053, 32005215
32006467, 32006703, 32006824, 32007076, 32007698, 32008408, 32008586
32008716, 32008819, 32009197, 32009334, 32009754, 32010275, 32010593
32010707, 32011107, 32011888, 32012137, 32012400, 32012788, 32012975
32013253, 32013403, 32014520, 32015642, 32015820, 32016884, 32017215
32017301, 32017422, 32017570, 32017635, 32017671, 32018632, 32018953
32020701, 32022223, 32022711, 32022814, 32023471, 32025328, 32028155
32028269, 32032653, 32032733, 32032887, 32033795, 32034318, 32034766
32035268, 32035536, 32035893, 32035899, 32035902, 32036045, 32037237
32037962, 32038054, 32038780, 32038812, 32038844, 32038996, 32040940
32041003, 32041799, 32042256, 32042352, 32042706, 32043743, 32044533
32044903, 32045377, 32046125, 32046587, 32047226, 32048412, 32048921
32050048, 32051896, 32052587, 32053746, 32054806, 32055692, 32056529
32057333, 32057565, 32057639, 32058260, 32060164, 32060577, 32061018
32061146, 32061173, 32061648, 32062227, 32064682, 32066061, 32067130
32067356, 32067675, 32068110, 32068187, 32068190, 32069160, 32069508
32069696, 32069834, 32071457, 32071582, 32072944, 32073027, 32073710
32074450, 32074728, 32075009, 32075020, 32075130, 32076305, 32076561
32077318, 32078078, 32079097, 32079573, 32079739, 32080081, 32080655
32081074, 32081381, 32082098, 32087331, 32087597, 32087956, 32088132
32088478, 32089051, 32089820, 32090518, 32090725, 32092797, 32093558
32094825, 32095097, 32095380, 32095610, 32095658, 32096252, 32097387
32097589, 32097604, 32097767, 32097882, 32097962, 32098224, 32098535
32099153, 32099539, 32099580, 32101305, 32101499, 32102542, 32102722
32102854, 32103383, 32103427, 32103628, 32104324, 32104402, 32104578
32104610, 32105135, 32105239, 32105412, 32107505, 32107621, 32108094
32108115, 32108566, 32108576, 32109384, 32109796, 32111046, 32112798
32112822, 32113113, 32113791, 32114541, 32114561, 32114572, 32114746
32115403, 32115642, 32116952, 32117115, 32117253, 32117490, 32118543
32118727, 32119144, 32119339, 32119565, 32120283, 32120453, 32121014
32121326, 32121673, 32121803, 32121885, 32122197, 32122574, 32123331

32123673, 32124176, 32124570, 32124594, 32124607, 32124611, 32125142
32125160, 32125845, 32127227, 32127448, 32127911, 32128142, 32129659
32130083, 32130485, 32130504, 32131010, 32131401, 32131774, 32132464
32132504, 32133039, 32133898, 32138257, 32138478, 32138782, 32139432
32139659, 32140616, 32140800, 32142788, 32143492, 32143562, 32144917
32147340, 32148419, 32148662, 32149848, 32150818, 32150854, 32151098
32152341, 32153396, 32153619, 32153909, 32156194, 32157050, 32157075
32157078, 32159343, 32161260, 32161381, 32162391, 32164053, 32164112
32165367, 32165759, 32165814, 32165887, 32166950, 32167592, 32167923
32169151, 32170162, 32170190, 32171622, 32171791, 32172050, 32172773
32172777, 32173142, 32173543, 32174321, 32174405, 32174492, 32174571
32175329, 32175780, 32176922, 32177701, 32177869, 32178217, 32178966
32179209, 32179306, 32181149, 32182097, 32182783, 32183102, 32183756
32184235, 32184577, 32184844, 32184855, 32185296, 32186186, 32186983
32187775, 32189400, 32189869, 32189952, 32190132, 32190190, 32190284
32190419, 32190573, 32191427, 32191451, 32193431, 32195333, 32195815
32195946, 32196492, 32196738, 32196943, 32197147, 32198292, 32198368
32198396, 32199681, 32200524, 32201743, 32201903, 32201936, 32203068
32203354, 32205455, 32205514, 32205825, 32207088, 32207920, 32208144
32208326, 32208346, 32208691, 32209784, 32210660, 32211423, 32212041
32212062, 32212635, 32212916, 32213376, 32213696, 32214021, 32214195
32214654, 32214743, 32214782, 32215240, 32215991, 32216027, 32216841
32216930, 32218369, 32218395, 32218498, 32218552, 32219179, 32219318
32219835, 32219988, 32220017, 32220709, 32221141, 32222473, 32223045
32223654, 32223669, 32224140, 32224583, 32225117, 32225353, 32225742
32225899, 32227352, 32228188, 32228677, 32229431, 32229919, 32230213
32230775, 32230953, 32231049, 32231356, 32233406, 32234148, 32234161
32235513, 32236601, 32236685, 32236798, 32237489, 32237778, 32238935
32239137, 32239730, 32240272, 32241889, 32243007, 32243148, 32243814
32243882, 32243985, 32244187, 32245711, 32245850, 32246090, 32247141
32247420, 32248131, 32248405, 32248649, 32249207, 32249371, 32249509
32249640, 32249674, 32250232, 32250238, 32251364, 32252036, 32252213
32252262, 32252294, 32253703, 32254063, 32254399, 32254686, 32255029
32255073, 32255529, 32255753, 32255762, 32258021, 32258388, 32258423
32259063, 32259322, 32259535, 32259785, 32260010, 32260290, 32263923
32264556, 32266406, 32266906, 32267171, 32267610, 32268669, 32268800
32274403, 32277643, 32277793, 32279351, 32280901, 32281066, 32283798
32284241, 32284325, 32284485, 32284608, 32284725, 32285086, 32285717
32285789, 32287797, 32287989, 32289552, 32289858, 32290313, 32290399
32290812, 32290949, 32291114, 32291139, 32292180, 32292805, 32293615
32294031, 32294566, 32294851, 32296259, 32296941, 32297373, 32297469
32297849, 32298173, 32298782, 32300098, 32300822, 32300849, 32301856
32302470, 32302561, 32303160, 32303657, 32304293, 32304712, 32305792
32307046, 32307586, 32309046, 32309488, 32309723, 32312131, 32312412

32312586, 32316070, 32316252, 32316326, 32317012, 32317306, 32318528
32318820, 32318914, 32319410, 32321317, 32321319, 32321765, 32322629
32322738, 32323488, 32323600, 32323816, 32324219, 32325574, 32325611
32327201, 32327690, 32328231, 32329914, 32330269, 32330540, 32331889
32332107, 32334745, 32335257, 32335769, 32338476, 32338736, 32338919
32338953, 32339801, 32340392, 32340885, 32341217, 32341260, 32341820
32342172, 32342345, 32342750, 32342824, 32343092, 32343678, 32344099
32344168, 32344199, 32345001, 32345050, 32345178, 32345272, 32345785
32346649, 32346733, 32347957, 32353343, 32355765, 32355912, 32356340
32356545, 32356609, 32356628, 32357412, 32357665, 32359044, 32361175
32361677, 32362016, 32362066, 32362072, 32362698, 32363549, 32363711
32363981, 32364147, 32366303, 32366461, 32366536, 32367151, 32368161
32368480, 32368789, 32368792, 32369041, 32371828, 32372725, 32374050
32374431, 32374616, 32375438, 32375493, 32376774, 32376872, 32376922
32377901, 32379001, 32379140, 32379303, 32379775, 32380591, 32381403
32381605, 32382021, 32382207, 32385068, 32385141, 32385832, 32386482
32386683, 32386720, 32386877, 32387555, 32387818, 32388247, 32389047
32389497, 32390629, 32390855, 32391021, 32392724, 32393137, 32393612
32394623, 32396085, 32396326, 32397350, 32398714, 32400076, 32401086
32402243, 32403509, 32403748, 32404638, 32404933, 32405239, 32406222
32408640, 32409009, 32409344, 32409942, 32410175, 32412340, 32413042
32413512, 32414944, 32414996, 32415846, 32415989, 32416652, 32416655
32417227, 32417242, 32417274, 32417301, 32417438, 32417632, 32417766
32419774, 32421958, 32422965, 32423678, 32423985, 32424465, 32425097
32425124, 32425194, 32425778, 32425862, 32426213, 32426315, 32426900
32427158, 32427173, 32427226, 32427583, 32427953, 32428097, 32428189
32428330, 32430745, 32431049, 32431067, 32431251, 32431290, 32431413
32432078, 32432245, 32435911, 32436342, 32436460, 32436721, 32436757
32437538, 32439726, 32440681, 32441128, 32441671, 32441834, 32442229
32442404, 32443087, 32443531, 32443744, 32443935, 32444159, 32446565
32449622, 32449909, 32450344, 32453583, 32453611, 32453888, 32455219
32455516, 32455650, 32455742, 32455961, 32457252, 32459153, 32459632
32460136, 32460145, 32461726, 32462153, 32464021, 32464584, 32465193
32465209, 32465466, 32465495, 32465853, 32465894, 32466474, 32467812
32468643, 32469004, 32469225, 32471100, 32471251, 32471346, 32471642
32472589, 32473465, 32474686, 32474827, 32474926, 32474997, 32477479
32478452, 32480419, 32480510, 32480528, 32480541, 32481807, 32483115
32483966, 32484945, 32485859, 32486528, 32486955, 32489206, 32490128
32490416, 32491443, 32492343, 32492382, 32492422, 32492452, 32495545
32495572, 32497756, 32498459, 32498569, 32498752, 32499155, 32500117
32501930, 32503790, 32504340, 32504786, 32505009, 32505439, 32505557
32505634, 32506166, 32506309, 32506473, 32506809, 32507542, 32508585
32509271, 32509584, 32509606, 32509814, 32510116, 32512145, 32512918
32514516, 32515850, 32516336, 32517405, 32517797, 32518029, 32518679

32519995, 32520645, 32520691, 32520994, 32522300, 32522472, 32523206
32523613, 32523750, 32524841, 32525039, 32526118, 32526703, 32527621
32529396, 32529483, 32530202, 32531259, 32531627, 32531647, 32533019
32533225, 32533461, 32534925, 32535106, 32535156, 32535159, 32536006
32538436, 32538824, 32539300, 32539322, 32539914, 32539936, 32540706
32541049, 32542641, 32544124, 32544464, 32544740, 32544784, 32545415
32546408, 32546937, 32548580, 32549168, 32549277, 32549351, 32550051
32550589, 32550751, 32550894, 32551177, 32551246, 32552602, 32553241
32555120, 32555592, 32556165, 32556311, 32556891, 32559543, 32561759
32561791, 32561841, 32562587, 32563106, 32563114, 32563151, 32563940
32565722, 32565870, 32567750, 32567788, 32568163, 32569603, 32569745
32573197, 32573703, 32573942, 32574796, 32576097, 32576508, 32576534
32577408, 32578113, 32578616, 32578792, 32579075, 32579529, 32580082
32580378, 32580852, 32583315, 32583355, 32583375, 32583692, 32584375
32584505, 32586534, 32587305, 32587472, 32587567, 32587793, 32587994
32588298, 32588656, 32588691, 32589147, 32589990, 32593845, 32593877
32593886, 32593955, 32594965, 32595551, 32596355, 32596705, 32597099
32597637, 32598406, 32601769, 32602194, 32602344, 32602599, 32602735
32602871, 32602990, 32603092, 32603152, 32603564, 32603619, 32605116
32606093, 32606489, 32607991, 32608297, 32608821, 32609394, 32609512
32609886, 32610185, 32610271, 32613788, 32614157, 32614583, 32615310
32615776, 32616678, 32618819, 32619195, 32619298, 32619327, 32620859
32620919, 32621140, 32621309, 32622507, 32622612, 32625160, 32625356
32626756, 32627140, 32628131, 32628221, 32629028, 32629772, 32629859
32630060, 32631551, 32631787, 32633251, 32634049, 32635881, 32635931
32638991, 32639432, 32639860, 32639950, 32641593, 32641748, 32642587
32645139, 32646025, 32647170, 32648248, 32649737, 32649749, 32651063
32651769, 32651773, 32652143, 32652573, 32652605, 32653470, 32653669
32654962, 32655446, 32655691, 32656130, 32656231, 32656275, 32657251
32658481, 32659438, 32659574, 32659930, 32659983, 32662165, 32663019
32665550, 32665836, 32666862, 32668907, 32669149, 32670769, 32671437
32671481, 32672057, 32674819, 32675095, 32675227, 32675756, 32676084
32676350, 32676659, 32677000, 32677702, 32682430, 32682586, 32685989
32686338, 32686850, 32690400, 32692372, 32693242, 32697157, 32697431
32697781, 32697859, 32698508, 32698569, 32700396, 32700455, 32700989
32701048, 32702005, 32703155, 32704013, 32704119, 32704231, 32704765
32705734, 32705800, 32706821, 32707007, 32707211, 32710165, 32710534
32710750, 32711741, 32712220, 32712791, 32712916, 32715945, 32716726
32718204, 32718316, 32718721, 32719288, 32720344, 32720458, 32722118
32724505, 32724654, 32725484, 32726772, 32728984, 32730701, 32731498
32732179, 32733671, 32733845, 32734021, 32734171, 32734800, 32735915
32735980, 32736370, 32737774, 32737827, 32737969, 32738356, 32739966
32740421, 32740503, 32740515, 32740987, 32743290, 32743511, 32746831
32747680, 32747738, 32749028, 32750940, 32753371, 32753472, 32754044

32754574, 32754845, 32755493, 32755517, 32755731, 32756914, 32757219
32758096, 32760868, 32760906, 32761294, 32761932, 32762231, 32763283
32763544, 32764690, 32765738, 32766252, 32766397, 32766407, 32766916
32768752, 32769786, 32769880, 32771735, 32775512, 32775526, 32776891
32780676, 32781826, 32782851, 32784393, 32784403, 32786308, 32786309
32788660, 32789228, 32790012, 32793286, 32794120, 32794261, 32795016
32795712, 32797486, 32800137, 32800539, 32801192, 32801303, 32801337
32802926, 32803807, 32804604, 32804609, 32806069, 32806112, 32806915
32807517, 32809152, 32810125, 32810668, 32811069, 32811131, 32816003
32817950, 32818019, 32818230, 32818242, 32818436, 32818545, 32821107
32822436, 32822847, 32823545, 32823692, 32827206, 32828636, 32829060
32829563, 32829937, 32831451, 32831855, 32831901, 32833378, 32834168
32834394, 32834426, 32835524, 32838028, 32838533, 32841689, 32841994
32842415, 32842823, 32843672, 32843754, 32846272, 32846876, 32847975
32848060, 32848531, 32848816, 32850174, 32851615, 32851841, 32852484
32852504, 32855257, 32856375, 32856640, 32857370, 32857881, 32858446
32863795, 32864736, 32866089, 32868344, 32868369, 32869560, 32870681
32872839, 32874995, 32875003, 32875118, 32875482, 32877550, 32878039
32879447, 32879990, 32880225, 32880390, 32881057, 32881462, 32881853
32883252, 32883853, 32887649, 32888458, 32889096, 32889434, 32891500
32892883, 32893686, 32893951, 32894842, 32895105, 32897184, 32897679
32898672, 32898678, 32898971, 32899387, 32900165, 32900208, 32902635
32903472, 32903625, 32907741, 32907975, 32908241, 32908249, 32908946
32909255, 32909292, 32909936, 32910846, 32913527, 32913610, 32914508
32914711, 32915747, 32915760, 32915847, 32916025, 32917969, 32918041
32918394, 32920489, 32920547, 32922090, 32922635, 32924796, 32925421
32925703, 32926513, 32926653, 32930360, 32930423, 32930665, 32931078
32931941, 32935932, 32936005, 32936402, 32936424, 32936537, 32936859
32936950, 32936961, 32937167, 32937338, 32939376, 32939883, 32940440
32940714, 32940955, 32941096, 32941509, 32941792, 32943694, 32945404
32946347, 32946711, 32947264, 32947268, 32952285, 32953258, 32955962
32956092, 32956896, 32958616, 32961142, 32961939, 32962162, 32965460
32966389, 32967871, 32968221, 32968634, 32969466, 32969863, 32970478
32973406, 32976022, 32977489, 32980826, 32982562, 32983419, 32983750
32983871, 32984625, 32984679, 32985908, 32987004, 32987206, 32987308
32988028, 32991527, 32993522, 32993998, 32994080, 32995206, 32995242
32995863, 32996071, 32996974, 32998659, 32999086, 32999329, 32999541
33000440, 33000980, 33001094, 33001615, 33003817, 33004888, 33005241
33008265, 33009224, 33009321, 33009351, 33010173, 33010444, 33011078
33011198, 33013379, 33015716, 33016007, 33018951, 33020510, 33021036
33021642, 33022043, 33022140, 33022926, 33023671, 33025005, 33026533
33026796, 33026949, 33027087, 33027377, 33027525, 33027539, 33027553
33028013, 33028286, 33028462, 33030293, 33031619, 33032299, 33032579
33034103, 33034619, 33034642, 33034846, 33035201, 33035710, 33036321

33037150, 33037531, 33037895, 33038120, 33038479, 33038537, 33039277
33040335, 33043590, 33044062, 33045137, 33046179, 33047645, 33047827
33048074, 33048277, 33049012, 33049866, 33050587, 33050622, 33050626
33056383, 33056579, 33059891, 33059924, 33060161, 33061339, 33061595
33063919, 33064324, 33064565, 33065343, 33065437, 33065526, 33065979
33069366, 33069889, 33072392, 33072854, 33075133, 33075246, 33075452
33076129, 33080651, 33084064, 33085296, 33085361, 33088863, 33089096
33089192, 33090110, 33090127, 33090781, 33090848, 33092087, 33096609
33097433, 33099872, 33100352, 33101055, 33101058, 33102477, 33105276
33105656, 33106822, 33106897, 33107872, 33108317, 33109335, 33110192
33110642, 33110992, 33111729, 33113848, 33114640, 33115438, 33116131
33116481, 33117641, 33120828, 33120920, 33121866, 33121880, 33121934
33123402, 33123404, 33123985, 33125873, 33126216, 33127032, 33127141
33127312, 33129473, 33131526, 33131742, 33132050, 33135083, 33136252
33136601, 33137328, 33139230, 33140218, 33141420, 33142123, 33142479
33142533, 33142739, 33144001, 33145153, 33146001, 33147065, 33148063
33149578, 33150236, 33150645, 33152388, 33159956, 33161424, 33161535
33161726, 33163159, 33163187, 33165183, 33165391, 33166116, 33166242
33169254, 33172549, 33172631, 33172679, 33176672, 33177660, 33178223
33178248, 33179718, 33181349, 33182152, 33184467, 33185231, 33185773
33186578, 33186650, 33188597, 33189199, 33190454, 33190694, 33190761
33191073, 33191584, 33192462, 33193293, 33195897, 33196009, 33196035
33196475, 33197296, 33199431, 33201415, 33203951, 33205229, 33205781
33206160, 33207143, 33207342, 33208644, 33211160, 33211334, 33212112
33215225, 33216590, 33216667, 33218194, 33218259, 33218518, 33219840
33221061, 33223248, 33225584, 33225678, 33227044, 33230882, 33232128
33233560, 33234302, 33235620, 33237523, 33239083, 33241118, 33241692
33242408, 33244297, 33245879, 33245940, 33247372, 33247862, 33251111
33252648, 33253466, 33253504, 33254019, 33261707, 33261786, 33266449
33268162, 33271941, 33273638, 33275880, 33276748, 33278133, 33278440
33278509, 33279489, 33279810, 33281287, 33282110, 33282502, 33282504
33282605, 33282871, 33282971, 33287418, 33288427, 33289442, 33289604
33289734, 33292174, 33292175, 33292429, 33292896, 33292950, 33294123
33295267, 33297275, 33303555, 33303725, 33304435, 33304775, 33304830
33305150, 33305175, 33305254, 33306852, 33307945, 33308107, 33308199
33308244, 33308736, 33309324, 33311488, 33312823, 33312932, 33314122
33314523, 33315230, 33315835, 33316711, 33316815, 33317279, 33317740
33317752, 33318949, 33319065, 33320455, 33322672, 33323634, 33323903
33324226, 33325981, 33327118, 33329027, 33329192, 33330508, 33331329
33332612, 33332891, 33334218, 33334340, 33334404, 33334945, 33334957
33335941, 33337385, 33338247, 33338891, 33339868, 33343993, 33344767
33345269, 33346851, 33347947, 33349744, 33350643, 33351136, 33351978
33352629, 33352740, 33352794, 33353474, 33354011, 33355007, 33355136
33358968, 33360246, 33362391, 33364012, 33367076, 33367184, 33367909

33370332, 33373644, 33373693, 33375194, 33376694, 33380058, 33380472
33380871, 33381652, 33381839, 33382108, 33382224, 33382529, 33382620
33384092, 33384505, 33387767, 33388473, 33388927, 33389651, 33390717
33390917, 33390925, 33392926, 33393503, 33394330, 33395219, 33397495
33397605, 33401519, 33402361, 33402406, 33402456, 33402847, 33403843
33404069, 33407135, 33408858, 33409163, 33409759, 33409841, 33410321
33415279, 33416405, 33417145, 33417828, 33417987, 33418443, 33420096
33420249, 33420490, 33421440, 33422596, 33422877, 33424192, 33425127
33426135, 33427823, 33427991, 33434256, 33440178, 33440442, 33440899
33441073, 33444647, 33446226, 33446788, 33447015, 33447602, 33447957
33448908, 33451134, 33454288, 33454299, 33455225, 33456516, 33456703
33456848, 33457235, 33457584, 33457842, 33458082, 33458732, 33459161
33460450, 33460521, 33460870, 33462620, 33464061, 33466822, 33467715
33470092, 33470254, 33471858, 33473795, 33474386, 33474916, 33476928
33479415, 33479703, 33480124, 33480765, 33482590, 33484387, 33485134
33489699, 33490031, 33491676, 33492066, 33492136, 33493957, 33495024
33495575, 33497160, 33498037, 33499125, 33499867, 33500486, 33503732
33504158, 33504432, 33504626, 33504902, 33505158, 33507610, 33507953
33510171, 33513434, 33513447, 33513906, 33514179, 33514440, 33515115
33516571, 33517445, 33517703, 33520658, 33521864, 33522372, 33522799
33523982, 33525448, 33527630, 33527663, 33531067, 33531364, 33532517
33532755, 33533269, 33534589, 33537225, 33538009, 33538063, 33539504
33540746, 33541736, 33542695, 33544836, 33545633, 33545698, 33548709
33548869, 33550827, 33553452, 33553902, 33555482, 33557344, 33558058
33558087, 33558251, 33558391, 33559316, 33561671, 33561708, 33561845
33562255, 33563137, 33563167, 33563718, 33564809, 33566611, 33566851
33568355, 33570800, 33571225, 33573142, 33574722, 33575022, 33580595
33584585, 33584637, 33590551, 33591046, 33596056, 33596361, 33598703
33599734, 33601195, 33601673, 33601849, 33607613, 33613169, 33613512
33613829, 33616923, 33617587, 33617685, 33618962, 33621871, 33621993
33622325, 33624052, 33624356, 33625059, 33625822, 33628304, 33631068
33631562, 33631820, 33631959, 33632051, 33632754, 33633875, 33635094
33635886, 33636280, 33637219, 33641592, 33647716, 33647739, 33647820
33648273, 33651003, 33651993, 33655399, 33656104, 33656608, 33656679
33657553, 33660093, 33660782, 33660816, 33661960, 33663113, 33663444
33664959, 33664976, 33666803, 33667548, 33670617, 33670793, 33674035
33674065, 33676296, 33677163, 33679665, 33682799, 33684377, 33692669
33695048, 33695100, 33703196, 33704431, 33706800, 33708958, 33710568
33714000, 33715183, 33718848, 33726788, 33726841, 33727390, 33727406
33727922, 33729692, 33736618, 33738702, 33741444, 33743745, 33746114
33749984, 33750344, 33750791, 33751080, 33751431, 33754410, 33755161
33755486, 33757064, 33761538, 33763570, 33764761, 33767425, 33768567
33770883, 33774856, 33777176, 33779364, 33779494, 33785175, 33786208
33790553, 33794088, 33796040, 33798328, 33799368, 33801237, 33805155

```
33808041, 33809062, 33809642, 33810130, 33810360, 33811111, 33811601
33813849, 33817717, 33821129, 33821145, 33822187, 33824830, 33825303
33832499, 33833783, 33836203, 33840940, 33842364, 33843368, 33845824
33847898, 33848294, 33850437, 33852881, 33853330, 33858183, 33865116
33865495, 33870373, 33871591, 33871761, 33872610, 33875167, 33879054
33886487, 33886862, 33890586, 33893127, 33896341, 33896760, 33897055
33899902, 33902235, 33902539, 33909838, 33912833, 33916081, 33916311
33921410, 33921441, 33932721, 33933784, 33937333, 33940540, 33954999
33957025, 33960464, 33960647, 33961800, 33964258, 33967599, 33970659
33973695, 33982392, 33983204, 33986030, 33987170, 33988339, 33988974
33989017, 34001406, 34003643, 34004063, 34006614, 34010877, 34023644
34024924, 34027791, 34034279, 34042759, 34050156, 34052471, 34053514
34056235, 34060829, 34088989, 34096213, 34099185, 34100909, 34103647
34104105, 34105578, 34110342, 34119948, 34132318, 34136651, 34139217
34146833, 34147169, 34149263, 34153367, 34162335, 34164828, 34172951
34175987, 34183461, 34195569, 34203713, 34220943, 34240339, 34261947
34264633, 34301118, 34476155, 34533061, 34533150
```

Version 19.0.0.0.ru-2022-04.rur-2022-04.r1

Version 19.0.0.0.ru-2022-04.rur-2022-04.r1 includes the following:

- Patch [33806152](#): DATABASE RELEASE UPDATE 19.15.0.0.0
- Patch [33808367](#): OJVM RELEASE UPDATE 19.15.0.0.0
- Patch [34006614](#): RDBMS - DSTV38 UPDATE - TZDATA2022A
- Patch [34006650](#): DSTV38 UPDATE - TZDATA2022A - NEED OJVM FIX
- Patch [28730253](#): SUPPORT NEW ERA REIWA FOR JAPANESE IMPERIAL CALENDAR
- Patch [29213893](#): DBMS_STATS FAILING WITH ERROR ORA-01422 WHEN GATHERING STATS FOR USER\$ TABLE
- Patch [33125873](#): MAKE CACHE GLOBAL OBJECT INVALIDATION CIC NON-SERIALIZE FOR BETTER PERFORMANCE
- Patch [33121934](#): IAD:E23POD LIBRARY CACHE LOCK / LOAD LOCK / MUTEX X DURING CONNECTION STORM
- PreUpgrade Jar: preupgrade_19_cbuild_13_lf.zip

Combined patches for version 19.0.0.0.ru-2022-04.rur-2022-04.r1, released April 2022

Bugs fixed:

1297945, 7391838, 8460502, 8476681, 14570574, 14735102, 15931756
15959416, 16662822, 16664572, 16750494, 17275499, 17395507, 17428816
17468475, 17777718, 18534283, 18697534, 19080742, 19138896, 19697993
19884953, 19958239, 20007421, 20083476, 20313356, 20319830, 20479545
20867658, 20922160, 21119541, 21232786, 21245711, 21374587, 21528318
21629064, 21639146, 21888352, 21965541, 22066547, 22252368, 22325312
22387320, 22553815, 22580355, 22725871, 22729345, 22748979, 23020668
23066463, 23094775, 23125587, 23294761, 23296836, 23311885, 23606241
23645975, 23734075, 23734111, 23763462, 24336782, 24356932, 24559425
24561942, 24596874, 24597536, 24669730, 24687075, 24833686, 24916492
24957575, 24971456, 25030027, 25033515, 25092651, 25093917, 25148135
25404117, 25415139, 25416731, 25541233, 25560538, 25562258, 25607406
25607716, 25632308, 25661172, 25677036, 25756945, 25792962, 25804387
25804908, 25806201, 25809128, 25883179, 25905368, 25913778, 25979242
25986062, 25997810, 26001677, 26003708, 26108369, 26127355, 26139817
26173091, 26203132, 26247450, 26256280, 26280704, 26284288, 26352569
26352615, 26440142, 26476244, 26497655, 26499997, 26500553, 26577716
26587659, 26611353, 26621826, 26668264, 26716835, 26739322, 26758837
26777814, 26785852, 26789742, 26800890, 26819036, 26860844, 26872233
26897528, 26951566, 26957541, 26963540, 26978857, 27004798, 27004828
27019512, 27036163, 27044169, 27044246, 27063461, 27086374, 27091809
27101798, 27126122, 27126938, 27130348, 27131416, 27155644, 27162036
27166935, 27195575, 27195935, 27207214, 27207959, 27221350, 27222128
27243840, 27244999, 27254335, 27260704, 27261477, 27275126, 27277677
27302372, 27329690, 27359766, 27359770, 27362994, 27369515, 27378053
27381279, 27392968, 27406105, 27411022, 27423500, 27439716, 27453490
27458357, 27458493, 27460010, 27489107, 27497101, 27525303, 27572040
27582210, 27589260, 27595082, 27597359, 27604329, 27614573, 27622946
27629928, 27636387, 27639208, 27654410, 27658166, 27661222, 27666312
27684864, 27692173, 27697886, 27700413, 27710072, 27729678, 27742354
27745728, 27751111, 27751518, 27760043, 27764052, 27768096, 27782078
27785931, 27786168, 27801144, 27825962, 27828892, 27829722, 27841399
27846298, 27860754, 27873364, 27877830, 27880025, 27897090, 27899093
27907898, 27917890, 27929509, 27933036, 27934711, 27935464, 27941110
27950978, 27957203, 27957963, 27962025, 27967484, 27979632, 27989365
27998559, 28001632, 28007516, 28031385, 28052648, 28064977, 28072567
28078186, 28089605, 28092783, 28104176, 28109326, 28112563, 28125947
28127569, 28129791, 28133903, 28138566, 28138847, 28144569, 28145995

28156781, 28167557, 28173612, 28181021, 28185286, 28187837, 28189466
28198802, 28201045, 28204104, 28204262, 28205555, 28209601, 28209985
28210681, 28215483, 28234255, 28248841, 28263142, 28271258, 28271693
28276054, 28279176, 28279456, 28279612, 28294439, 28294563, 28298401
28302580, 28313275, 28319114, 28322973, 28326928, 28337860, 28338211
28350595, 28351919, 28362187, 28364580, 28370061, 28371123, 28373960
28375383, 28379065, 28381939, 28383667, 28386259, 28387185, 28387574
28390273, 28392179, 28395302, 28397317, 28402823, 28403019, 28406374
28410431, 28414968, 28431445, 28432345, 28435333, 28436173, 28436414
28442896, 28451312, 28452123, 28454215, 28461031, 28461789, 28463226
28470673, 28475242, 28479352, 28482048, 28482049, 28484299, 28487818
28489419, 28492006, 28498976, 28499269, 28502773, 28503081, 28504631
28505321, 28513333, 28521330, 28522750, 28523644, 28526715, 28530171
28530697, 28534475, 28534493, 28535127, 28537481, 28538439, 28541606
28542455, 28544270, 28546290, 28547068, 28547926, 28553649, 28553981
28558489, 28558645, 28561704, 28564479, 28565296, 28567417, 28567819
28569897, 28570589, 28572165, 28572407, 28572533, 28572544, 28572667
28572834, 28578945, 28587723, 28589194, 28589509, 28589644, 28591817
28592647, 28593127, 28593682, 28594086, 28597221, 28598022, 28601957
28602253, 28604647, 28605066, 28606598, 28607316, 28607632, 28608211
28612239, 28618343, 28620697, 28621543, 28622202, 28625580, 28625862
28625873, 28627033, 28628592, 28630381, 28632796, 28632799, 28636532
28639299, 28640772, 28642469, 28642551, 28642899, 28643583, 28643654
28643718, 28644549, 28645570, 28646200, 28646939, 28649388, 28651078
28655209, 28657026, 28659098, 28661333, 28661362, 28663289, 28663782
28670402, 28672124, 28672457, 28673945, 28681153, 28682182, 28682796
28689483, 28690694, 28692103, 28692275, 28692282, 28693954, 28694526
28694639, 28694872, 28694877, 28696373, 28697526, 28698087, 28699321
28700945, 28703812, 28704412, 28705231, 28707931, 28708400, 28708585
28709063, 28710385, 28710469, 28710663, 28710734, 28714461, 28714720
28715655, 28715727, 28717406, 28718302, 28718469, 28719348, 28720204
28720418, 28721497, 28722229, 28729900, 28730079, 28730253, 28734355
28734910, 28740708, 28740799, 28741374, 28742555, 28745367, 28747846
28749853, 28751498, 28752923, 28755011, 28755084, 28755309, 28755846
28757960, 28758722, 28760206, 28760662, 28763291, 28765983, 28767240
28769456, 28770865, 28771022, 28771947, 28772390, 28772816, 28774416
28776431, 28776811, 28777073, 28777214, 28777478, 28778754, 28781599
28781754, 28785273, 28785321, 28785531, 28788272, 28789531, 28789533
28791576, 28791852, 28793062, 28794230, 28795551, 28795563, 28795734
28800508, 28802066, 28802734, 28804517, 28805242, 28806517, 28807247
28808314, 28808652, 28808656, 28810381, 28811560, 28811592, 28813317
28813931, 28815123, 28815355, 28815557, 28816871, 28817449, 28818063
28819640, 28820669, 28821847, 28824482, 28827682, 28828390, 28831971
28833912, 28835937, 28836716, 28837979, 28838385, 28839869, 28842408

28844656, 28844738, 28845346, 28846759, 28847541, 28847572, 28849494
28849776, 28850084, 28851458, 28851467, 28852325, 28854004, 28854212
28854733, 28855520, 28855922, 28857552, 28861861, 28862532, 28863263
28863432, 28863487, 28865544, 28865569, 28867698, 28867992, 28870496
28871040, 28872645, 28872829, 28873575, 28874416, 28875089, 28876253
28876639, 28876926, 28877252, 28878865, 28880218, 28880864, 28881191
28881848, 28882146, 28882751, 28882784, 28884931, 28887305, 28888083
28888327, 28889389, 28889730, 28891867, 28891941, 28892794, 28897123
28897512, 28899663, 28900506, 28901126, 28902135, 28904380, 28905312
28905390, 28905457, 28905615, 28907196, 28909769, 28909992, 28910498
28910586, 28911140, 28912691, 28914144, 28915561, 28917080, 28918429
28919145, 28921844, 28922227, 28922485, 28922532, 28922608, 28922767
28925250, 28925460, 28925634, 28925880, 28927452, 28928462, 28930944
28932914, 28933079, 28933158, 28935293, 28935956, 28936114, 28937717
28938167, 28938422, 28938698, 28940179, 28940281, 28940472, 28941901
28942455, 28942694, 28945421, 28945994, 28946233, 28946574, 28948554
28949888, 28950868, 28951332, 28951493, 28951533, 28952168, 28954762
28955606, 28955883, 28956145, 28956908, 28957260, 28957292, 28957723
28958088, 28958094, 28958590, 28959493, 28960863, 28962271, 28962775
28963036, 28965084, 28965095, 28965231, 28965376, 28966444, 28968211
28968779, 28970122, 28974083, 28974902, 28974999, 28977322, 28978664
28979289, 28980448, 28980910, 28981871, 28983095, 28983486, 28984313
28985114, 28985272, 28985362, 28985478, 28986207, 28986231, 28986257
28986326, 28986481, 28986696, 28988482, 28988864, 28989306, 28990681
28993295, 28993353, 28994307, 28994542, 28994721, 28994783, 28995287
28996376, 28998369, 28999046, 29000000, 29001305, 29001888, 29002273
29002488, 29002784, 29002927, 29003207, 29003407, 29003617, 29003738
29004934, 29005748, 29006318, 29006621, 29007321, 29007353, 29007775
29008035, 29008669, 29009513, 29010126, 29010517, 29011936, 29012609
29013475, 29013832, 29014076, 29014385, 29015118, 29016294, 29017265
29018655, 29018680, 29019121, 29020271, 29020423, 29021063, 29021352
29022986, 29024028, 29024054, 29024448, 29024552, 29024732, 29024795
29024876, 29026154, 29026582, 29026606, 29027456, 29027694, 29027914
29027933, 29027940, 29030184, 29030927, 29031575, 29031600, 29032234
29032276, 29032457, 29032607, 29033052, 29033145, 29033164, 29033200
29033280, 29033655, 29034331, 29034587, 29036278, 29037290, 29038528
29038728, 29038730, 29039089, 29039510, 29040032, 29040739, 29041739
29041775, 29043554, 29043651, 29043725, 29044086, 29044763, 29044954
29046482, 29047127, 29047850, 29048178, 29048289, 29048498, 29048605
29048728, 29048792, 29048858, 29049014, 29049673, 29050357, 29050560
29050765, 29050886, 29051263, 29051702, 29051953, 29052726, 29052850
29053783, 29053902, 29055644, 29056024, 29056270, 29056560, 29056767
29056894, 29058476, 29059011, 29060216, 29061016, 29061959, 29062692
29062848, 29062860, 29062868, 29110526, 29110783, 29110790, 29110797

29110802, 29110805, 29111598, 29111631, 29112455, 29113282, 29113305
29115794, 29115857, 29116779, 29117337, 29117526, 29117642, 29118543
29119077, 29119733, 29120223, 29122224, 29122254, 29122367, 29123297
29123324, 29123432, 29123444, 29123482, 29124104, 29124368, 29125036
29125374, 29125380, 29125708, 29125786, 29126345, 29127957, 29128693
29128935, 29129450, 29129476, 29129497, 29129691, 29129712, 29130219
29131539, 29131772, 29132456, 29132869, 29132938, 29133470, 29134447
29135383, 29135649, 29136111, 29138641, 29139070, 29139727, 29139761
29139780, 29139956, 29141316, 29141341, 29141685, 29141886, 29142609
29142667, 29143516, 29144995, 29145214, 29145730, 29146077, 29146157
29146810, 29147849, 29148799, 29149170, 29149829, 29150338, 29151520
29152357, 29152603, 29152752, 29154631, 29154636, 29154725, 29154829
29155099, 29155208, 29157051, 29157389, 29158680, 29158899, 29158990
29159216, 29159661, 29159909, 29159936, 29160174, 29160462, 29160824
29161597, 29161923, 29162095, 29162749, 29163073, 29163156, 29163415
29163437, 29163524, 29163567, 29164376, 29164446, 29165682, 29167111
29167342, 29167374, 29167940, 29168137, 29168219, 29168433, 29169073
29169215, 29169540, 29169739, 29170232, 29170717, 29171683, 29171942
29172618, 29172826, 29173140, 29173373, 29173618, 29173817, 29174004
29174753, 29175638, 29175829, 29176318, 29177466, 29177543, 29177886
29178385, 29179097, 29180313, 29180455, 29180559, 29180721, 29180893
29181078, 29181153, 29181231, 29181568, 29181620, 29181743, 29181923
29182019, 29182517, 29182901, 29182920, 29183298, 29183912, 29184297
29184666, 29185193, 29186091, 29186456, 29186605, 29188255, 29189302
29189307, 29189889, 29190235, 29190474, 29190663, 29190740, 29191541
29191827, 29192419, 29192468, 29192685, 29193207, 29194205, 29194367
29194493, 29194827, 29194981, 29195279, 29195337, 29195758, 29196151
29196725, 29198092, 29198913, 29199163, 29199635, 29199733, 29200316
29200700, 29201143, 29201494, 29201539, 29201695, 29201787, 29202104
29202461, 29202850, 29203041, 29203122, 29203166, 29203227, 29203425
29203443, 29203604, 29205281, 29205323, 29205419, 29205463, 29205767
29205918, 29206109, 29206605, 29206631, 29207073, 29208260, 29208732
29209545, 29210577, 29210610, 29210624, 29210683, 29211457, 29211724
29211895, 29212012, 29212433, 29212611, 29213320, 29213351, 29213613
29213641, 29213775, 29213850, 29213879, 29213893, 29214561, 29214960
29216312, 29216723, 29216746, 29216984, 29217294, 29217472, 29217828
29217848, 29217856, 29218570, 29219205, 29219273, 29219627, 29220079
29221248, 29221745, 29221891, 29221942, 29222031, 29222534, 29222784
29222892, 29223833, 29223859, 29223967, 29224065, 29224294, 29224605
29224710, 29225076, 29225168, 29225758, 29225861, 29227602, 29228869
29229164, 29229754, 29229839, 29229844, 29229955, 29230252, 29230565
29231133, 29232117, 29232154, 29232449, 29232533, 29232653, 29233415
29233810, 29233953, 29234123, 29235934, 29236573, 29237538, 29237575
29237744, 29240307, 29240668, 29240759, 29241345, 29241651, 29242017

29242561, 29242884, 29242906, 29243749, 29243958, 29244495, 29244766
29244968, 29245063, 29245137, 29245160, 29246163, 29246337, 29247183
29247415, 29247712, 29247906, 29248495, 29248552, 29248723, 29248835
29248858, 29249289, 29249412, 29249583, 29249991, 29250059, 29250317
29251259, 29251564, 29252510, 29252790, 29253184, 29253871, 29254031
29254177, 29254623, 29254930, 29255178, 29255273, 29255431, 29255435
29255616, 29255705, 29255718, 29255973, 29256279, 29256426, 29259119
29259320, 29260224, 29260407, 29260452, 29260956, 29261547, 29261548
29261695, 29261906, 29262143, 29262512, 29262887, 29265446, 29265448
29265780, 29266248, 29266899, 29267292, 29268412, 29269171, 29269228
29269825, 29270585, 29271019, 29273168, 29273360, 29273539, 29273570
29273735, 29273812, 29273847, 29274428, 29274564, 29274623, 29274627
29275461, 29276272, 29277317, 29278218, 29278684, 29279658, 29279751
29279854, 29281112, 29281527, 29281691, 29281796, 29282090, 29282233
29282666, 29282898, 29285197, 29285453, 29285503, 29285621, 29285788
29285956, 29286037, 29286220, 29286229, 29287130, 29287705, 29290110
29290235, 29292232, 29292253, 29292378, 29292837, 29293072, 29293574
29293806, 29294753, 29296257, 29297863, 29297915, 29298220, 29299049
29299082, 29299830, 29299844, 29301139, 29301463, 29301566, 29302565
29302614, 29302963, 29303712, 29303918, 29304314, 29304640, 29304692
29304781, 29304853, 29305093, 29306226, 29306713, 29306790, 29307090
29307109, 29307638, 29309698, 29311336, 29311528, 29311588, 29311927
29312310, 29312672, 29312734, 29312753, 29312889, 29313347, 29313417
29313525, 29314539, 29314636, 29314867, 29314949, 29317756, 29318410
29319441, 29319558, 29320900, 29321489, 29321689, 29323946, 29323999
29324568, 29324735, 29325087, 29325105, 29325257, 29325356, 29325497
29325765, 29325993, 29326233, 29327044, 29327892, 29328305, 29329042
29329087, 29329675, 29329807, 29329848, 29330361, 29330791, 29331066
29331209, 29331380, 29331493, 29332292, 29332395, 29332763, 29332771
29332966, 29333500, 29336843, 29336899, 29337294, 29337310, 29337742
29338315, 29338348, 29338453, 29338780, 29338913, 29339101, 29339155
29339299, 29339452, 29340333, 29341209, 29341782, 29342099, 29343086
29343156, 29343861, 29344541, 29345382, 29345937, 29346057, 29346138
29346211, 29346943, 29347620, 29348176, 29348358, 29350052, 29350712
29350762, 29350868, 29351044, 29351386, 29351662, 29351716, 29351735
29351749, 29351771, 29351786, 29352298, 29352724, 29352867, 29352947
29353271, 29353432, 29353718, 29353821, 29353960, 29355654, 29356547
29356634, 29356704, 29356711, 29356752, 29356782, 29357821, 29358509
29358828, 29360252, 29360285, 29360467, 29360672, 29360775, 29360911
29360950, 29361319, 29361472, 29361801, 29362596, 29363090, 29363151
29364171, 29364177, 29366406, 29366818, 29366940, 29367019, 29367561
29367971, 29368253, 29368310, 29368725, 29372069, 29372541, 29372562
29373418, 29373588, 29374179, 29374604, 29374627, 29375355, 29375941
29375984, 29376346, 29377804, 29377986, 29378029, 29378287, 29378834

29378913, 29379299, 29379381, 29379552, 29379750, 29379978, 29380527
29381000, 29382296, 29382641, 29382784, 29382815, 29383695, 29384740
29384781, 29384854, 29384864, 29384960, 29385339, 29385429, 29385652
29385774, 29386125, 29386502, 29386557, 29386635, 29386660, 29386835
29387073, 29387274, 29387310, 29387329, 29387337, 29388020, 29388072
29388094, 29388524, 29388830, 29389408, 29389889, 29390011, 29390435
29390785, 29391030, 29391237, 29391301, 29391438, 29391849, 29391925
29392554, 29392966, 29393291, 29393649, 29394014, 29394140, 29394749
29395657, 29396481, 29397841, 29397954, 29397996, 29398192, 29398488
29398863, 29399046, 29399100, 29399121, 29399336, 29399938, 29399959
29402110, 29402131, 29404425, 29404483, 29405012, 29405462, 29405651
29405996, 29407488, 29407637, 29407804, 29408853, 29409149, 29409455
29410311, 29410834, 29411037, 29411427, 29411469, 29411931, 29412066
29412269, 29413360, 29413382, 29413517, 29413544, 29413634, 29413956
29415493, 29415774, 29416339, 29416688, 29416700, 29417084, 29417113
29417173, 29417719, 29417884, 29418165, 29418341, 29420254, 29420834
29421059, 29423003, 29423016, 29423156, 29423227, 29423491, 29423826
29424094, 29424999, 29426241, 29426320, 29426521, 29428230, 29429017
29429087, 29429264, 29429336, 29429466, 29429566, 29429895, 29430524
29430866, 29431192, 29431402, 29431485, 29431985, 29432176, 29434301
29434777, 29434869, 29435474, 29435652, 29435966, 29436454, 29436514
29436522, 29436727, 29437029, 29437379, 29437594, 29437712, 29438150
29438277, 29438736, 29439522, 29440651, 29441196, 29442400, 29442936
29443187, 29443250, 29443559, 29444072, 29444275, 29444282, 29444602
29444906, 29445548, 29446319, 29446669, 29447460, 29448498, 29449477
29449845, 29449852, 29450162, 29450193, 29450273, 29450421, 29450812
29450936, 29451085, 29451386, 29452251, 29452576, 29452936, 29452953
29454450, 29454978, 29455424, 29455773, 29456538, 29456714, 29457312
29457319, 29457370, 29457502, 29457807, 29457978, 29458132, 29460252
29461420, 29461791, 29461971, 29462594, 29462767, 29462957, 29463047
29463528, 29463553, 29463798, 29464616, 29464779, 29465047, 29465177
29466674, 29467622, 29469563, 29469565, 29470059, 29470205, 29470291
29471633, 29471832, 29471857, 29471860, 29472618, 29473708, 29474348
29475386, 29476473, 29476702, 29477015, 29481584, 29482021, 29483452
29483532, 29483626, 29483672, 29483685, 29483712, 29483723, 29483771
29485099, 29485731, 29485877, 29486181, 29486848, 29487150, 29487189
29487407, 29488894, 29488996, 29489436, 29489546, 29490256, 29491784
29492127, 29492939, 29493122, 29493821, 29494101, 29494245, 29494788
29494934, 29495057, 29495171, 29495684, 29496977, 29497053, 29497311
29497588, 29497696, 29497778, 29498198, 29500257, 29500826, 29500963
29501218, 29502561, 29503543, 29503631, 29503827, 29504103, 29504492
29504682, 29505225, 29505589, 29505668, 29506942, 29507270, 29507616
29508681, 29508998, 29509777, 29510278, 29511064, 29511611, 29511980
29512125, 29512773, 29512890, 29514479, 29515134, 29515240, 29515476

29515766, 29515834, 29516300, 29516727, 29516766, 29517168, 29517443
29517883, 29518604, 29518767, 29519131, 29521187, 29521688, 29521748
29521862, 29522358, 29522561, 29522662, 29523055, 29523216, 29523511
29524043, 29524599, 29524985, 29525366, 29525467, 29525886, 29526966
29527595, 29527610, 29528184, 29528368, 29529147, 29529436, 29530440
29530515, 29530812, 29530909, 29531654, 29531836, 29532112, 29532532
29534218, 29536342, 29536445, 29536794, 29537829, 29538631, 29539027
29539413, 29540327, 29540831, 29540862, 29541517, 29541742, 29541769
29541973, 29542084, 29542449, 29542474, 29542580, 29542643, 29543034
29543956, 29544552, 29546817, 29547010, 29547867, 29548413, 29548427
29548592, 29548687, 29548722, 29549040, 29549071, 29549104, 29549154
29549730, 29550530, 29552402, 29552773, 29553141, 29554092, 29554351
29554554, 29554997, 29555105, 29555239, 29557144, 29557261, 29557336
29557556, 29558238, 29558452, 29558926, 29558975, 29559187, 29559395
29559446, 29559908, 29559981, 29564592, 29564593, 29565611, 29579919
29580394, 29580983, 29581460, 29581771, 29583018, 29584261, 29584693
29586143, 29587299, 29587488, 29587720, 29587765, 29588580, 29588732
29589544, 29590666, 29591343, 29591641, 29591661, 29592011, 29592215
29592433, 29592595, 29592946, 29593820, 29597158, 29597536, 29597716
29597754, 29598039, 29598040, 29598046, 29598226, 29598233, 29598338
29599008, 29599243, 29599300, 29599552, 29601461, 29602831, 29603460
29603884, 29604002, 29604257, 29606261, 29607136, 29607797, 29608000
29608023, 29609434, 29609603, 29610506, 29611020, 29611991, 29613733
29614206, 29614931, 29614987, 29615824, 29616244, 29616414, 29617414
29618074, 29618190, 29620042, 29620564, 29622936, 29623323, 29623592
29624124, 29624408, 29625065, 29625804, 29625827, 29625876, 29626154
29626732, 29628200, 29628647, 29629430, 29629650, 29629681, 29629745
29630221, 29631749, 29632095, 29632265, 29632611, 29632751, 29633697
29633753, 29633936, 29634643, 29635427, 29635717, 29635990, 29637362
29637526, 29637560, 29638285, 29638928, 29641373, 29641736, 29642451
29643721, 29644426, 29644464, 29645167, 29645349, 29647176, 29647770
29648928, 29649694, 29651183, 29651517, 29651520, 29652809, 29653132
29653246, 29655164, 29655416, 29655668, 29655855, 29656400, 29656819
29656843, 29657399, 29657422, 29657744, 29657960, 29657973, 29658056
29661028, 29661065, 29661722, 29663191, 29663368, 29663494, 29663601
29663813, 29664087, 29664161, 29665168, 29665940, 29666451, 29667527
29667994, 29668005, 29669241, 29669413, 29670713, 29670782, 29671363
29672507, 29675446, 29676089, 29676921, 29677051, 29677173, 29677733
29677927, 29678217, 29679856, 29680700, 29681987, 29683039, 29683189
29683211, 29684518, 29685137, 29685276, 29687214, 29687220, 29687459
29687718, 29687727, 29687763, 29688867, 29689145, 29689255, 29690795
29692115, 29692694, 29693847, 29694869, 29695425, 29695821, 29695841
29695964, 29695987, 29696242, 29696310, 29697928, 29700125, 29700460
29700770, 29701720, 29701755, 29701937, 29703932, 29704426, 29705793

29706141, 29706160, 29707099, 29707493, 29707896, 29708324, 29708353
29708876, 29708915, 29710188, 29710858, 29713810, 29715220, 29715647
29715703, 29716029, 29716194, 29716227, 29716491, 29716602, 29716871
29717659, 29717901, 29718198, 29719146, 29720133, 29720373, 29721418
29721576, 29722026, 29722092, 29722167, 29722389, 29723113, 29724497
29724658, 29725421, 29725425, 29725476, 29725781, 29726695, 29737941
29738374, 29738400, 29739576, 29741319, 29741976, 29742223, 29742926
29744225, 29744400, 29744637, 29745288, 29745624, 29746962, 29747493
29747648, 29747653, 29748285, 29748325, 29748336, 29748513, 29749469
29749471, 29750673, 29751094, 29753244, 29754196, 29754640, 29754951
29755821, 29756274, 29756444, 29757099, 29757264, 29757651, 29757687
29758203, 29758217, 29758661, 29761678, 29761837, 29761911, 29763158
29764644, 29765035, 29765219, 29765347, 29765393, 29765493, 29766207
29766435, 29766503, 29766679, 29768487, 29768899, 29769549, 29769695
29769901, 29770750, 29771032, 29771242, 29772514, 29772761, 29773185
29773197, 29773205, 29773459, 29773633, 29773842, 29774362, 29775393
29775473, 29779196, 29779901, 29780140, 29780507, 29780633, 29782211
29782284, 29782501, 29782823, 29782866, 29783142, 29784106, 29785169
29785239, 29785251, 29785311, 29785544, 29785550, 29785831, 29787292
29787766, 29788820, 29789911, 29791152, 29791880, 29791916, 29792213
29792433, 29793141, 29793151, 29793318, 29794174, 29794462, 29795712
29795957, 29796335, 29796378, 29796916, 29797209, 29797726, 29801164
29802382, 29802695, 29803948, 29804875, 29805368, 29805772, 29806390
29806964, 29807964, 29809792, 29809837, 29810012, 29810013, 29811616
29812084, 29812166, 29812489, 29813503, 29813650, 29813671, 29814455
29814995, 29815341, 29815713, 29816887, 29817278, 29817547, 29817784
29818794, 29819753, 29820341, 29821130, 29821582, 29822714, 29825525
29827647, 29827792, 29827852, 29828644, 29829339, 29830374, 29831196
29831404, 29831567, 29833406, 29833984, 29834506, 29836096, 29836424
29838337, 29838485, 29838740, 29838773, 29839481, 29839715, 29840619
29841267, 29841687, 29842369, 29843238, 29843277, 29843692, 29843831
29844131, 29844226, 29844275, 29845449, 29845530, 29845691, 29846126
29846525, 29846645, 29846688, 29847627, 29848084, 29848849, 29849100
29849139, 29850552, 29850566, 29850930, 29851020, 29851308, 29851401
29851733, 29853485, 29856420, 29856506, 29856859, 29856890, 29858121
29858376, 29858420, 29859068, 29860022, 29860994, 29861075, 29864203
29864261, 29865188, 29865590, 29865658, 29867728, 29868639, 29869052
29869086, 29869149, 29869404, 29869857, 29869877, 29869887, 29869906
29870065, 29870533, 29871098, 29871312, 29871360, 29872401, 29872937
29872983, 29873206, 29873665, 29873751, 29874090, 29874761, 29875200
29875459, 29875565, 29875919, 29876358, 29876989, 29877608, 29878076
29879723, 29881050, 29881478, 29881575, 29881643, 29881839, 29882427
29882454, 29882729, 29884958, 29885182, 29885890, 29886809, 29887045
29887111, 29887840, 29888621, 29889184, 29889358, 29890740, 29891075

29891533, 29891853, 29891857, 29891916, 29892388, 29892604, 29892634
29893132, 29893197, 29893287, 29894021, 29896510, 29897418, 29897720
29897863, 29900186, 29900203, 29900824, 29901021, 29901025, 29901419
29901961, 29902299, 29902327, 29902330, 29902659, 29903190, 29903299
29903357, 29903454, 29904002, 29906678, 29907942, 29908389, 29908639
29908777, 29909658, 29910218, 29910402, 29912135, 29912286, 29913805
29913934, 29913966, 29914449, 29914544, 29915182, 29915217, 29915848
29916198, 29916975, 29919782, 29919789, 29920025, 29920376, 29920804
29921214, 29921318, 29921559, 29922225, 29922435, 29922461, 29923452
29924147, 29924181, 29924479, 29925177, 29926466, 29927756, 29928040
29928210, 29928340, 29928427, 29928564, 29930457, 29931230, 29931956
29932202, 29932310, 29932430, 29932780, 29932953, 29933718, 29934048
29934052, 29934158, 29934557, 29935685, 29936841, 29937565, 29937655
29937956, 29938063, 29938225, 29939075, 29939400, 29939795, 29940373
29941062, 29942096, 29942275, 29942554, 29943670, 29943879, 29944035
29944159, 29944660, 29944963, 29945645, 29946101, 29946388, 29947145
29947242, 29947428, 29948165, 29950018, 29950220, 29951620, 29951759
29952700, 29955625, 29956016, 29956222, 29957412, 29957493, 29958925
29960325, 29960884, 29961353, 29961360, 29961609, 29961847, 29962160
29962248, 29962834, 29962927, 29962939, 29965052, 29965207, 29965603
29965888, 29966768, 29967223, 29967386, 29967911, 29968085, 29968703
29969557, 29969985, 29970081, 29970261, 29970273, 29970298, 29970587
29970861, 29971027, 29971481, 29971888, 29971936, 29971951, 29972134
29972176, 29973012, 29989783, 29989845, 29990779, 29991257, 29992299
29993717, 29997326, 29997553, 29997937, 30000518, 30000664, 30001105
30001331, 30003187, 30004660, 30004856, 30006159, 30006280, 30006411
30006472, 30006705, 30006985, 30007450, 30007536, 30007797, 30008035
30008125, 30008198, 30008214, 30008456, 30009528, 30009710, 30012181
30012737, 30013243, 30013535, 30014200, 30015070, 30017836, 30018017
30018126, 30018903, 30019864, 30021830, 30024618, 30025814, 30026016
30026596, 30027614, 30027638, 30027649, 30028182, 30028599, 30028649
30029519, 30029806, 30031027, 30031613, 30032233, 30032376, 30032484
30033040, 30033547, 30034456, 30035444, 30035598, 30036258, 30038392
30038576, 30039796, 30039800, 30039959, 30040157, 30040511, 30041501
30041514, 30042490, 30043398, 30043610, 30043930, 30044108, 30044507
30045242, 30045273, 30045389, 30045484, 30045983, 30046497, 30047510
30047531, 30047702, 30047765, 30047931, 30048688, 30049966, 30051176
30051783, 30051804, 30052740, 30052928, 30053036, 30053501, 30053748
30054980, 30056058, 30057718, 30057799, 30058149, 30058453, 30059106
30059109, 30059821, 30060267, 30060330, 30062364, 30062429, 30062736
30062819, 30064268, 30066352, 30067565, 30068101, 30068384, 30068792
30068871, 30070064, 30071446, 30072018, 30072038, 30072905, 30073314
30073422, 30073744, 30074250, 30074296, 30074349, 30074469, 30074472
30074820, 30075037, 30076058, 30076197, 30076253, 30076604, 30078675

30078934, 30079949, 30080111, 30080266, 30080297, 30080988, 30081055
30081546, 30081580, 30082145, 30082402, 30083100, 30083216, 30083488
30083807, 30084458, 30084606, 30084971, 30085897, 30086596, 30086992
30087165, 30087509, 30088229, 30088421, 30090568, 30092254, 30092280
30092859, 30094929, 30094948, 30095499, 30095591, 30095952, 30096138
30097092, 30097115, 30098251, 30098719, 30099302, 30099420, 30099454
30099852, 30100354, 30101090, 30101186, 30101541, 30101847, 30102774
30103551, 30103553, 30104348, 30104378, 30104555, 30105458, 30106748
30106901, 30108012, 30109365, 30110224, 30110370, 30110518, 30114477
30114489, 30114534, 30116085, 30116203, 30116753, 30116854, 30117209
30117335, 30117469, 30117593, 30118261, 30118279, 30120608, 30121009
30122523, 30122583, 30123138, 30125765, 30126145, 30126470, 30127145
30127522, 30127805, 30127904, 30128047, 30128231, 30130240, 30131286
30131645, 30132708, 30132989, 30133841, 30134103, 30134746, 30135396
30135731, 30135942, 30136102, 30136346, 30137792, 30138600, 30138948
30139392, 30140425, 30141240, 30142527, 30142812, 30142815, 30142907
30143470, 30143593, 30145712, 30146593, 30146969, 30147195, 30147307
30147308, 30147473, 30147928, 30148343, 30148929, 30148966, 30148999
30149035, 30149658, 30150606, 30150710, 30151636, 30153533, 30153552
30153885, 30154633, 30155241, 30155320, 30155388, 30155489, 30155814
30155837, 30155999, 30156569, 30157526, 30158313, 30159329, 30159488
30159511, 30159536, 30159690, 30159752, 30159760, 30160025, 30160625
30161094, 30163243, 30164238, 30164714, 30165493, 30165503, 30165876
30165892, 30165897, 30166257, 30166352, 30167787, 30169254, 30170104
30172925, 30173113, 30173370, 30173556, 30174102, 30174394, 30174401
30175180, 30175291, 30175478, 30175587, 30177597, 30178250, 30178839
30178990, 30179012, 30179038, 30179644, 30179894, 30180208, 30180643
30181756, 30182498, 30183367, 30183696, 30183715, 30183920, 30184102
30185852, 30186319, 30186476, 30186706, 30187627, 30187866, 30188631
30189516, 30189535, 30190090, 30191274, 30192691, 30192729, 30192853
30193165, 30193262, 30193505, 30193506, 30193584, 30193736, 30194612
30194710, 30194972, 30195667, 30195668, 30195684, 30195773, 30196195
30196358, 30196629, 30198239, 30198598, 30198861, 30198905, 30199890
30200034, 30200132, 30200237, 30200680, 30200758, 30202349, 30202388
30202407, 30203929, 30204042, 30204542, 30206220, 30206493, 30206675
30207473, 30207519, 30208327, 30208690, 30208723, 30209222, 30209736
30210429, 30210753, 30210884, 30211567, 30213031, 30213540, 30214769
30214826, 30215130, 30215302, 30215351, 30217206, 30217562, 30217982
30218044, 30218317, 30218956, 30219222, 30220932, 30221115, 30221237
30221298, 30222512, 30222669, 30222975, 30223712, 30223847, 30224544
30224650, 30224725, 30224868, 30224950, 30225265, 30225439, 30225443
30225718, 30225837, 30225844, 30226244, 30227400, 30228422, 30228567
30229030, 30229126, 30229683, 30230183, 30232638, 30233105, 30233536
30233934, 30234132, 30234227, 30235878, 30235919, 30235979, 30236092

30236399, 30236554, 30236746, 30236964, 30237477, 30237640, 30238211
30238715, 30239480, 30240010, 30240547, 30240858, 30240930, 30240972
30241567, 30241807, 30241829, 30241920, 30242120, 30242724, 30243216
30243720, 30244340, 30244831, 30246053, 30246179, 30247305, 30248520
30248531, 30248564, 30249432, 30249738, 30249927, 30251003, 30252005
30252098, 30252156, 30252458, 30252977, 30253035, 30253090, 30253608
30253705, 30253761, 30253835, 30254206, 30254525, 30254576, 30254726
30255143, 30255528, 30256542, 30257412, 30257908, 30259120, 30259469
30260523, 30260595, 30262248, 30263013, 30263377, 30264405, 30265523
30265608, 30265615, 30265703, 30266791, 30267155, 30269428, 30269748
30270647, 30270744, 30271114, 30272329, 30273212, 30274090, 30274188
30274324, 30274662, 30275548, 30275569, 30275578, 30275784, 30276144
30276243, 30277120, 30277451, 30277589, 30277648, 30277733, 30277884
30277887, 30278402, 30281428, 30281615, 30282501, 30282591, 30282918
30283296, 30283577, 30283579, 30283581, 30283832, 30283932, 30284219
30284369, 30284751, 30285026, 30285166, 30285251, 30285341, 30285457
30285540, 30285843, 30286961, 30288343, 30288491, 30289074, 30289458
30290700, 30291536, 30292305, 30293345, 30294267, 30294465, 30294671
30294865, 30295110, 30295137, 30295549, 30295790, 30295808, 30297905
30299367, 30299817, 30299934, 30300030, 30300342, 30300363, 30300523
30300538, 30304037, 30305163, 30305264, 30305395, 30305568, 30305603
30305880, 30306407, 30307814, 30307883, 30308368, 30308578, 30308624
30308772, 30308947, 30309098, 30309798, 30310195, 30311826, 30312094
30312546, 30313749, 30313848, 30313989, 30314079, 30314198, 30314837
30316667, 30316897, 30317005, 30317209, 30317397, 30318638, 30318943
30319080, 30319099, 30320029, 30321076, 30321398, 30322980, 30323219
30323658, 30323820, 30323849, 30324059, 30324180, 30324466, 30324649
30325407, 30325786, 30326115, 30326882, 30327149, 30327581, 30327678
30327810, 30328168, 30328209, 30328690, 30329209, 30329737, 30329751
30330123, 30331254, 30331356, 30331759, 30332505, 30332893, 30334484
30334563, 30335127, 30335832, 30335987, 30336032, 30336383, 30336530
30336742, 30336996, 30337245, 30338434, 30338591, 30339049, 30339103
30339605, 30340540, 30341713, 30342371, 30342878, 30343370, 30343750
30344614, 30345201, 30345432, 30345809, 30345926, 30345950, 30346330
30346729, 30346847, 30346867, 30347215, 30347410, 30349714, 30350177
30350543, 30352532, 30352581, 30352623, 30352715, 30354034, 30355490
30356060, 30356461, 30357463, 30357698, 30357897, 30358416, 30359614
30360383, 30360653, 30361070, 30361635, 30362003, 30362850, 30363088
30363193, 30363311, 30363658, 30363716, 30364329, 30364481, 30364613
30364835, 30365745, 30367193, 30368048, 30368482, 30368534, 30368668
30368917, 30371264, 30371623, 30371909, 30372081, 30373419, 30373541
30373550, 30374345, 30374570, 30374739, 30375109, 30376986, 30377347
30377692, 30377729, 30380511, 30380907, 30381207, 30381525, 30381614
30382364, 30382646, 30382982, 30383286, 30384121, 30384152, 30387628

30387666, 30388853, 30389229, 30389414, 30389507, 30389821, 30390279
30390382, 30390635, 30391272, 30391794, 30392011, 30392870, 30392987
30393110, 30393317, 30393653, 30393944, 30394509, 30394738, 30394974
30395132, 30396120, 30396946, 30396974, 30397100, 30398099, 30398251
30398257, 30398422, 30398770, 30399906, 30402386, 30403284, 30403412
30403763, 30403877, 30403881, 30403902, 30403989, 30404117, 30404153
30404357, 30404639, 30406227, 30406709, 30408128, 30408515, 30408808
30409207, 30409339, 30409472, 30409590, 30412188, 30412772, 30412863
30412885, 30412921, 30413137, 30413294, 30414491, 30414679, 30414714
30416034, 30416603, 30417648, 30417732, 30418926, 30419024, 30419196
30419450, 30420105, 30420452, 30421009, 30421026, 30421204, 30421439
30421476, 30421706, 30422487, 30423135, 30423218, 30424347, 30430921
30431274, 30431504, 30431582, 30431698, 30431703, 30431717, 30431867
30432101, 30432470, 30433177, 30434793, 30436326, 30436399, 30437003
30437149, 30438224, 30439985, 30440651, 30440712, 30441277, 30441687
30441959, 30442266, 30442749, 30442805, 30442874, 30442884, 30443393
30446436, 30446583, 30446820, 30447060, 30447498, 30447589, 30447994
30448182, 30448348, 30448355, 30448917, 30449194, 30449837, 30450787
30453442, 30454090, 30455427, 30457633, 30457697, 30458080, 30458568
30458593, 30460095, 30460558, 30460842, 30460922, 30461123, 30461458
30462439, 30463938, 30464250, 30464655, 30466081, 30466214, 30469579
30469777, 30470402, 30470947, 30472891, 30473634, 30474167, 30474386
30474774, 30475041, 30475115, 30475813, 30476768, 30477588, 30477685
30477691, 30477767, 30479252, 30479647, 30479715, 30480591, 30480872
30481004, 30483065, 30483140, 30483217, 30483521, 30484042, 30484623
30484801, 30485255, 30486436, 30486896, 30487387, 30487697, 30489582
30490014, 30490578, 30490671, 30492380, 30493331, 30493518, 30494259
30494900, 30495035, 30495078, 30495133, 30495483, 30496957, 30497057
30497120, 30497765, 30498824, 30500224, 30500297, 30500344, 30500582
30501574, 30502415, 30503943, 30505029, 30505497, 30506794, 30506991
30506996, 30507032, 30507313, 30508100, 30509112, 30509277, 30510347
30510527, 30510718, 30512690, 30513285, 30513353, 30513480, 30513848
30515886, 30516868, 30517214, 30517516, 30517635, 30518114, 30518349
30518447, 30518923, 30519188, 30520662, 30522285, 30522998, 30523137
30523538, 30523601, 30523750, 30524736, 30527198, 30527275, 30528547
30528637, 30528687, 30528704, 30528731, 30528935, 30529790, 30529915
30529940, 30530585, 30532811, 30533132, 30533580, 30534351, 30534549
30534662, 30534827, 30535905, 30536237, 30537403, 30537405, 30537533
30537584, 30538141, 30538818, 30539519, 30539866, 30540109, 30540407
30544247, 30544595, 30544629, 30544752, 30545040, 30545281, 30545556
30549255, 30549368, 30549637, 30549789, 30549881, 30551000, 30551123
30554178, 30556326, 30556523, 30556581, 30556807, 30557386, 30557803
30558561, 30559129, 30559218, 30559252, 30560365, 30560513, 30561404
30561590, 30561737, 30564139, 30564343, 30564898, 30565004, 30565595

30565805, 30566054, 30567372, 30568514, 30568896, 30570083, 30571306
30572816, 30573236, 30573703, 30575243, 30575697, 30576112, 30576393
30576853, 30577071, 30577591, 30578221, 30579051, 30580813, 30580887
30581448, 30582221, 30582500, 30584767, 30585407, 30586493, 30587001
30588738, 30589914, 30591028, 30591475, 30592859, 30593046, 30593104
30593863, 30594167, 30595114, 30595408, 30595860, 30596024, 30596320
30596488, 30596694, 30598682, 30598746, 30598919, 30599405, 30599407
30600173, 30600184, 30602230, 30602828, 30603211, 30605215, 30605676
30606345, 30606451, 30608583, 30609799, 30610052, 30610097, 30610406
30610667, 30611527, 30611603, 30612199, 30613035, 30613937, 30613971
30614411, 30616406, 30616738, 30617002, 30617626, 30618056, 30618230
30619138, 30619383, 30619414, 30619525, 30619728, 30619787, 30620805
30621255, 30621910, 30622393, 30622528, 30622755, 30623138, 30623142
30624243, 30624792, 30624864, 30624874, 30625121, 30628834, 30628899
30629139, 30629643, 30629799, 30630391, 30630829, 30630930, 30631393
30631523, 30633259, 30633395, 30633938, 30634548, 30634559, 30635183
30635302, 30635326, 30635360, 30637270, 30637319, 30637841, 30638712
30639996, 30640436, 30641541, 30641755, 30641900, 30642124, 30644358
30644530, 30644766, 30644889, 30645590, 30645896, 30645938, 30646077
30647133, 30649310, 30650297, 30650404, 30651231, 30651570, 30651621
30651674, 30652515, 30652595, 30652813, 30652853, 30654131, 30654558
30655504, 30655906, 30656839, 30657196, 30657365, 30657566, 30657624
30657706, 30657875, 30657906, 30657940, 30658421, 30658533, 30658555
30658702, 30659940, 30660412, 30661000, 30661939, 30662634, 30662651
30662736, 30663591, 30663646, 30664266, 30665036, 30665399, 30665720
30666902, 30668407, 30668754, 30670096, 30670328, 30670369, 30670584
30671606, 30671720, 30671813, 30671958, 30674373, 30674959, 30676209
30677633, 30679595, 30679771, 30679804, 30681085, 30681462, 30681516
30681521, 30682289, 30684902, 30685163, 30686017, 30686131, 30686809
30687047, 30689557, 30689988, 30690686, 30691604, 30691731, 30691857
30692462, 30692473, 30693791, 30694947, 30695670, 30696566, 30696821
30698289, 30699770, 30702732, 30703610, 30704826, 30705448, 30707740
30708735, 30710088, 30710506, 30710783, 30710807, 30710917, 30711370
30711386, 30712670, 30713133, 30714151, 30714715, 30716001, 30716863
30718841, 30718862, 30719327, 30719419, 30720736, 30720844, 30722105
30722705, 30723671, 30724679, 30724881, 30726204, 30727701, 30727759
30728196, 30729278, 30729604, 30729839, 30730026, 30732711, 30733270
30733563, 30734242, 30734362, 30734707, 30735091, 30735153, 30735624
30735736, 30737970, 30739013, 30739876, 30740115, 30740250, 30740444
30740669, 30740997, 30741263, 30747820, 30748411, 30748707, 30749181
30749644, 30749722, 30750219, 30750991, 30751171, 30751521, 30751527
30751639, 30751968, 30753432, 30755348, 30758836, 30758854, 30758943
30759573, 30760739, 30761871, 30761878, 30763272, 30763305, 30763639
30763754, 30763970, 30764405, 30764663, 30764706, 30764976, 30765486

30765995, 30767277, 30767654, 30768636, 30769312, 30770717, 30772069
30773164, 30773696, 30773797, 30776416, 30776676, 30776929, 30777519
30777759, 30778855, 30779240, 30781032, 30781041, 30781461, 30781970
30782266, 30782300, 30782414, 30783395, 30783551, 30785101, 30786237
30786641, 30786655, 30787365, 30788973, 30789904, 30790047, 30790441
30801050, 30801296, 30801510, 30803210, 30804646, 30806757, 30806984
30807723, 30807888, 30808109, 30808364, 30808869, 30809087, 30809267
30810680, 30810765, 30812574, 30814266, 30814285, 30815269, 30815495
30815852, 30815994, 30816760, 30816938, 30819340, 30819629, 30819756
30820155, 30821297, 30822207, 30822502, 30822919, 30823744, 30825391
30825419, 30825656, 30826474, 30827849, 30828205, 30828350, 30829779
30829844, 30830555, 30832775, 30833454, 30834068, 30834110, 30834705
30835184, 30835219, 30835853, 30836129, 30838605, 30839253, 30839315
30839451, 30839836, 30839961, 30840150, 30840791, 30840793, 30841241
30842277, 30843271, 30844839, 30845806, 30846063, 30846159, 30846263
30846782, 30847442, 30847871, 30848028, 30848097, 30848773, 30851448
30851951, 30852945, 30852954, 30855101, 30856358, 30857501, 30857721
30858444, 30858810, 30858877, 30858919, 30860741, 30860803, 30861988
30862285, 30863115, 30864607, 30865805, 30866141, 30866988, 30867685
30868010, 30868186, 30869131, 30870043, 30870248, 30870439, 30870513
30871716, 30871792, 30873527, 30874084, 30874270, 30874337, 30874660
30876666, 30879169, 30879708, 30880774, 30880913, 30881161, 30881407
30883715, 30883785, 30883877, 30886188, 30887501, 30887777, 30887976
30887989, 30889443, 30889607, 30889723, 30890720, 30890752, 30890971
30891760, 30891792, 30893601, 30895426, 30895577, 30896615, 30896620
30896685, 30898366, 30898381, 30898748, 30898939, 30901889, 30902655
30904672, 30905604, 30906274, 30906407, 30909596, 30909918, 30910264
30910267, 30913399, 30914272, 30914411, 30914674, 30915781, 30919403
30919587, 30919691, 30919804, 30921136, 30921259, 30922450, 30922936
30922996, 30923514, 30923517, 30923597, 30923732, 30923940, 30925316
30925419, 30925828, 30927440, 30927821, 30929206, 30930149, 30930339
30931068, 30931311, 30931981, 30932674, 30932923, 30933117, 30936251
30936831, 30936942, 30937340, 30937391, 30937410, 30938413, 30939307
30939317, 30939934, 30940259, 30940382, 30940868, 30940869, 30941056
30944643, 30945005, 30945772, 30946072, 30946141, 30946595, 30946768
30946843, 30946876, 30946896, 30947294, 30948278, 30950326, 30950786
30952104, 30952191, 30953157, 30953266, 30953836, 30954062, 30955702
30956571, 30956647, 30957739, 30958493, 30960314, 30960356, 30960736
30961566, 30961824, 30964194, 30965111, 30965554, 30965649, 30966205
30967084, 30968737, 30968781, 30970518, 30972817, 30972841, 30972887
30972947, 30972951, 30972959, 30972966, 30973085, 30973113, 30973127
30973137, 30973143, 30973197, 30973698, 30973877, 30974207, 30974813
30976603, 30977294, 30977411, 30978554, 30978747, 30979701, 30980023
30980115, 30980317, 30980733, 30981182, 30981240, 30983064, 30985027

30985906, 30986423, 30987088, 30987105, 30987243, 30987717, 30987724
30988444, 30989951, 30990034, 30992120, 30992330, 30992477, 30992597
30993198, 30993518, 30993604, 30994996, 30996945, 30996991, 30997375
30997960, 30998035, 30998662, 30998759, 30998847, 31000312, 31001017
31001455, 31001490, 31001859, 31002223, 31002346, 31002923, 31003137
31003659, 31003759, 31004077, 31004719, 31004844, 31004871, 31005003
31006011, 31006259, 31006792, 31006953, 31008240, 31008858, 31008907
31009032, 31009271, 31009545, 31009590, 31009680, 31010218, 31010554
31010976, 31011361, 31013127, 31013531, 31014323, 31015330, 31016413
31019249, 31019407, 31021068, 31021109, 31021157, 31021324, 31021542
31021780, 31022858, 31025267, 31025520, 31025531, 31025859, 31026220
31026591, 31026860, 31026870, 31027747, 31028883, 31028986, 31029936
31030898, 31031240, 31031955, 31032463, 31032904, 31032913, 31034794
31035287, 31035916, 31037421, 31038220, 31038447, 31038817, 31039337
31039627, 31039928, 31041540, 31042208, 31042337, 31043483, 31043630
31043695, 31043747, 31044145, 31044460, 31044504, 31044951, 31045929
31046188, 31046619, 31046830, 31047022, 31047169, 31047333, 31047697
31047740, 31048025, 31048741, 31049215, 31049995, 31050103, 31050557
31051056, 31051075, 31052735, 31052809, 31053669, 31054177, 31054874
31055142, 31056909, 31057402, 31058548, 31061482, 31061504, 31062010
31062645, 31063315, 31063380, 31063769, 31064025, 31065701, 31065838
31066082, 31066250, 31066265, 31066554, 31067456, 31067483, 31067892
31067913, 31069059, 31070528, 31071080, 31073424, 31073440, 31073586
31074032, 31075323, 31075960, 31077117, 31077365, 31078391, 31078757
31079204, 31080474, 31081558, 31082719, 31084778, 31084921, 31086467
31086869, 31086954, 31087361, 31087679, 31088115, 31088341, 31089259
31089270, 31090262, 31091402, 31091469, 31091868, 31092129, 31092233
31092581, 31092921, 31094183, 31094228, 31094249, 31094374, 31094688
31095972, 31096846, 31097760, 31097961, 31098661, 31098870, 31099312
31099926, 31099981, 31100172, 31101386, 31101840, 31103065, 31103804
31104809, 31105225, 31105733, 31105896, 31106140, 31106577, 31107577
31108603, 31108644, 31109506, 31109924, 31110021, 31110887, 31112088
31112209, 31112530, 31112972, 31113089, 31113177, 31113249, 31113426
31113682, 31114116, 31114265, 31114671, 31115201, 31115502, 31115653
31117282, 31118486, 31118702, 31118809, 31118844, 31119057, 31119467
31119846, 31120361, 31122876, 31123976, 31124213, 31124363, 31124821
31124914, 31125773, 31125849, 31125918, 31126053, 31126058, 31127043
31127457, 31127961, 31127968, 31127969, 31128086, 31129851, 31130156
31132732, 31134430, 31137765, 31138106, 31138371, 31139643, 31140940
31141792, 31142377, 31142749, 31142815, 31143146, 31143415, 31143870
31145389, 31145403, 31145525, 31145804, 31146338, 31146727, 31151483
31153120, 31153485, 31155085, 31155305, 31155634, 31156301, 31156383
31156767, 31156898, 31158151, 31158341, 31158380, 31159382, 31161861
31162457, 31162711, 31162915, 31163379, 31163498, 31163534, 31165038

31165577, 31165722, 31166083, 31166801, 31168440, 31169366, 31170082
31171096, 31171147, 31171631, 31172207, 31172233, 31172642, 31174836
31175365, 31176451, 31176502, 31177193, 31177204, 31177221, 31178051
31178058, 31178103, 31180519, 31181375, 31181380, 31181989, 31182159
31182451, 31182756, 31182793, 31183413, 31184230, 31185224, 31188038
31188398, 31190624, 31191224, 31192039, 31193292, 31193511, 31193695
31193745, 31193936, 31194015, 31194264, 31195090, 31195430, 31195600
31195838, 31196272, 31196310, 31196395, 31196812, 31200057, 31200845
31201001, 31201366, 31201611, 31202536, 31204002, 31204412, 31204878
31205834, 31206070, 31206201, 31207446, 31208287, 31213034, 31214119
31214928, 31215422, 31215438, 31215548, 31215854, 31216823, 31216995
31217946, 31218837, 31218904, 31219047, 31219975, 31220188, 31220549
31220837, 31220881, 31220912, 31221454, 31222780, 31223382, 31224819
31225538, 31226448, 31226534, 31228670, 31230250, 31230775, 31233170
31233235, 31234765, 31234790, 31234983, 31235797, 31236624, 31240626
31240864, 31242319, 31242976, 31243859, 31244165, 31244968, 31245856
31247532, 31247838, 31248496, 31249008, 31249406, 31249689, 31249696
31250120, 31250152, 31250221, 31251325, 31252659, 31253451, 31254297
31254535, 31254929, 31255369, 31255869, 31256383, 31257740, 31257826
31258101, 31258344, 31258697, 31258995, 31260692, 31261467, 31261641
31262275, 31262388, 31265651, 31265773, 31266236, 31268557, 31270711
31270847, 31271032, 31274074, 31279670, 31281708, 31282037, 31283557
31287296, 31287741, 31287871, 31289115, 31290017, 31290300, 31290427
31291986, 31292298, 31293484, 31293867, 31298871, 31301460, 31303032
31304573, 31304945, 31305114, 31305309, 31305624, 31306248, 31306261
31306867, 31306927, 31307715, 31309379, 31309867, 31310564, 31310624
31311732, 31311830, 31312450, 31312976, 31313117, 31313177, 31313214
31313444, 31313812, 31314323, 31314885, 31315495, 31315876, 31316250
31317032, 31321092, 31322720, 31323383, 31324442, 31324507, 31325584
31326320, 31326608, 31326977, 31326998, 31327046, 31327259, 31327278
31327349, 31327391, 31327896, 31331354, 31331372, 31333156, 31334606
31334961, 31335037, 31336298, 31336371, 31338249, 31338673, 31338686
31338769, 31339457, 31339643, 31339744, 31341138, 31341746, 31343110
31344046, 31344097, 31348711, 31348922, 31349426, 31350348, 31353098
31353610, 31355339, 31356601, 31356954, 31357581, 31357737, 31358308
31358474, 31358511, 31359215, 31359366, 31360146, 31360155, 31360214
31360282, 31360314, 31360323, 31360469, 31360529, 31362408, 31362692
31364001, 31364383, 31366716, 31367188, 31367364, 31368027, 31369444
31370500, 31372498, 31373825, 31373837, 31373843, 31374283, 31374449
31374738, 31375865, 31376011, 31376708, 31377129, 31377206, 31377487
31377701, 31377808, 31377936, 31380443, 31381174, 31381701, 31382518
31383049, 31383396, 31383464, 31383814, 31385668, 31386394, 31386696
31387033, 31387123, 31387426, 31387443, 31388201, 31388288, 31390936
31390955, 31391991, 31393208, 31393600, 31393991, 31394341, 31394347

31394365, 31394544, 31395247, 31396027, 31396609, 31396695, 31396980
31398505, 31398617, 31398663, 31398761, 31399131, 31399883, 31400754
31401831, 31402078, 31402598, 31403177, 31403565, 31404014, 31404130
31404263, 31404487, 31404550, 31405300, 31405751, 31408636, 31408732
31409483, 31409912, 31409964, 31410289, 31411163, 31412209, 31414023
31414524, 31415324, 31416193, 31416213, 31416250, 31417007, 31417192
31417242, 31417336, 31417844, 31417990, 31418442, 31419363, 31420295
31420316, 31420320, 31420337, 31421316, 31422440, 31422620, 31423645
31424838, 31425167, 31425761, 31425800, 31427345, 31429501, 31429590
31429770, 31429784, 31429844, 31429971, 31430722, 31430735, 31430910
31431005, 31431326, 31431771, 31431964, 31431969, 31431971, 31431973
31431975, 31431986, 31432906, 31433092, 31433579, 31433749, 31434421
31434805, 31434870, 31435163, 31435308, 31435735, 31437030, 31437448
31440426, 31440813, 31441916, 31441920, 31442332, 31442714, 31443030
31444353, 31444516, 31445356, 31446431, 31447733, 31448642, 31448680
31449354, 31450392, 31450653, 31450942, 31451019, 31453375, 31453585
31454428, 31454972, 31454988, 31455051, 31455597, 31456857, 31457334
31458049, 31458537, 31458634, 31458739, 31459231, 31459242, 31459369
31461990, 31462082, 31462940, 31463613, 31464165, 31465389, 31466433
31468060, 31468705, 31469001, 31469418, 31471441, 31471589, 31471856
31472077, 31473148, 31474315, 31475378, 31475635, 31476093, 31476603
31476701, 31476736, 31477424, 31477695, 31479072, 31479075, 31479106
31479272, 31479772, 31481750, 31481893, 31483949, 31484385, 31484603
31485340, 31485386, 31485507, 31486061, 31486557, 31487441, 31487491
31487826, 31487844, 31488085, 31488464, 31489032, 31489137, 31489481
31489590, 31489672, 31489936, 31490604, 31491634, 31492171, 31492191
31492588, 31492655, 31492856, 31493153, 31493840, 31494095, 31494264
31494420, 31494794, 31495254, 31495564, 31496174, 31497550, 31498559
31499370, 31499700, 31500699, 31500719, 31500971, 31501139, 31502301
31503349, 31503674, 31503934, 31505088, 31506095, 31507107, 31507129
31508229, 31508712, 31509279, 31510891, 31510910, 31511142, 31511519
31511940, 31512044, 31512262, 31513011, 31515163, 31515869, 31515879
31515911, 31515929, 31516164, 31516184, 31516255, 31516265, 31517502
31518371, 31522708, 31523548, 31523578, 31523585, 31523620, 31523646
31523736, 31523836, 31525310, 31525463, 31525609, 31525783, 31526250
31526903, 31527103, 31527199, 31527381, 31528724, 31528738, 31528962
31529594, 31529967, 31530985, 31530995, 31532084, 31532176, 31532308
31532339, 31533050, 31533113, 31533274, 31533799, 31533817, 31533833
31534841, 31535073, 31535516, 31535782, 31535870, 31535955, 31536401
31536731, 31537521, 31537736, 31538274, 31538363, 31538891, 31539566
31541805, 31541864, 31541905, 31542347, 31542356, 31542851, 31542956
31543810, 31544097, 31545477, 31546864, 31547220, 31547445, 31547480
31548675, 31549221, 31549468, 31551142, 31552563, 31552615, 31552738
31552755, 31553289, 31553674, 31553813, 31553968, 31554610, 31555126

31555173, 31555346, 31555539, 31555800, 31556139, 31556950, 31557518
31557663, 31558194, 31559079, 31559085, 31559415, 31559563, 31560348
31560592, 31561886, 31563138, 31564060, 31564795, 31567124, 31567403
31567441, 31567719, 31568423, 31569057, 31569867, 31570054, 31570161
31571415, 31571688, 31571742, 31572006, 31572046, 31572267, 31573269
31573457, 31574122, 31574150, 31574244, 31574267, 31575529, 31575649
31575665, 31576738, 31577569, 31578202, 31578994, 31580079, 31580122
31580374, 31580437, 31581627, 31583865, 31584056, 31584555, 31584853
31585040, 31585319, 31585351, 31585491, 31585789, 31586381, 31586862
31588631, 31588933, 31590826, 31591384, 31591400, 31591409, 31591421
31595025, 31595632, 31597104, 31597727, 31598146, 31599363, 31599990
31600023, 31600291, 31600894, 31601385, 31602782, 31603199, 31603380
31603625, 31605119, 31605370, 31605737, 31606474, 31607937, 31608753
31609974, 31610024, 31611125, 31612535, 31613275, 31613838, 31615736
31616101, 31616104, 31617492, 31619276, 31620252, 31620748, 31620944
31622250, 31623413, 31623463, 31625579, 31625618, 31625959, 31626438
31626493, 31626528, 31626572, 31627587, 31628155, 31628311, 31628753
31628975, 31629056, 31630551, 31630794, 31630946, 31631985, 31632273
31632534, 31632605, 31632663, 31633224, 31634510, 31634805, 31635875
31635963, 31635980, 31637094, 31637607, 31637680, 31638398, 31638733
31638943, 31639082, 31640139, 31640197, 31640240, 31642462, 31642556
31642639, 31644775, 31645288, 31647304, 31648120, 31648157, 31649447
31649818, 31649819, 31649958, 31649962, 31650046, 31650112, 31650202
31652641, 31652763, 31653080, 31653167, 31653634, 31653647, 31653758
31653913, 31653916, 31653917, 31654116, 31654119, 31654122, 31654125
31654133, 31655807, 31656263, 31656601, 31657084, 31657211, 31657324
31657462, 31657483, 31657681, 31658464, 31658819, 31658943, 31659065
31660283, 31661865, 31661879, 31662143, 31662504, 31662625, 31662925
31663189, 31663788, 31664203, 31664399, 31666449, 31666684, 31667096
31667180, 31667940, 31668033, 31668061, 31668065, 31668312, 31668694
31668872, 31669064, 31670014, 31670263, 31670353, 31671512, 31671568
31672605, 31673406, 31674380, 31674801, 31675568, 31675852, 31675860
31676941, 31677345, 31677460, 31677479, 31677587, 31678629, 31679900
31680709, 31680713, 31680985, 31682766, 31683044, 31683260, 31683311
31683373, 31683708, 31684080, 31684494, 31685612, 31685882, 31685989
31686979, 31688127, 31688241, 31688978, 31691030, 31691089, 31691480
31694070, 31695062, 31695693, 31696043, 31696577, 31696853, 31697741
31699230, 31700234, 31701239, 31701517, 31701910, 31703614, 31705178
31705265, 31705356, 31705704, 31706595, 31706956, 31707190, 31708133
31708175, 31709647, 31709739, 31709777, 31710272, 31711155, 31711720
31711889, 31711997, 31712260, 31714645, 31715935, 31716510, 31716873
31717010, 31718000, 31718134, 31718346, 31718842, 31719167, 31720344
31720377, 31720839, 31720942, 31721557, 31721863, 31721880, 31722558
31722646, 31723226, 31723323, 31723651, 31725154, 31727229, 31727233

31727560, 31728160, 31728440, 31728444, 31728447, 31728477, 31728486
31728858, 31730485, 31730766, 31731076, 31731407, 31732311, 31732672
31734007, 31734012, 31734017, 31734583, 31735662, 31736095, 31737059
31737603, 31739198, 31739891, 31740252, 31741359, 31741938, 31743771
31744832, 31745130, 31745233, 31745528, 31746054, 31747706, 31747818
31747935, 31747989, 31748000, 31748182, 31748233, 31748944, 31750577
31750581, 31752492, 31752502, 31752633, 31753202, 31753425, 31753478
31753692, 31754240, 31754546, 31754887, 31754980, 31755245, 31755451
31756415, 31756465, 31756568, 31756650, 31757357, 31757775, 31757824
31758083, 31758344, 31758846, 31758939, 31758960, 31759565, 31760278
31760592, 31760738, 31761510, 31762819, 31763030, 31763707, 31763905
31764089, 31764239, 31764866, 31764913, 31765068, 31765246, 31765257
31765296, 31766499, 31766534, 31766675, 31766696, 31767204, 31767237
31767598, 31767852, 31768490, 31768497, 31768505, 31768866, 31769267
31769373, 31769530, 31770289, 31771302, 31771370, 31771410, 31771468
31771745, 31771836, 31772002, 31772070, 31773582, 31773909, 31774019
31774132, 31775101, 31776121, 31776659, 31776785, 31776994, 31777410
31777489, 31779833, 31780567, 31781897, 31781944, 31783422, 31783451
31783782, 31783985, 31785445, 31785572, 31786282, 31786838, 31787057
31787655, 31788104, 31788594, 31788704, 31788761, 31788785, 31789167
31789178, 31789335, 31790500, 31790757, 31792397, 31792465, 31792615
31793126, 31793691, 31793713, 31794336, 31794882, 31795231, 31796208
31796277, 31796882, 31798001, 31798669, 31798702, 31798742, 31799858
31800053, 31800059, 31800139, 31800757, 31804838, 31805812, 31807179
31807431, 31807516, 31809510, 31809729, 31810213, 31812352, 31812824
31815099, 31815227, 31816158, 31816343, 31816631, 31820632, 31820662
31820842, 31820859, 31820926, 31821129, 31821835, 31822026, 31822951
31823051, 31823327, 31823716, 31824504, 31824792, 31824934, 31825151
31825324, 31825410, 31827339, 31827605, 31827912, 31828378, 31828999
31829366, 31829617, 31829639, 31831950, 31832785, 31832901, 31833172
31833585, 31833948, 31834191, 31834214, 31834611, 31834677, 31834871
31835805, 31835854, 31836113, 31836454, 31839038, 31839779, 31839888
31840180, 31840490, 31840516, 31840992, 31841147, 31841210, 31841696
31842545, 31843028, 31843462, 31843476, 31843716, 31843845, 31844137
31844357, 31844557, 31844560, 31845092, 31845403, 31845803, 31845955
31846318, 31846454, 31847489, 31847541, 31848331, 31848365, 31848391
31848903, 31849859, 31850132, 31850227, 31851383, 31851449, 31852482
31852506, 31852574, 31854285, 31854692, 31855307, 31855484, 31855526
31855996, 31857143, 31858580, 31858621, 31858833, 31859067, 31859143
31860193, 31860406, 31860760, 31862359, 31862593, 31862611, 31863118
31863250, 31863890, 31864818, 31864947, 31865822, 31866141, 31866159
31867037, 31867331, 31867351, 31869601, 31869944, 31869954, 31869966
31870010, 31870150, 31870164, 31870190, 31870196, 31871384, 31871692
31872230, 31872320, 31873155, 31875140, 31876138, 31876192, 31876368

31876867, 31878256, 31878314, 31880154, 31881527, 31883124, 31883343
31883739, 31883845, 31886547, 31886695, 31886745, 31886848, 31887130
31888148, 31888731, 31889222, 31890230, 31890516, 31892029, 31892856
31895670, 31897023, 31897178, 31897786, 31897854, 31898193, 31898257
31900585, 31902517, 31902662, 31903523, 31903786, 31903962, 31904739
31904933, 31905033, 31907042, 31907137, 31907510, 31907565, 31907792
31907962, 31908345, 31908482, 31908571, 31908750, 31909295, 31909807
31912638, 31912834, 31913650, 31913839, 31914003, 31914943, 31915444
31915968, 31916644, 31917378, 31917494, 31917856, 31918462, 31919563
31919952, 31921267, 31922161, 31922580, 31923463, 31923622, 31925162
31925462, 31926203, 31926811, 31926848, 31927078, 31927510, 31927930
31930204, 31932042, 31932196, 31933451, 31933837, 31933842, 31933846
31933914, 31934254, 31934301, 31935672, 31935717, 31935970, 31936588
31936983, 31938116, 31938288, 31939461, 31939486, 31939767, 31940176
31940458, 31941148, 31941948, 31942136, 31942144, 31942258, 31942274
31942473, 31943497, 31943691, 31945038, 31945407, 31945659, 31945701
31945827, 31945928, 31946936, 31947732, 31947861, 31949490, 31950244
31950577, 31951599, 31951628, 31952046, 31952052, 31953394, 31953989
31954223, 31956113, 31956435, 31956920, 31957152, 31957564, 31957674
31957683, 31958038, 31958958, 31959140, 31959253, 31960389, 31960603
31961578, 31961940, 31964519, 31965012, 31965391, 31965542, 31966094
31968431, 31969646, 31970188, 31971792, 31972615, 31972671, 31973203
31974187, 31974424, 31974597, 31974693, 31976303, 31977024, 31977257
31980216, 31980296, 31981745, 31981751, 31982879, 31985494, 31985738
31985961, 31986808, 31986836, 31986905, 31987278, 31988079, 31988833
31990386, 31991705, 31992242, 31992615, 31992953, 31993051, 31993795
31994145, 31994206, 31994298, 31995577, 31996264, 31996331, 31997107
31997457, 31997658, 31997660, 31998181, 31998189, 31998861, 31999453
32001851, 32002411, 32003551, 32003908, 32004148, 32004299, 32004977
32005046, 32005048, 32005053, 32005215, 32006467, 32006703, 32006824
32007076, 32007698, 32008408, 32008586, 32008716, 32008819, 32009197
32009334, 32009754, 32010275, 32010593, 32010707, 32011107, 32011888
32012788, 32012975, 32013253, 32013403, 32014520, 32015642, 32015820
32016884, 32017301, 32017422, 32017635, 32017671, 32018632, 32018953
32020701, 32022223, 32022711, 32025328, 32028155, 32028269, 32032653
32032733, 32032887, 32033795, 32034766, 32035268, 32035536, 32035893
32035899, 32035902, 32036045, 32037237, 32037962, 32038054, 32038780
32038812, 32038844, 32038996, 32040940, 32041003, 32041799, 32042256
32042352, 32042706, 32043743, 32044533, 32044903, 32045377, 32046125
32046587, 32047226, 32048412, 32048921, 32050048, 32051896, 32052587
32054806, 32056529, 32057333, 32057565, 32057639, 32058260, 32060164
32060577, 32061018, 32061146, 32061173, 32061648, 32062227, 32064682
32066061, 32067130, 32067356, 32067675, 32068110, 32068187, 32068190
32069160, 32069508, 32069696, 32069834, 32071457, 32071582, 32072944

32073027, 32073710, 32074450, 32074728, 32075009, 32075020, 32075130
32076305, 32076561, 32077318, 32079573, 32079739, 32080081, 32080655
32081074, 32081381, 32082098, 32087331, 32087597, 32087956, 32088132
32088478, 32089051, 32089820, 32090518, 32090725, 32092797, 32093558
32094825, 32095097, 32095380, 32095610, 32095658, 32096252, 32097387
32097589, 32097604, 32097767, 32097882, 32097962, 32098224, 32098535
32099153, 32099539, 32099580, 32101305, 32101499, 32102542, 32102854
32103383, 32103427, 32103628, 32104324, 32104402, 32104610, 32105135
32105239, 32105412, 32107505, 32107621, 32108094, 32108115, 32108566
32108576, 32109384, 32109796, 32112798, 32112822, 32113113, 32113791
32114541, 32114561, 32114572, 32114746, 32115403, 32115642, 32117115
32117253, 32117490, 32118543, 32118727, 32119144, 32119339, 32119565
32120283, 32120453, 32121014, 32121326, 32121673, 32121803, 32121885
32122574, 32123331, 32124176, 32124570, 32124594, 32124607, 32124611
32125142, 32125160, 32125845, 32127227, 32127448, 32127911, 32129659
32130083, 32130485, 32130504, 32131010, 32131401, 32131774, 32132464
32132504, 32133039, 32133898, 32138257, 32138478, 32138782, 32139432
32139659, 32140616, 32140800, 32142788, 32143492, 32143562, 32144917
32147340, 32148419, 32148662, 32149848, 32150818, 32150854, 32151098
32152341, 32153396, 32153619, 32153909, 32156194, 32157050, 32157078
32159343, 32161260, 32161381, 32162391, 32164053, 32165367, 32165759
32165814, 32165887, 32167592, 32167923, 32169151, 32170162, 32170190
32171622, 32171791, 32172050, 32172773, 32172777, 32173142, 32173543
32174321, 32174405, 32174492, 32174571, 32175329, 32175780, 32176922
32177701, 32177869, 32178217, 32178966, 32179209, 32179306, 32181149
32182097, 32182783, 32183102, 32183756, 32184235, 32184577, 32184844
32184855, 32185296, 32186186, 32186983, 32187775, 32189869, 32189952
32190132, 32190190, 32190284, 32190419, 32190573, 32191427, 32191451
32193431, 32195333, 32195815, 32195946, 32196492, 32196738, 32197147
32198292, 32198368, 32198396, 32199681, 32200524, 32201743, 32201903
32201936, 32203068, 32203354, 32205455, 32205514, 32205825, 32207088
32207920, 32208144, 32208326, 32208346, 32208691, 32209784, 32210660
32211423, 32212041, 32212062, 32212635, 32212916, 32213376, 32213696
32214021, 32214195, 32214654, 32214743, 32214782, 32215240, 32215991
32216027, 32218369, 32218395, 32218498, 32218552, 32219179, 32219318
32219835, 32219988, 32220017, 32220709, 32221141, 32222473, 32223669
32224583, 32225117, 32225353, 32225742, 32225899, 32227352, 32228188
32228677, 32229431, 32229919, 32230213, 32230775, 32230953, 32231049
32231356, 32234161, 32235513, 32236601, 32236685, 32236798, 32237489
32237778, 32238935, 32239137, 32239730, 32241889, 32243007, 32243148
32243814, 32243882, 32243985, 32244187, 32245711, 32245850, 32246090
32247420, 32248131, 32248405, 32248649, 32249207, 32249371, 32249509
32249640, 32249674, 32250232, 32250238, 32251364, 32252036, 32252213
32252262, 32252294, 32253703, 32254063, 32254399, 32254686, 32255029

32255073, 32255753, 32258021, 32258423, 32259063, 32259322, 32259535
32259785, 32260010, 32260290, 32263923, 32264556, 32266406, 32266906
32267171, 32267610, 32268669, 32268800, 32274403, 32277643, 32277793
32279351, 32280901, 32284241, 32284325, 32284485, 32284608, 32284725
32285086, 32285717, 32285789, 32287797, 32287989, 32289552, 32289858
32290313, 32290399, 32290949, 32291114, 32291139, 32292180, 32292805
32293615, 32294566, 32294851, 32296259, 32296941, 32297373, 32297469
32297849, 32298173, 32298782, 32300098, 32300822, 32300849, 32301856
32302470, 32302561, 32303160, 32303657, 32304293, 32304712, 32305792
32307046, 32307586, 32309046, 32309488, 32309723, 32312131, 32312412
32312586, 32316070, 32316252, 32316326, 32317012, 32317306, 32318528
32318820, 32318914, 32319410, 32321317, 32321319, 32321765, 32322629
32322738, 32323488, 32323600, 32323816, 32324219, 32325574, 32325611
32327201, 32328231, 32329914, 32330269, 32330540, 32331889, 32332107
32334745, 32335257, 32335769, 32338476, 32338736, 32338953, 32339801
32340392, 32340885, 32341217, 32341260, 32341820, 32342172, 32342345
32342750, 32343092, 32343678, 32344099, 32344168, 32344199, 32345001
32345178, 32345272, 32345785, 32346649, 32346733, 32347957, 32353343
32355765, 32355912, 32356340, 32356545, 32356609, 32356628, 32357412
32357665, 32359044, 32361175, 32361677, 32362016, 32362066, 32362072
32362698, 32363549, 32363711, 32364147, 32366303, 32366461, 32366536
32367151, 32368480, 32368789, 32368792, 32369041, 32372725, 32374050
32374431, 32374616, 32375438, 32375493, 32376774, 32376872, 32376922
32377901, 32379001, 32379140, 32379303, 32379775, 32380591, 32381403
32381605, 32382021, 32382207, 32385068, 32385141, 32385832, 32386482
32386683, 32386720, 32386877, 32387555, 32387818, 32388247, 32389047
32389497, 32390629, 32390855, 32391021, 32392724, 32393137, 32393612
32394623, 32396326, 32397350, 32398714, 32400076, 32401086, 32402243
32403509, 32403748, 32404638, 32405239, 32406222, 32408640, 32409009
32409344, 32409942, 32410175, 32412340, 32413042, 32413512, 32414944
32414996, 32415846, 32415989, 32416652, 32416655, 32417227, 32417242
32417274, 32417301, 32417438, 32417632, 32417766, 32419774, 32421958
32422965, 32423678, 32423985, 32424465, 32425097, 32425124, 32425194
32425778, 32425862, 32426213, 32426315, 32427158, 32427173, 32427226
32427583, 32427953, 32428097, 32428189, 32428330, 32430745, 32431049
32431251, 32431290, 32431413, 32432078, 32432245, 32435911, 32436342
32436460, 32436721, 32436757, 32437538, 32439726, 32440681, 32441128
32441671, 32441834, 32442229, 32442404, 32443087, 32443531, 32443744
32443935, 32444159, 32446565, 32449622, 32450344, 32453583, 32453611
32453888, 32455219, 32455650, 32455742, 32455961, 32457252, 32459153
32459632, 32460136, 32460145, 32461726, 32462153, 32464021, 32464584
32465193, 32465209, 32465466, 32465495, 32465853, 32465894, 32466474
32467812, 32468643, 32469004, 32469225, 32471100, 32471251, 32471346
32471642, 32472589, 32473465, 32474686, 32474926, 32474997, 32478452

32480419, 32480510, 32480528, 32480541, 32481807, 32484945, 32485859
32486528, 32486955, 32489206, 32490128, 32490416, 32491443, 32492343
32492382, 32492422, 32492452, 32495545, 32495572, 32497756, 32498459
32498569, 32498752, 32499155, 32500117, 32501930, 32503790, 32504340
32504786, 32505009, 32505439, 32505557, 32505634, 32506309, 32506473
32506809, 32507542, 32508585, 32509271, 32509584, 32509606, 32509814
32510116, 32512145, 32512918, 32515850, 32516336, 32517405, 32517797
32518029, 32518679, 32519995, 32520645, 32520691, 32520994, 32522300
32522472, 32523206, 32523613, 32523750, 32524841, 32525039, 32526118
32526703, 32527621, 32529396, 32529483, 32530202, 32531259, 32531627
32531647, 32533019, 32533225, 32533461, 32534925, 32535106, 32535159
32536006, 32538436, 32538824, 32539300, 32539322, 32539914, 32540706
32541049, 32542641, 32544124, 32544464, 32544740, 32544784, 32545415
32546408, 32546937, 32548580, 32549168, 32549277, 32549351, 32550051
32550589, 32550751, 32551177, 32551246, 32552602, 32553241, 32555120
32555592, 32556165, 32556891, 32559543, 32561759, 32561791, 32561841
32562587, 32563106, 32563114, 32563151, 32563940, 32565870, 32567750
32567788, 32568163, 32569603, 32569745, 32573197, 32573703, 32573942
32576097, 32576508, 32576534, 32577408, 32578113, 32578616, 32578792
32579075, 32579529, 32580082, 32580378, 32580852, 32583315, 32583355
32583375, 32583692, 32584375, 32584505, 32586534, 32587305, 32587472
32587567, 32587793, 32587994, 32588298, 32588656, 32589147, 32589990
32593845, 32593886, 32593955, 32594965, 32595551, 32596355, 32596705
32597099, 32597637, 32598406, 32601769, 32602194, 32602344, 32602599
32602735, 32602871, 32602990, 32603092, 32603152, 32603564, 32603619
32605116, 32606489, 32607991, 32608297, 32608821, 32609394, 32609886
32610185, 32610271, 32613788, 32614583, 32615310, 32615776, 32616678
32618819, 32619195, 32619298, 32619327, 32620859, 32620919, 32621140
32621309, 32622507, 32622612, 32625356, 32626756, 32627140, 32628131
32628221, 32629028, 32629772, 32629859, 32630060, 32631551, 32631787
32633251, 32634049, 32635881, 32635931, 32639432, 32639860, 32639950
32641748, 32642587, 32645139, 32646025, 32647170, 32648248, 32649749
32651063, 32651769, 32651773, 32652143, 32652573, 32652605, 32653470
32653669, 32654962, 32655446, 32655691, 32656231, 32656275, 32657251
32658481, 32659438, 32659574, 32659930, 32659983, 32662165, 32663019
32665836, 32669149, 32671437, 32671481, 32672057, 32675095, 32675227
32676084, 32676350, 32676659, 32677000, 32677702, 32682430, 32685989
32686338, 32686850, 32690400, 32692372, 32693242, 32697157, 32697431
32697781, 32697859, 32698508, 32698569, 32700396, 32700455, 32700989
32701048, 32703155, 32704013, 32704119, 32704765, 32705800, 32706821
32707007, 32707211, 32710165, 32710534, 32710750, 32711741, 32712220
32712916, 32715945, 32716726, 32718316, 32718721, 32719288, 32720344
32720458, 32724505, 32724654, 32725484, 32728984, 32730701, 32731498
32733671, 32733845, 32734021, 32734171, 32734800, 32735915, 32735980

32736370, 32737774, 32737969, 32738356, 32739966, 32740421, 32740503
32740515, 32740987, 32743290, 32743511, 32746831, 32747680, 32747738
32749028, 32750940, 32753371, 32753472, 32754044, 32754574, 32754845
32755493, 32755517, 32755731, 32756914, 32757219, 32758096, 32760868
32760906, 32761294, 32761932, 32762231, 32763283, 32763544, 32764690
32765738, 32766397, 32766407, 32766916, 32768752, 32769880, 32771735
32775512, 32775526, 32776891, 32781826, 32782851, 32784393, 32784403
32786308, 32786309, 32788660, 32789228, 32790012, 32793286, 32794120
32794261, 32795016, 32795712, 32797486, 32800137, 32800539, 32801192
32801303, 32801337, 32803807, 32806069, 32806112, 32806915, 32807517
32809152, 32810125, 32810668, 32811069, 32811131, 32816003, 32817950
32818019, 32818230, 32818545, 32822436, 32822847, 32823545, 32823692
32827206, 32828636, 32829060, 32829563, 32829937, 32831451, 32831855
32831901, 32833378, 32834168, 32834394, 32834426, 32838028, 32838533
32841689, 32841994, 32842415, 32842823, 32843672, 32843754, 32846272
32846876, 32847975, 32848816, 32850174, 32851615, 32851841, 32852504
32855257, 32856375, 32857370, 32857881, 32858446, 32863795, 32864736
32866089, 32868369, 32869560, 32870681, 32872839, 32874995, 32875003
32875118, 32877550, 32878039, 32879447, 32879990, 32880225, 32880390
32881462, 32881853, 32883252, 32883853, 32887649, 32888458, 32889096
32889434, 32891500, 32892883, 32893686, 32893951, 32894842, 32895105
32897184, 32897679, 32898672, 32898678, 32898971, 32900208, 32902635
32903472, 32903625, 32907741, 32907975, 32908241, 32908249, 32908946
32909255, 32909292, 32910846, 32913527, 32914508, 32914711, 32915747
32915760, 32915847, 32916025, 32918041, 32918394, 32922090, 32924796
32925421, 32925703, 32930360, 32930423, 32930665, 32931078, 32931941
32935932, 32936005, 32936402, 32936424, 32936859, 32936961, 32937167
32937338, 32939376, 32939883, 32940714, 32940955, 32941096, 32941509
32941792, 32945404, 32946347, 32946711, 32947264, 32952285, 32953258
32955962, 32956092, 32956896, 32961939, 32962162, 32965460, 32966389
32967871, 32968221, 32968634, 32969466, 32969863, 32970478, 32973406
32976022, 32977489, 32980826, 32982562, 32983419, 32983750, 32983871
32984625, 32984679, 32985908, 32987004, 32987206, 32987308, 32988028
32991527, 32993522, 32993998, 32994080, 32995206, 32995242, 32995863
32996071, 32996974, 32998659, 32999086, 32999329, 33000440, 33000980
33003817, 33004888, 33008265, 33009224, 33009351, 33010173, 33010444
33011078, 33011198, 33013379, 33015716, 33016007, 33018951, 33020510
33021036, 33021642, 33022043, 33022140, 33023671, 33025005, 33026533
33026796, 33027087, 33027377, 33027525, 33027539, 33027553, 33028013
33028286, 33028462, 33031619, 33032299, 33032579, 33034103, 33034619
33034642, 33035201, 33035710, 33036321, 33037531, 33037895, 33038479
33038537, 33039277, 33040335, 33043590, 33044062, 33045137, 33046179
33047827, 33048277, 33049012, 33049866, 33050587, 33050622, 33050626
33056383, 33056579, 33059891, 33060161, 33061339, 33063919, 33064324

33064565, 33065437, 33065979, 33069366, 33072392, 33072854, 33075133
33075246, 33075452, 33084064, 33085296, 33085361, 33090110, 33090127
33090781, 33090848, 33092087, 33096609, 33097433, 33099872, 33100352
33101055, 33101058, 33102477, 33105276, 33105656, 33106822, 33106897
33107872, 33108317, 33109335, 33110192, 33110642, 33110992, 33111729
33113848, 33114640, 33115438, 33117641, 33120828, 33121866, 33121880
33121934, 33123402, 33123404, 33123985, 33125873, 33126216, 33127032
33127141, 33127312, 33131526, 33131742, 33135083, 33136252, 33137328
33139230, 33140218, 33141420, 33142123, 33142533, 33142739, 33144001
33145153, 33148063, 33149578, 33150236, 33152388, 33159956, 33161424
33161535, 33161726, 33163159, 33163187, 33165183, 33165391, 33166116
33166242, 33169254, 33172549, 33172631, 33172679, 33176672, 33177660
33178223, 33178248, 33182152, 33184467, 33185773, 33186578, 33188597
33190454, 33190694, 33191073, 33191584, 33192462, 33193293, 33196009
33196035, 33196475, 33197296, 33199431, 33205781, 33207143, 33207342
33208644, 33211160, 33211334, 33212112, 33215225, 33216667, 33218194
33218518, 33219840, 33221061, 33223248, 33225584, 33225678, 33227044
33230882, 33232128, 33233560, 33234302, 33235620, 33237523, 33239083
33241692, 33242408, 33244297, 33245940, 33247372, 33251111, 33252648
33253504, 33261786, 33266449, 33268162, 33271941, 33273638, 33275880
33278133, 33278509, 33279489, 33282110, 33282605, 33282971, 33287418
33288427, 33289442, 33289604, 33292174, 33292175, 33292896, 33295267
33297275, 33303555, 33303725, 33304435, 33304775, 33304830, 33305150
33305254, 33306852, 33307945, 33308107, 33308199, 33308244, 33312823
33314122, 33314523, 33315835, 33316711, 33317279, 33318949, 33322672
33323634, 33323903, 33324226, 33325981, 33327118, 33330508, 33331329
33332612, 33332891, 33334340, 33334404, 33335941, 33337385, 33338247
33338891, 33344767, 33347947, 33349744, 33351136, 33351978, 33352794
33353474, 33354011, 33355007, 33355136, 33358968, 33360246, 33364012
33367184, 33367909, 33373644, 33373693, 33375194, 33380472, 33380871
33381652, 33382529, 33382620, 33384092, 33384505, 33387767, 33388473
33388927, 33397495, 33401519, 33403843, 33407135, 33408858, 33409163
33409759, 33409841, 33415279, 33416405, 33417145, 33417828, 33417987
33420249, 33420490, 33421440, 33422596, 33425127, 33426135, 33427823
33440178, 33440442, 33441073, 33444647, 33446226, 33448908, 33451134
33454288, 33454299, 33455225, 33456516, 33456703, 33456848, 33457235
33457584, 33457842, 33458082, 33458732, 33459161, 33460521, 33462620
33464061, 33470092, 33471858, 33473795, 33474916, 33479703, 33482590
33489699, 33490031, 33497160, 33499125, 33499867, 33500486, 33504432
33504902, 33507610, 33507953, 33510171, 33513434, 33514179, 33515115
33517445, 33522799, 33531067, 33531364, 33532755, 33534589, 33537225
33538063, 33540746, 33545698, 33548869, 33550827, 33553902, 33557344
33558058, 33558251, 33558391, 33559316, 33561671, 33561845, 33562255
33563137, 33563167, 33566611, 33571225, 33573142, 33591046, 33599734

33601195, 33601849, 33613512, 33613829, 33617685, 33618962, 33621871
 33622325, 33624356, 33631068, 33631562, 33631959, 33632051, 33632754
 33635094, 33637219, 33641592, 33647820, 33651003, 33656104, 33656608
 33656679, 33657553, 33660093, 33660782, 33660816, 33661960, 33663113
 33674035, 33679665, 33684377, 33695048, 33714000, 33718848, 33727406
 33736618, 33738702, 33743745, 33794088, 33801237, 33805155, 33808041
 33811601, 33817717, 33822187, 33824830, 33850437, 33853330, 33879054
 33893127, 33896760, 33921441, 33954999, 33961800, 33967599, 34006614
 34006650

Version 19.0.0.0.ru-2022-01.rur-2022-01.r1

Version 19.0.0.0.ru-2022-01.rur-2022-01.r1 includes the following:

- Patch [33515361](#): DATABASE RELEASE UPDATE 19.14.0.0.0
- Patch [33561310](#): OJVM RELEASE UPDATE 19.14.0.0.0
- Patch [33613829](#): RDBMS - DSTV37 UPDATE - TZDATA2021E
- Patch [33613833](#): DSTV37 UPDATE - TZDATA2021E - NEED OJVM FIX
- Patch [29213893](#): DBMS_STATS FAILING WITH ERROR ORA-01422 WHEN GATHERING STATS FOR USER TABLE
- Patch [28730253](#): SUPPORT NEW ERA REIWA FOR JAPANESE IMPERIAL CALENDAR
- PreUpgrade Jar: preupgrade_19_cbuild_12_lf.zip

Combined patches for version 19.0.0.0.ru-2022-01.rur-2022-01.r1, released January 2022

Bugs fixed:

7391838, 8460502, 8476681, 14570574, 14735102, 15931756, 15959416
 16662822, 16664572, 16750494, 17275499, 17395507, 17428816, 17468475
 17777718, 18534283, 18697534, 19080742, 19138896, 19697993, 20007421
 20083476, 20313356, 20319830, 20479545, 20867658, 20922160, 21119541
 21232786, 21245711, 21374587, 21528318, 21629064, 21639146, 21888352
 21965541, 22066547, 22252368, 22325312, 22387320, 22553815, 22580355
 22725871, 22729345, 22748979, 23020668, 23066463, 23094775, 23125587
 23294761, 23296836, 23311885, 23606241, 23645975, 23734075, 23734111
 23763462, 24336782, 24356932, 24559425, 24561942, 24596874, 24669730

24687075, 24833686, 24957575, 24971456, 25030027, 25033515, 25092651
25093917, 25148135, 25404117, 25415139, 25416731, 25541233, 25560538
25562258, 25607406, 25607716, 25632308, 25661172, 25677036, 25756945
25792962, 25804387, 25804908, 25806201, 25809128, 25883179, 25905368
25913778, 25979242, 25986062, 25997810, 26001677, 26003708, 26108369
26127355, 26139817, 26173091, 26203132, 26256280, 26280704, 26284288
26352569, 26352615, 26440142, 26476244, 26497655, 26499997, 26500553
26577716, 26587659, 26611353, 26621826, 26668264, 26716835, 26739322
26758837, 26777814, 26785852, 26789742, 26800890, 26819036, 26860844
26872233, 26897528, 26951566, 26957541, 26963540, 26978857, 27004798
27004828, 27019512, 27036163, 27044169, 27044246, 27063461, 27086374
27091809, 27101798, 27126122, 27126938, 27130348, 27131416, 27155644
27162036, 27166935, 27195575, 27195935, 27207214, 27221350, 27222128
27243840, 27244999, 27254335, 27260704, 27261477, 27277677, 27302372
27329690, 27359766, 27359770, 27362994, 27369515, 27378053, 27381279
27392968, 27406105, 27411022, 27423500, 27439716, 27453490, 27458357
27458493, 27460010, 27489107, 27497101, 27572040, 27582210, 27589260
27597359, 27604329, 27622946, 27629928, 27636387, 27639208, 27654410
27658166, 27661222, 27666312, 27684864, 27692173, 27697886, 27700413
27710072, 27729678, 27742354, 27745728, 27751111, 27760043, 27764052
27768096, 27782078, 27785931, 27786168, 27801144, 27828892, 27829722
27841399, 27846298, 27873364, 27877830, 27880025, 27897090, 27899093
27907898, 27917890, 27929509, 27933036, 27934711, 27935464, 27941110
27957203, 27957963, 27962025, 27967484, 27998559, 28001632, 28007516
28031385, 28052648, 28064977, 28072567, 28078186, 28089605, 28092783
28104176, 28109326, 28112563, 28125947, 28127569, 28129791, 28133903
28138566, 28138847, 28144569, 28145995, 28156781, 28167557, 28173612
28181021, 28185286, 28187837, 28189466, 28198802, 28201045, 28204104
28204262, 28205555, 28209985, 28210681, 28234255, 28248841, 28263142
28271258, 28271693, 28276054, 28279176, 28279456, 28279612, 28294439
28294563, 28298401, 28302580, 28313275, 28319114, 28322973, 28326928
28338211, 28350595, 28351919, 28362187, 28364580, 28370061, 28371123
28373960, 28375383, 28379065, 28381939, 28383667, 28386259, 28387185
28387574, 28390273, 28392179, 28395302, 28397317, 28402823, 28403019
28406374, 28410431, 28414968, 28431445, 28432345, 28435333, 28436173
28436414, 28442896, 28451312, 28454215, 28461031, 28461789, 28463226
28470673, 28475242, 28479352, 28482048, 28482049, 28484299, 28487818
28489419, 28492006, 28498976, 28499269, 28502773, 28503081, 28504631
28505321, 28513333, 28521330, 28522750, 28523644, 28526715, 28530171
28530697, 28534475, 28534493, 28535127, 28537481, 28538439, 28541606
28542455, 28544270, 28546290, 28547068, 28547926, 28553981, 28558489
28558645, 28561704, 28564479, 28565296, 28567417, 28567819, 28569897
28570589, 28572165, 28572407, 28572533, 28572544, 28572667, 28572834
28578945, 28587723, 28589194, 28589509, 28589644, 28591817, 28592647

28593127, 28593682, 28594086, 28597221, 28598022, 28601957, 28602253
28605066, 28606598, 28607316, 28607632, 28608211, 28612239, 28618343
28620697, 28621543, 28622202, 28625580, 28625862, 28625873, 28627033
28628592, 28630381, 28632796, 28632799, 28636532, 28639299, 28640772
28642469, 28642551, 28642899, 28643583, 28643654, 28643718, 28644549
28645570, 28646200, 28646939, 28649388, 28651078, 28655209, 28657026
28659098, 28661333, 28661362, 28663289, 28663782, 28670402, 28672124
28672457, 28673945, 28681153, 28682182, 28682796, 28689483, 28690694
28692103, 28692275, 28692282, 28693954, 28694526, 28694639, 28694872
28694877, 28696373, 28697526, 28698087, 28699321, 28700945, 28703812
28704412, 28705231, 28707931, 28708400, 28708585, 28709063, 28710385
28710469, 28710663, 28710734, 28714461, 28714720, 28715655, 28715727
28717406, 28718302, 28718469, 28719348, 28720204, 28720418, 28721497
28722229, 28729900, 28730079, 28730253, 28734355, 28740708, 28740799
28741374, 28742555, 28745367, 28747846, 28749853, 28751498, 28752923
28755011, 28755084, 28755309, 28755846, 28757960, 28758722, 28760206
28763291, 28765983, 28767240, 28769456, 28770865, 28771022, 28771947
28772390, 28772816, 28774416, 28776431, 28776811, 28777073, 28777214
28777478, 28778754, 28781599, 28781754, 28785273, 28785321, 28785531
28788272, 28789531, 28789533, 28791576, 28791852, 28793062, 28794230
28795551, 28795563, 28795734, 28800508, 28802066, 28802734, 28804517
28805242, 28806517, 28807247, 28808314, 28808652, 28808656, 28810381
28811560, 28811592, 28813317, 28813931, 28815123, 28815355, 28815557
28816871, 28817449, 28818063, 28819640, 28820669, 28821847, 28824482
28827682, 28828390, 28831971, 28833912, 28835937, 28836716, 28837979
28838385, 28839869, 28842408, 28844656, 28844738, 28845346, 28846759
28847541, 28847572, 28849494, 28849776, 28850084, 28851458, 28851467
28852325, 28854004, 28854212, 28854733, 28855520, 28855922, 28857552
28861861, 28862532, 28863263, 28863432, 28863487, 28865544, 28865569
28867698, 28867992, 28870496, 28871040, 28872645, 28872829, 28873575
28874416, 28875089, 28876253, 28876639, 28876926, 28877252, 28878865
28880218, 28880864, 28881191, 28881848, 28882146, 28882751, 28882784
28884931, 28887305, 28888083, 28888327, 28889389, 28889730, 28891867
28891941, 28892794, 28897123, 28897512, 28899663, 28900506, 28901126
28902135, 28904380, 28905312, 28905390, 28905457, 28905615, 28907196
28909769, 28909992, 28910498, 28910586, 28911140, 28912691, 28914144
28915561, 28917080, 28918429, 28919145, 28921844, 28922227, 28922485
28922532, 28922608, 28922767, 28925250, 28925460, 28925634, 28925880
28927452, 28928462, 28930944, 28932914, 28933079, 28933158, 28935293
28935956, 28936114, 28937717, 28938167, 28938422, 28938698, 28940179
28940281, 28940472, 28941901, 28942455, 28942694, 28945421, 28945994
28946233, 28946574, 28948554, 28949888, 28950868, 28951332, 28951493
28951533, 28952168, 28954762, 28955606, 28955883, 28956145, 28956908
28957260, 28957292, 28957723, 28958088, 28958094, 28958590, 28959493

28960863, 28962271, 28962775, 28963036, 28965084, 28965095, 28965231
28965376, 28966444, 28968211, 28968779, 28970122, 28974083, 28974902
28974999, 28977322, 28978664, 28979289, 28980448, 28980910, 28981871
28983095, 28983486, 28984313, 28985114, 28985272, 28985362, 28985478
28986207, 28986231, 28986257, 28986326, 28986481, 28986696, 28988482
28988864, 28989306, 28990681, 28993295, 28993353, 28994307, 28994542
28994721, 28994783, 28995287, 28996376, 28998369, 28999046, 29000000
29001305, 29001888, 29002273, 29002488, 29002784, 29002927, 29003207
29003407, 29003617, 29003738, 29004934, 29005748, 29006318, 29006621
29007321, 29007353, 29007775, 29008035, 29008669, 29009513, 29010126
29010517, 29011936, 29012609, 29013475, 29013832, 29014076, 29014385
29015118, 29016294, 29017265, 29018655, 29018680, 29019121, 29020423
29021063, 29021352, 29022986, 29024028, 29024054, 29024448, 29024552
29024732, 29024795, 29024876, 29026154, 29026582, 29026606, 29027456
29027694, 29027914, 29027933, 29027940, 29030184, 29030927, 29031575
29031600, 29032234, 29032276, 29032457, 29032607, 29033052, 29033145
29033164, 29033200, 29033280, 29033655, 29034331, 29034587, 29036278
29037290, 29038528, 29038728, 29038730, 29039089, 29039510, 29040032
29040739, 29041739, 29041775, 29043554, 29043651, 29043725, 29044086
29044763, 29044954, 29046482, 29047127, 29047850, 29048178, 29048289
29048498, 29048605, 29048728, 29048792, 29048858, 29049014, 29049673
29050357, 29050560, 29050765, 29050886, 29051263, 29051702, 29051953
29052726, 29052850, 29053783, 29053902, 29055644, 29056024, 29056270
29056560, 29056767, 29056894, 29058476, 29059011, 29060216, 29061016
29061959, 29062692, 29062848, 29062860, 29062868, 29110526, 29110783
29110790, 29110797, 29110802, 29110805, 29111598, 29111631, 29112455
29113282, 29113305, 29115794, 29115857, 29116779, 29117337, 29117526
29117642, 29118543, 29119077, 29119733, 29120223, 29122224, 29122254
29122367, 29123297, 29123324, 29123432, 29123444, 29123482, 29124104
29124368, 29125036, 29125374, 29125380, 29125708, 29125786, 29126345
29127957, 29128693, 29128935, 29129450, 29129476, 29129497, 29129691
29129712, 29130219, 29131539, 29131772, 29132456, 29132869, 29132938
29133470, 29134447, 29135383, 29135649, 29136111, 29138641, 29139070
29139727, 29139761, 29139780, 29139956, 29141316, 29141341, 29141685
29141886, 29142609, 29142667, 29143516, 29144995, 29145214, 29145730
29146077, 29146157, 29146810, 29147849, 29148799, 29149170, 29149829
29150338, 29151520, 29152357, 29152603, 29152752, 29154631, 29154636
29154725, 29154829, 29155099, 29155208, 29157051, 29157389, 29158680
29158899, 29158990, 29159216, 29159661, 29159909, 29159936, 29160174
29160462, 29160824, 29161597, 29161923, 29162095, 29162749, 29163073
29163156, 29163415, 29163437, 29163524, 29163567, 29164376, 29164446
29165682, 29167111, 29167342, 29167374, 29167940, 29168137, 29168219
29168433, 29169073, 29169215, 29169540, 29169739, 29170232, 29170717
29171683, 29171942, 29172618, 29172826, 29173140, 29173373, 29173618

29173817, 29174004, 29174753, 29175638, 29175829, 29176318, 29177466
29177543, 29177886, 29178385, 29179097, 29180313, 29180455, 29180559
29180721, 29180893, 29181078, 29181153, 29181231, 29181568, 29181620
29181743, 29181923, 29182019, 29182517, 29182901, 29182920, 29183298
29183912, 29184297, 29184666, 29185193, 29186091, 29186456, 29186605
29188255, 29189302, 29189307, 29189889, 29190235, 29190474, 29190663
29190740, 29191541, 29191827, 29192419, 29192468, 29192685, 29193207
29194205, 29194367, 29194493, 29194827, 29194981, 29195279, 29195337
29195758, 29196151, 29196725, 29198092, 29198913, 29199163, 29199635
29199733, 29200316, 29200700, 29201143, 29201494, 29201539, 29201695
29201787, 29202104, 29202461, 29202850, 29203041, 29203122, 29203166
29203227, 29203425, 29203443, 29203604, 29205281, 29205323, 29205419
29205463, 29205767, 29205918, 29206109, 29206605, 29206631, 29207073
29208260, 29208732, 29209545, 29210577, 29210610, 29210624, 29210683
29211457, 29211724, 29211895, 29212012, 29212433, 29212611, 29213320
29213351, 29213613, 29213641, 29213775, 29213850, 29213879, 29213893
29214561, 29214960, 29216312, 29216723, 29216746, 29216984, 29217294
29217472, 29217828, 29217848, 29217856, 29218570, 29219205, 29219273
29219627, 29220079, 29221248, 29221745, 29221891, 29221942, 29222031
29222534, 29222784, 29222892, 29223833, 29223859, 29223967, 29224065
29224294, 29224605, 29224710, 29225076, 29225168, 29225758, 29225861
29227602, 29228869, 29229164, 29229754, 29229839, 29229844, 29229955
29230252, 29230565, 29231133, 29232117, 29232154, 29232449, 29232533
29232653, 29233415, 29233810, 29233953, 29234123, 29235934, 29236573
29237538, 29237575, 29237744, 29240307, 29240668, 29240759, 29241345
29241651, 29242017, 29242561, 29242884, 29242906, 29243749, 29243958
29244495, 29244766, 29244968, 29245063, 29245137, 29245160, 29246163
29246337, 29247183, 29247415, 29247712, 29247906, 29248495, 29248552
29248723, 29248835, 29248858, 29249289, 29249412, 29249583, 29249991
29250059, 29250317, 29251259, 29251564, 29252510, 29252790, 29253184
29253871, 29254031, 29254177, 29254623, 29254930, 29255178, 29255273
29255431, 29255435, 29255616, 29255705, 29255718, 29255973, 29256279
29256426, 29259119, 29259320, 29260224, 29260407, 29260452, 29260956
29261547, 29261548, 29261695, 29261906, 29262143, 29262512, 29262887
29265446, 29265448, 29265780, 29266248, 29266899, 29267292, 29268412
29269171, 29269228, 29269825, 29270585, 29271019, 29273168, 29273360
29273539, 29273570, 29273735, 29273812, 29273847, 29274428, 29274564
29274623, 29274627, 29275461, 29276272, 29277317, 29278218, 29278684
29279658, 29279751, 29279854, 29281112, 29281527, 29281691, 29281796
29282090, 29282233, 29282666, 29282898, 29285197, 29285453, 29285503
29285621, 29285788, 29285956, 29286037, 29286220, 29286229, 29287130
29287705, 29290110, 29290235, 29292232, 29292253, 29292378, 29292837
29293072, 29293574, 29293806, 29294753, 29296257, 29297863, 29297915
29298220, 29299049, 29299082, 29299830, 29299844, 29301139, 29301463

29301566, 29302565, 29302614, 29302963, 29303712, 29303918, 29304314
29304640, 29304692, 29304781, 29304853, 29305093, 29306226, 29306713
29306790, 29307090, 29307109, 29307638, 29309698, 29311336, 29311528
29311588, 29311927, 29312310, 29312672, 29312734, 29312753, 29312889
29313347, 29313417, 29313525, 29314539, 29314636, 29314867, 29314949
29317756, 29318410, 29319441, 29319558, 29320900, 29321489, 29321689
29323946, 29323999, 29324568, 29324735, 29325087, 29325105, 29325257
29325356, 29325497, 29325765, 29325993, 29326233, 29327044, 29327892
29328305, 29329042, 29329087, 29329675, 29329807, 29329848, 29330361
29330791, 29331066, 29331209, 29331380, 29331493, 29332292, 29332395
29332763, 29332771, 29332966, 29333500, 29336843, 29336899, 29337294
29337310, 29337742, 29338315, 29338348, 29338453, 29338780, 29338913
29339101, 29339155, 29339299, 29339452, 29340333, 29341209, 29341782
29342099, 29343086, 29343156, 29343861, 29344541, 29345382, 29345937
29346057, 29346138, 29346211, 29346943, 29347620, 29348176, 29348358
29350052, 29350712, 29350762, 29350868, 29351044, 29351386, 29351662
29351716, 29351735, 29351749, 29351771, 29351786, 29352298, 29352724
29352867, 29352947, 29353271, 29353432, 29353718, 29353821, 29353960
29355654, 29356547, 29356634, 29356704, 29356711, 29356752, 29356782
29357821, 29358509, 29358828, 29360252, 29360285, 29360467, 29360672
29360775, 29360911, 29360950, 29361319, 29361472, 29361801, 29362596
29363090, 29363151, 29364171, 29364177, 29366406, 29366818, 29366940
29367019, 29367561, 29367971, 29368253, 29368310, 29368725, 29372069
29372541, 29372562, 29373418, 29373588, 29374179, 29374604, 29374627
29375355, 29375941, 29375984, 29376346, 29377804, 29377986, 29378029
29378287, 29378834, 29378913, 29379299, 29379381, 29379552, 29379750
29379978, 29380527, 29381000, 29382296, 29382641, 29382784, 29382815
29383695, 29384740, 29384781, 29384854, 29384864, 29384960, 29385339
29385429, 29385652, 29385774, 29386125, 29386502, 29386557, 29386635
29386660, 29386835, 29387073, 29387274, 29387310, 29387329, 29387337
29388020, 29388072, 29388094, 29388524, 29388830, 29389408, 29389889
29390011, 29390435, 29390785, 29391030, 29391237, 29391301, 29391438
29391849, 29391925, 29392554, 29392966, 29393291, 29393649, 29394014
29394140, 29394749, 29395657, 29396481, 29397841, 29397954, 29397996
29398192, 29398488, 29398863, 29399046, 29399100, 29399121, 29399336
29399938, 29399959, 29402110, 29402131, 29404425, 29404483, 29405012
29405462, 29405651, 29405996, 29407488, 29407804, 29408853, 29409149
29409455, 29410311, 29410834, 29411037, 29411427, 29411469, 29411931
29412066, 29412269, 29413360, 29413382, 29413517, 29413544, 29413634
29413956, 29415493, 29415774, 29416339, 29416688, 29416700, 29417084
29417113, 29417173, 29417719, 29417884, 29418165, 29418341, 29420254
29420834, 29421059, 29423003, 29423016, 29423156, 29423227, 29423491
29423826, 29424094, 29424999, 29426241, 29426320, 29426521, 29428230
29429017, 29429087, 29429264, 29429336, 29429466, 29429566, 29429895

29430524, 29430866, 29431192, 29431402, 29431485, 29431985, 29432176
29434301, 29434869, 29435474, 29435652, 29435966, 29436454, 29436514
29436522, 29436727, 29437029, 29437379, 29437594, 29437712, 29438150
29438277, 29438736, 29439522, 29440651, 29441196, 29442400, 29442936
29443187, 29443250, 29443559, 29444072, 29444275, 29444282, 29444602
29444906, 29445548, 29446319, 29446669, 29447460, 29448498, 29449477
29449845, 29449852, 29450162, 29450193, 29450273, 29450421, 29450812
29450936, 29451085, 29451386, 29452251, 29452576, 29452936, 29452953
29454450, 29454978, 29455424, 29455773, 29456538, 29456714, 29457312
29457319, 29457370, 29457502, 29457807, 29457978, 29458132, 29460252
29461420, 29461791, 29461971, 29462594, 29462767, 29462957, 29463047
29463528, 29463553, 29463798, 29464616, 29464779, 29465047, 29465177
29466674, 29467622, 29469563, 29469565, 29470059, 29470205, 29470291
29471633, 29471832, 29471857, 29471860, 29472618, 29473708, 29474348
29475386, 29476473, 29476702, 29477015, 29481584, 29482021, 29483452
29483532, 29483626, 29483672, 29483685, 29483712, 29483723, 29483771
29485099, 29485731, 29485877, 29486181, 29486848, 29487150, 29487189
29487407, 29488894, 29488996, 29489436, 29489546, 29490256, 29491784
29492127, 29492939, 29493122, 29493821, 29494245, 29494788, 29494934
29495057, 29495171, 29495684, 29496977, 29497053, 29497311, 29497588
29497696, 29497778, 29498198, 29500257, 29500826, 29500963, 29501218
29502561, 29503543, 29503631, 29503827, 29504103, 29504492, 29504682
29505225, 29505589, 29505668, 29506942, 29507270, 29507616, 29508681
29508998, 29509777, 29510278, 29511064, 29511611, 29511980, 29512125
29512773, 29512890, 29514479, 29515134, 29515240, 29515476, 29515766
29515834, 29516300, 29516727, 29516766, 29517168, 29517443, 29517883
29518604, 29518767, 29519131, 29521187, 29521688, 29521748, 29521862
29522358, 29522561, 29522662, 29523055, 29523216, 29523511, 29524599
29524985, 29525366, 29525467, 29525886, 29526966, 29527595, 29527610
29528184, 29528368, 29529147, 29529436, 29530440, 29530515, 29530812
29530909, 29531654, 29531836, 29532112, 29532532, 29536342, 29536445
29536794, 29537829, 29538631, 29539027, 29539413, 29540327, 29540831
29540862, 29541517, 29541742, 29541769, 29541973, 29542084, 29542449
29542474, 29542580, 29542643, 29543034, 29543956, 29544552, 29546817
29547010, 29547867, 29548413, 29548427, 29548592, 29548687, 29548722
29549040, 29549071, 29549104, 29549154, 29549730, 29550530, 29552402
29552773, 29553141, 29554092, 29554351, 29554554, 29555105, 29555239
29557144, 29557261, 29557336, 29557556, 29558238, 29558452, 29558926
29558975, 29559187, 29559395, 29559446, 29559908, 29559981, 29564592
29564593, 29565611, 29579919, 29580394, 29580983, 29581460, 29581771
29583018, 29584261, 29584693, 29586143, 29587299, 29587488, 29587720
29587765, 29588580, 29588732, 29589544, 29590666, 29591343, 29591641
29591661, 29592011, 29592215, 29592433, 29592595, 29592946, 29597158
29597536, 29597716, 29597754, 29598039, 29598040, 29598046, 29598226

29598233, 29598338, 29599008, 29599243, 29599300, 29599552, 29601461
29602831, 29603460, 29603884, 29604002, 29604257, 29606261, 29607136
29607797, 29608000, 29608023, 29609603, 29610506, 29611020, 29611991
29613733, 29614206, 29614931, 29614987, 29615824, 29616244, 29616414
29617414, 29618074, 29618190, 29620042, 29620564, 29622936, 29623323
29623592, 29624124, 29625065, 29625804, 29625876, 29626154, 29626732
29628200, 29628647, 29629430, 29629650, 29629681, 29629745, 29630221
29631749, 29632095, 29632265, 29632611, 29632751, 29633697, 29633753
29633936, 29634643, 29635427, 29635717, 29635990, 29637362, 29637526
29637560, 29638285, 29638928, 29641736, 29642451, 29643721, 29644426
29644464, 29645167, 29645349, 29647176, 29647770, 29648928, 29649694
29651183, 29651517, 29651520, 29652809, 29653132, 29653246, 29655164
29655416, 29655668, 29655855, 29656400, 29656819, 29656843, 29657399
29657422, 29657744, 29657960, 29657973, 29658056, 29661028, 29661065
29661722, 29663191, 29663368, 29663494, 29663601, 29663813, 29664087
29664161, 29665168, 29665940, 29666451, 29667527, 29667994, 29668005
29669241, 29669413, 29670713, 29670782, 29671363, 29672507, 29675446
29676089, 29676921, 29677051, 29677173, 29677733, 29677927, 29678217
29679856, 29680700, 29681987, 29683039, 29683189, 29683211, 29684518
29685137, 29685276, 29687214, 29687220, 29687459, 29687718, 29687727
29687763, 29688867, 29689145, 29689255, 29690795, 29692115, 29692694
29693847, 29694869, 29695425, 29695821, 29695841, 29695964, 29695987
29696242, 29696310, 29697928, 29700125, 29700460, 29700770, 29701720
29701755, 29701937, 29703932, 29704426, 29705793, 29706141, 29706160
29707099, 29707493, 29707896, 29708324, 29708353, 29708876, 29708915
29710188, 29710858, 29713810, 29715220, 29715647, 29715703, 29716029
29716194, 29716227, 29716491, 29716602, 29716871, 29717659, 29717901
29718198, 29719146, 29720133, 29720373, 29721418, 29721576, 29722026
29722092, 29722167, 29722389, 29723113, 29724497, 29724658, 29725421
29725425, 29725476, 29725781, 29726695, 29737941, 29738374, 29738400
29739576, 29741319, 29741976, 29742223, 29742926, 29744225, 29744400
29744637, 29745288, 29745624, 29746962, 29747493, 29747648, 29747653
29748285, 29748325, 29748336, 29748513, 29749471, 29750673, 29751094
29753244, 29754196, 29754640, 29754951, 29755821, 29756274, 29756444
29757099, 29757264, 29757651, 29757687, 29758203, 29758217, 29758661
29761678, 29761837, 29761911, 29763158, 29764644, 29765035, 29765219
29765347, 29765393, 29765493, 29766207, 29766435, 29766503, 29766679
29768487, 29768899, 29769549, 29769695, 29769901, 29770750, 29771032
29771242, 29772514, 29772761, 29773185, 29773197, 29773205, 29773459
29773633, 29773842, 29774362, 29775393, 29775473, 29779196, 29779901
29780140, 29780633, 29782211, 29782284, 29782501, 29782823, 29782866
29783142, 29784106, 29785169, 29785239, 29785251, 29785311, 29785544
29785550, 29785831, 29787292, 29787766, 29788820, 29789911, 29791152
29791880, 29791916, 29792213, 29792433, 29793141, 29793151, 29793318

29794174, 29794462, 29795712, 29795957, 29796335, 29796378, 29796916
29797209, 29797726, 29801164, 29802382, 29802695, 29803948, 29804875
29805368, 29805772, 29806390, 29806964, 29807964, 29809792, 29809837
29810012, 29810013, 29811616, 29812084, 29812166, 29812489, 29813503
29813650, 29813671, 29814455, 29814995, 29815341, 29815713, 29816887
29817278, 29817547, 29817784, 29818794, 29819753, 29820341, 29821130
29821582, 29822714, 29825525, 29827647, 29827792, 29827852, 29828644
29829339, 29831196, 29831404, 29831567, 29833406, 29833984, 29834506
29836096, 29836424, 29838337, 29838485, 29838740, 29838773, 29839481
29839715, 29840619, 29841267, 29841687, 29842369, 29843238, 29843277
29843692, 29843831, 29844131, 29844226, 29844275, 29845449, 29845530
29845691, 29846126, 29846525, 29846645, 29846688, 29847627, 29848084
29848849, 29849100, 29849139, 29850552, 29850566, 29850930, 29851020
29851308, 29851733, 29853485, 29856420, 29856506, 29856859, 29856890
29858121, 29858376, 29858420, 29859068, 29860022, 29860994, 29861075
29864203, 29864261, 29865188, 29865590, 29865658, 29867728, 29868639
29869052, 29869086, 29869149, 29869404, 29869857, 29869877, 29869887
29869906, 29870065, 29870533, 29871098, 29871312, 29871360, 29872401
29872937, 29872983, 29873206, 29873665, 29873751, 29874090, 29874761
29875200, 29875459, 29875565, 29875919, 29876358, 29876989, 29877608
29878076, 29879723, 29881050, 29881478, 29881575, 29881643, 29881839
29882427, 29882454, 29882729, 29884958, 29885182, 29885890, 29886809
29887045, 29887111, 29888621, 29889184, 29889358, 29890740, 29891075
29891853, 29891857, 29891916, 29892388, 29892604, 29892634, 29893132
29893197, 29893287, 29894021, 29896510, 29897418, 29897720, 29897863
29900203, 29900824, 29901021, 29901419, 29901961, 29902299, 29902327
29902330, 29902659, 29903190, 29903299, 29903357, 29903454, 29904002
29906678, 29907942, 29908389, 29908639, 29908777, 29909658, 29910218
29910402, 29912135, 29912286, 29913805, 29913934, 29913966, 29914449
29914544, 29915182, 29915217, 29915848, 29916198, 29916975, 29919782
29919789, 29920025, 29920376, 29920804, 29921214, 29921318, 29921559
29922225, 29922435, 29922461, 29923452, 29924147, 29924181, 29924479
29925177, 29926466, 29927756, 29928040, 29928210, 29928340, 29928427
29928564, 29930457, 29931956, 29932202, 29932310, 29932430, 29932780
29932953, 29933718, 29934048, 29934052, 29934158, 29934557, 29935685
29936841, 29937565, 29937655, 29937956, 29938063, 29938225, 29939075
29939400, 29939795, 29940373, 29941062, 29942096, 29942275, 29942554
29943670, 29943879, 29944035, 29944159, 29944660, 29944963, 29945645
29946101, 29946388, 29947145, 29947242, 29947428, 29948165, 29950018
29950220, 29951620, 29951759, 29952700, 29955625, 29956016, 29956222
29957412, 29957493, 29958925, 29960325, 29960884, 29961353, 29961360
29961609, 29961847, 29962160, 29962248, 29962834, 29962927, 29962939
29965052, 29965207, 29965603, 29965888, 29966768, 29967223, 29967386
29967911, 29968085, 29968703, 29969557, 29969985, 29970081, 29970261

29970273, 29970298, 29970587, 29970861, 29971027, 29971481, 29971888
29971936, 29971951, 29972134, 29972176, 29973012, 29989783, 29989845
29990779, 29991257, 29993717, 29997326, 29997553, 29997937, 30000518
30000664, 30001105, 30001331, 30003187, 30004660, 30004856, 30006159
30006280, 30006411, 30006472, 30006705, 30006985, 30007450, 30007536
30007797, 30008035, 30008125, 30008198, 30008214, 30008456, 30009528
30009710, 30012181, 30012737, 30013243, 30013535, 30014200, 30015070
30017836, 30018017, 30018903, 30019864, 30021830, 30024618, 30025814
30026016, 30026596, 30027614, 30027649, 30028182, 30028599, 30028649
30029519, 30029806, 30031027, 30031613, 30032233, 30032376, 30032484
30033040, 30033547, 30034456, 30035444, 30035598, 30036258, 30038392
30038576, 30039796, 30039800, 30039959, 30040157, 30040511, 30041501
30041514, 30042490, 30043398, 30043610, 30043930, 30044108, 30044507
30045242, 30045273, 30045389, 30045484, 30045983, 30046497, 30047510
30047531, 30047702, 30047765, 30047931, 30048688, 30049966, 30051176
30051783, 30051804, 30052740, 30052928, 30053036, 30053501, 30053748
30054980, 30056058, 30057718, 30057799, 30058149, 30058453, 30059106
30059109, 30059821, 30060267, 30060330, 30062364, 30062429, 30062736
30062819, 30064268, 30066352, 30067565, 30068384, 30068792, 30068871
30070064, 30071446, 30072018, 30072038, 30072905, 30073314, 30073422
30073744, 30074250, 30074296, 30074349, 30074469, 30074472, 30074820
30075037, 30076058, 30076197, 30076253, 30076604, 30078675, 30078934
30079949, 30080111, 30080266, 30080297, 30080988, 30081055, 30081546
30081580, 30082145, 30082402, 30083100, 30083216, 30083488, 30083807
30084458, 30084606, 30084971, 30085897, 30086596, 30086992, 30087165
30087509, 30088229, 30088421, 30090568, 30092254, 30092280, 30092859
30094929, 30094948, 30095499, 30095591, 30095952, 30096138, 30097092
30097115, 30098251, 30098719, 30099302, 30099420, 30099454, 30099852
30100354, 30101090, 30101186, 30101541, 30101847, 30102774, 30103551
30103553, 30104348, 30104378, 30104555, 30105458, 30106748, 30106901
30108012, 30109365, 30110224, 30110370, 30110518, 30114477, 30114489
30114534, 30116085, 30116203, 30116753, 30116854, 30117209, 30117335
30117469, 30117593, 30118261, 30118279, 30120608, 30122523, 30122583
30123138, 30125765, 30126145, 30126470, 30127145, 30127522, 30127805
30127904, 30128047, 30128231, 30130240, 30131286, 30131645, 30132708
30132989, 30133841, 30134103, 30134746, 30135396, 30135731, 30135942
30136102, 30136346, 30137792, 30138948, 30139392, 30140425, 30141240
30142527, 30142812, 30142815, 30142907, 30143470, 30143593, 30145712
30146593, 30146969, 30147195, 30147307, 30147308, 30147473, 30147928
30148343, 30148929, 30148966, 30148999, 30149035, 30149658, 30150606
30150710, 30153552, 30153885, 30154633, 30155241, 30155320, 30155388
30155489, 30155814, 30155837, 30155999, 30156569, 30157526, 30158313
30159329, 30159488, 30159511, 30159536, 30159690, 30159752, 30159760
30160025, 30160625, 30161094, 30163243, 30164238, 30164714, 30165493

30165503, 30165876, 30165892, 30165897, 30166257, 30166352, 30167787
30169254, 30170104, 30172925, 30173113, 30173370, 30173556, 30174102
30174394, 30174401, 30175180, 30175291, 30175478, 30175587, 30177597
30178250, 30178839, 30178990, 30179012, 30179038, 30179644, 30179894
30180208, 30180643, 30181756, 30182498, 30183367, 30183696, 30183715
30183920, 30184102, 30185852, 30186319, 30186476, 30186706, 30187627
30187866, 30188631, 30189516, 30189535, 30190090, 30191274, 30192691
30192729, 30192853, 30193165, 30193262, 30193505, 30193506, 30193584
30193736, 30194612, 30194710, 30194972, 30195667, 30195668, 30195684
30195773, 30196195, 30196358, 30196629, 30198239, 30198598, 30198861
30198905, 30199890, 30200034, 30200132, 30200237, 30200680, 30200758
30202349, 30202388, 30203929, 30204042, 30204542, 30206220, 30206493
30206675, 30207473, 30207519, 30208327, 30208690, 30208723, 30209222
30209736, 30210429, 30210753, 30210884, 30211567, 30213031, 30213540
30214769, 30214826, 30215130, 30215302, 30215351, 30217206, 30217562
30217982, 30218044, 30218317, 30218956, 30219222, 30220932, 30221115
30221237, 30221298, 30222512, 30222669, 30222975, 30223712, 30223847
30224544, 30224650, 30224725, 30224868, 30224950, 30225265, 30225439
30225443, 30225718, 30225837, 30225844, 30226244, 30227400, 30228422
30228567, 30229030, 30229126, 30229683, 30230183, 30232638, 30233105
30233536, 30233934, 30234132, 30234227, 30235878, 30235919, 30235979
30236092, 30236399, 30236554, 30236746, 30236964, 30237477, 30237640
30238211, 30238715, 30239480, 30240010, 30240547, 30240858, 30240930
30240972, 30241567, 30241807, 30241829, 30241920, 30242120, 30242724
30243216, 30244340, 30244831, 30246053, 30246179, 30247305, 30248520
30248531, 30248564, 30249432, 30249738, 30249927, 30251003, 30252005
30252098, 30252156, 30252458, 30252977, 30253035, 30253090, 30253608
30253705, 30253761, 30253835, 30254206, 30254525, 30254576, 30254726
30255143, 30255528, 30256542, 30257412, 30257908, 30259120, 30259469
30260523, 30260595, 30263013, 30263377, 30264405, 30265523, 30265608
30265615, 30265703, 30266791, 30267155, 30269428, 30269748, 30270647
30270744, 30271114, 30272329, 30273212, 30274090, 30274188, 30274324
30274662, 30275548, 30275569, 30275578, 30275784, 30276144, 30276243
30277120, 30277451, 30277589, 30277648, 30277733, 30277887, 30278402
30281428, 30281615, 30282501, 30282591, 30282918, 30283296, 30283577
30283579, 30283581, 30283832, 30283932, 30284219, 30284369, 30284751
30285026, 30285166, 30285251, 30285341, 30285457, 30285540, 30285843
30286961, 30288343, 30288491, 30289074, 30289458, 30290700, 30291536
30292305, 30293345, 30294267, 30294465, 30294671, 30294865, 30295110
30295137, 30295549, 30295790, 30295808, 30297905, 30299367, 30299817
30299934, 30300030, 30300342, 30300363, 30300523, 30300538, 30304037
30305163, 30305264, 30305395, 30305568, 30305603, 30305880, 30306407
30307814, 30307883, 30308368, 30308578, 30308624, 30308772, 30308947
30309098, 30309798, 30310195, 30311826, 30312094, 30312546, 30313749

30313848, 30313989, 30314079, 30314198, 30314837, 30316667, 30316897
30317005, 30317209, 30317397, 30318638, 30318943, 30319080, 30319099
30320029, 30321076, 30321398, 30322980, 30323219, 30323658, 30323820
30323849, 30324059, 30324180, 30324466, 30324649, 30325407, 30325786
30326115, 30326882, 30327149, 30327581, 30327678, 30327810, 30328168
30328209, 30328690, 30329209, 30329737, 30329751, 30330123, 30331254
30331356, 30331759, 30332505, 30332893, 30334484, 30334563, 30335127
30335832, 30335987, 30336032, 30336383, 30336530, 30336742, 30336996
30337245, 30338434, 30338591, 30339049, 30339103, 30340540, 30341713
30342371, 30342878, 30343370, 30344614, 30345201, 30345432, 30345809
30345926, 30345950, 30346330, 30346729, 30346847, 30346867, 30347410
30349714, 30350177, 30350543, 30352532, 30352581, 30352623, 30352715
30355490, 30356060, 30356461, 30357463, 30357698, 30357897, 30358416
30359614, 30360383, 30360653, 30361070, 30361635, 30362003, 30362850
30363088, 30363193, 30363311, 30363716, 30364329, 30364481, 30364613
30364835, 30365745, 30367193, 30368048, 30368482, 30368534, 30368668
30368917, 30371264, 30371623, 30371909, 30372081, 30373419, 30373541
30373550, 30374345, 30374570, 30374739, 30375109, 30376986, 30377347
30377692, 30377729, 30380511, 30380907, 30381207, 30381525, 30381614
30382646, 30382982, 30383286, 30384121, 30384152, 30387628, 30387666
30388853, 30389229, 30389414, 30389507, 30389821, 30390279, 30390382
30390635, 30391272, 30391794, 30392011, 30392870, 30392987, 30393110
30393653, 30393944, 30394509, 30394738, 30394974, 30395132, 30396120
30396946, 30396974, 30397100, 30398099, 30398251, 30398257, 30398422
30398770, 30399906, 30402386, 30403284, 30403412, 30403763, 30403881
30403902, 30403989, 30404117, 30404153, 30404357, 30404639, 30406227
30406709, 30408128, 30408515, 30408808, 30409207, 30409339, 30409472
30409590, 30412188, 30412772, 30412863, 30412885, 30412921, 30413137
30413294, 30414491, 30414679, 30414714, 30416034, 30416603, 30417648
30417732, 30418926, 30419024, 30419196, 30419450, 30420105, 30420452
30421009, 30421026, 30421204, 30421439, 30421476, 30421706, 30422487
30423135, 30423218, 30424347, 30430921, 30431274, 30431504, 30431582
30431698, 30431703, 30431717, 30431867, 30432101, 30432470, 30433177
30434793, 30436326, 30436399, 30437003, 30437149, 30438224, 30439985
30440651, 30440712, 30441277, 30441687, 30441959, 30442266, 30442749
30442805, 30442874, 30442884, 30443393, 30446436, 30446583, 30446820
30447060, 30447498, 30447589, 30447994, 30448182, 30448348, 30448355
30448917, 30449194, 30449837, 30450787, 30453442, 30454090, 30455427
30457633, 30457697, 30458080, 30458568, 30458593, 30460095, 30460558
30460842, 30460922, 30461123, 30461458, 30462439, 30463938, 30464250
30464655, 30466081, 30466214, 30469777, 30470402, 30470947, 30472891
30473634, 30474167, 30474386, 30474774, 30475041, 30475115, 30475813
30476768, 30477588, 30477685, 30477691, 30477767, 30479252, 30479647
30479715, 30480591, 30480872, 30481004, 30483065, 30483140, 30483217

30483521, 30484042, 30484623, 30484801, 30485255, 30486436, 30486896
30487387, 30487697, 30489582, 30490014, 30490578, 30490671, 30492380
30493331, 30493518, 30494259, 30494900, 30495035, 30495078, 30495133
30495483, 30496957, 30497057, 30497120, 30497765, 30498824, 30500224
30500297, 30500344, 30500582, 30501574, 30502415, 30503943, 30505029
30505497, 30506794, 30506991, 30507032, 30507313, 30508100, 30509112
30509277, 30510347, 30510527, 30510718, 30512690, 30513285, 30513353
30513480, 30513848, 30515886, 30516868, 30517214, 30517516, 30517635
30518349, 30518447, 30518923, 30519188, 30520662, 30522285, 30522998
30523137, 30523538, 30523601, 30523750, 30524736, 30527198, 30527275
30528547, 30528637, 30528687, 30528704, 30528731, 30528935, 30529790
30529915, 30529940, 30530585, 30532811, 30533132, 30533580, 30534351
30534549, 30534662, 30534827, 30535905, 30536237, 30537403, 30537405
30537533, 30537584, 30538141, 30538818, 30539519, 30539866, 30540109
30540407, 30544247, 30544595, 30544629, 30544752, 30545040, 30545281
30545556, 30549255, 30549368, 30549637, 30549789, 30549881, 30551000
30551123, 30554178, 30556326, 30556523, 30556581, 30556807, 30557386
30557803, 30558561, 30559129, 30559218, 30559252, 30560365, 30560513
30561404, 30561590, 30561737, 30564139, 30564343, 30564898, 30565004
30565595, 30565805, 30566054, 30567372, 30568514, 30568896, 30570083
30571306, 30572816, 30573236, 30573703, 30575243, 30575697, 30576112
30576393, 30576853, 30577071, 30577591, 30578221, 30579051, 30580813
30580887, 30581448, 30582221, 30582500, 30584767, 30585407, 30586493
30587001, 30588738, 30589914, 30591028, 30591475, 30592859, 30593046
30593104, 30593863, 30594167, 30595114, 30595408, 30595860, 30596024
30596320, 30596488, 30596694, 30598682, 30598746, 30598919, 30599405
30599407, 30600173, 30600184, 30602230, 30602828, 30603211, 30605215
30605676, 30606345, 30606451, 30608583, 30609799, 30610052, 30610097
30610406, 30610667, 30611527, 30611603, 30612199, 30613035, 30613937
30613971, 30614411, 30616406, 30616738, 30617002, 30617626, 30618230
30619138, 30619383, 30619414, 30619525, 30619728, 30619787, 30620805
30621255, 30621910, 30622393, 30622528, 30622755, 30623138, 30623142
30624243, 30624792, 30624864, 30624874, 30625121, 30628834, 30628899
30629139, 30629643, 30629799, 30630391, 30630829, 30630930, 30631393
30631523, 30633259, 30633395, 30633938, 30634548, 30634559, 30635183
30635302, 30635326, 30635360, 30637270, 30637319, 30637841, 30638712
30640436, 30641541, 30641755, 30641900, 30642124, 30644358, 30644530
30644766, 30644889, 30645590, 30645896, 30645938, 30646077, 30647133
30649310, 30650297, 30650404, 30651231, 30651570, 30651621, 30651674
30652515, 30652595, 30652813, 30652853, 30654131, 30654558, 30655906
30656839, 30657196, 30657365, 30657566, 30657624, 30657706, 30657875
30657906, 30657940, 30658421, 30658533, 30658555, 30658702, 30659940
30660412, 30661000, 30661939, 30662634, 30662651, 30662736, 30663591
30663646, 30664266, 30665036, 30665399, 30665720, 30666902, 30668407

30668754, 30670328, 30670369, 30670584, 30671606, 30671720, 30671813
30671958, 30674373, 30674959, 30676209, 30677633, 30679595, 30679771
30679804, 30681085, 30681462, 30681516, 30681521, 30682289, 30684902
30685163, 30686017, 30686131, 30686809, 30687047, 30689557, 30689988
30690686, 30691604, 30691731, 30691857, 30692462, 30692473, 30693791
30694947, 30695670, 30696566, 30696821, 30698289, 30699770, 30702732
30703610, 30704826, 30705448, 30708735, 30710088, 30710506, 30710783
30710807, 30710917, 30711370, 30712670, 30713133, 30714151, 30714715
30716001, 30716863, 30718841, 30718862, 30719327, 30719419, 30720736
30720844, 30722105, 30722705, 30723671, 30724679, 30724881, 30726204
30727701, 30727759, 30728196, 30729278, 30729604, 30729839, 30730026
30732711, 30733270, 30733563, 30734242, 30734362, 30734707, 30735091
30735153, 30735736, 30737970, 30739013, 30739876, 30740115, 30740250
30740669, 30740997, 30741263, 30748411, 30748707, 30749181, 30749644
30749722, 30750219, 30750991, 30751171, 30751521, 30751527, 30751639
30751968, 30753432, 30755348, 30758836, 30758854, 30758943, 30759573
30760739, 30761871, 30761878, 30763272, 30763305, 30763639, 30763754
30763970, 30764405, 30764663, 30764706, 30764976, 30765486, 30765995
30767277, 30767654, 30768636, 30769312, 30770717, 30772069, 30773164
30773696, 30773797, 30776416, 30776676, 30776929, 30777519, 30777759
30778855, 30779240, 30781032, 30781041, 30781461, 30781970, 30782266
30782300, 30782414, 30783395, 30783551, 30785101, 30786237, 30786641
30786655, 30787365, 30788973, 30789904, 30790047, 30790441, 30801050
30801296, 30801510, 30803210, 30804646, 30806757, 30806984, 30807723
30807888, 30808109, 30808364, 30808869, 30809087, 30810680, 30810765
30812574, 30814266, 30814285, 30815269, 30815495, 30815852, 30815994
30816760, 30816938, 30819340, 30819629, 30819756, 30820155, 30821297
30822207, 30822502, 30822919, 30823744, 30825391, 30825419, 30825656
30826474, 30827849, 30828205, 30828350, 30829779, 30829844, 30830555
30832775, 30833454, 30834068, 30834110, 30834705, 30835184, 30835219
30835853, 30836129, 30838605, 30839253, 30839315, 30839451, 30839836
30840791, 30840793, 30841241, 30842277, 30843271, 30844839, 30845806
30846063, 30846159, 30846782, 30847442, 30847871, 30848028, 30848097
30848773, 30851448, 30851951, 30852954, 30855101, 30856358, 30857501
30857721, 30858444, 30858810, 30858877, 30858919, 30860741, 30860803
30861988, 30862285, 30863115, 30864607, 30865805, 30866141, 30866988
30867685, 30868010, 30868186, 30869131, 30870439, 30870513, 30871716
30871792, 30873527, 30874084, 30874270, 30874337, 30874660, 30876666
30879169, 30879708, 30880774, 30880913, 30881161, 30881407, 30883715
30883785, 30883877, 30886188, 30887501, 30887777, 30887976, 30887989
30889443, 30889607, 30889723, 30890720, 30890752, 30890971, 30891760
30891792, 30893601, 30895426, 30895577, 30896620, 30896685, 30898366
30898381, 30898748, 30898939, 30901889, 30902655, 30904672, 30905604
30906274, 30906407, 30909596, 30909918, 30910264, 30910267, 30913399

30914272, 30914674, 30915781, 30919403, 30919587, 30919691, 30919804
30921136, 30921259, 30922450, 30922936, 30922996, 30923514, 30923517
30923597, 30923940, 30925316, 30925419, 30925828, 30927440, 30927821
30929206, 30930149, 30930339, 30931068, 30931311, 30931981, 30932674
30932923, 30936251, 30936831, 30936942, 30937340, 30937391, 30937410
30938413, 30939307, 30939317, 30939934, 30940259, 30940382, 30940868
30940869, 30941056, 30944643, 30945005, 30945772, 30946072, 30946141
30946595, 30946768, 30946843, 30946876, 30946896, 30947294, 30950786
30952104, 30952191, 30953157, 30953266, 30953836, 30954062, 30955702
30956571, 30956647, 30957739, 30958493, 30960314, 30960356, 30960736
30961566, 30961824, 30964194, 30965111, 30965554, 30965649, 30966205
30967084, 30968737, 30968781, 30970518, 30972817, 30972841, 30972887
30972947, 30972951, 30972959, 30972966, 30973085, 30973113, 30973127
30973137, 30973143, 30973197, 30973698, 30973877, 30974207, 30974813
30976603, 30977294, 30977411, 30978554, 30978747, 30979701, 30980023
30980115, 30980317, 30980733, 30981182, 30981240, 30983064, 30985027
30985906, 30986423, 30987088, 30987105, 30987243, 30987717, 30987724
30988444, 30989951, 30990034, 30992120, 30992330, 30992597, 30993198
30993518, 30993604, 30994996, 30996945, 30996991, 30997375, 30997960
30998035, 30998662, 30998759, 30998847, 31000312, 31001017, 31001455
31001490, 31001859, 31002223, 31002346, 31002923, 31003137, 31003659
31003759, 31004077, 31004719, 31004844, 31004871, 31005003, 31006011
31006259, 31006792, 31006953, 31008240, 31008858, 31008907, 31009032
31009271, 31009545, 31009590, 31009680, 31010218, 31010554, 31010976
31011361, 31013127, 31013531, 31014323, 31015330, 31016413, 31019249
31021068, 31021109, 31021157, 31021324, 31021542, 31021780, 31022858
31025267, 31025520, 31025531, 31025859, 31026220, 31026591, 31026860
31026870, 31027747, 31028883, 31028986, 31029936, 31030898, 31031240
31031955, 31032463, 31032904, 31032913, 31034794, 31035287, 31035916
31037421, 31038220, 31038447, 31038817, 31039337, 31039627, 31039928
31041540, 31042208, 31042337, 31043483, 31043630, 31043695, 31043747
31044145, 31044460, 31044504, 31044951, 31045929, 31046188, 31046619
31046830, 31047022, 31047169, 31047333, 31047697, 31047740, 31048025
31048741, 31049215, 31049995, 31050557, 31051056, 31051075, 31052735
31052809, 31053669, 31054177, 31054874, 31055142, 31056909, 31057402
31058548, 31061482, 31061504, 31062010, 31062645, 31063315, 31063380
31063769, 31064025, 31065701, 31065838, 31066082, 31066250, 31066265
31066554, 31067456, 31067483, 31067892, 31067913, 31069059, 31070528
31071080, 31073440, 31073586, 31074032, 31075323, 31075960, 31077117
31077365, 31078391, 31078757, 31079204, 31080474, 31081558, 31082719
31084778, 31084921, 31086467, 31086869, 31086954, 31087361, 31087679
31088115, 31088341, 31089259, 31089270, 31090262, 31091402, 31091469
31091868, 31092129, 31092233, 31092581, 31092921, 31094183, 31094228
31094249, 31094374, 31094688, 31095972, 31096846, 31097760, 31097961

31098661, 31098870, 31099312, 31099926, 31099981, 31100172, 31101386
31101840, 31103065, 31103804, 31104809, 31105225, 31105733, 31105896
31106140, 31106577, 31107577, 31108603, 31108644, 31109506, 31109924
31110021, 31112088, 31112209, 31112530, 31112972, 31113089, 31113177
31113249, 31113426, 31113682, 31114116, 31114265, 31114671, 31115201
31115502, 31115653, 31117282, 31118486, 31118702, 31118809, 31118844
31119057, 31119467, 31119846, 31120361, 31122876, 31123976, 31124213
31124363, 31124821, 31124914, 31125773, 31125849, 31125918, 31126053
31126058, 31127043, 31127457, 31127961, 31127968, 31127969, 31128086
31129851, 31130156, 31132732, 31134430, 31137765, 31138106, 31139643
31140940, 31141792, 31142377, 31142749, 31142815, 31143146, 31143415
31143870, 31145389, 31145403, 31145525, 31145804, 31146338, 31146727
31151483, 31153120, 31153485, 31155085, 31155305, 31155634, 31156301
31156383, 31156767, 31156898, 31158151, 31158341, 31158380, 31159382
31161861, 31162711, 31162915, 31163379, 31165038, 31165577, 31165722
31166083, 31166801, 31168440, 31169366, 31170082, 31171096, 31171147
31171631, 31172207, 31172233, 31172642, 31174836, 31175365, 31176451
31176502, 31177193, 31177204, 31177221, 31178051, 31178058, 31178103
31180519, 31181375, 31181380, 31182159, 31182451, 31182756, 31182793
31183413, 31184230, 31185224, 31188038, 31188398, 31190624, 31191224
31192039, 31193292, 31193511, 31193695, 31193745, 31193936, 31194015
31194264, 31195090, 31195430, 31195600, 31195838, 31196272, 31196310
31196812, 31200057, 31200845, 31201001, 31201366, 31201611, 31202536
31204002, 31204412, 31204878, 31205834, 31206070, 31206201, 31207446
31208287, 31213034, 31214119, 31214928, 31215422, 31215438, 31215548
31215854, 31216823, 31216995, 31217946, 31218837, 31218904, 31219047
31219975, 31220188, 31220549, 31220837, 31220881, 31220912, 31221454
31222780, 31223382, 31224819, 31225538, 31226448, 31226534, 31228670
31230250, 31230775, 31233170, 31233235, 31234765, 31234790, 31234983
31235797, 31236624, 31240626, 31240864, 31242319, 31242976, 31244968
31245856, 31247532, 31247838, 31248496, 31249008, 31249406, 31249689
31249696, 31250120, 31250152, 31250221, 31251325, 31252659, 31253451
31254297, 31254535, 31254929, 31255369, 31255869, 31256383, 31257740
31257826, 31258101, 31258344, 31258697, 31258995, 31260692, 31261467
31261641, 31262275, 31262388, 31265651, 31265773, 31268557, 31270711
31270847, 31271032, 31274074, 31279670, 31281708, 31282037, 31283557
31287296, 31287741, 31287871, 31289115, 31290017, 31290300, 31290427
31291986, 31292298, 31293484, 31293867, 31298871, 31301460, 31303032
31304573, 31304945, 31305114, 31305309, 31305624, 31306248, 31306261
31306867, 31306927, 31307715, 31309379, 31309867, 31310564, 31310624
31311830, 31312450, 31312976, 31313117, 31313177, 31313214, 31313444
31313812, 31314323, 31314885, 31315495, 31315876, 31316250, 31317032
31321092, 31322720, 31323383, 31325584, 31326320, 31326608, 31326977
31326998, 31327046, 31327259, 31327278, 31327349, 31327391, 31327896

31331354, 31331372, 31333156, 31334606, 31334961, 31335037, 31336298
31336371, 31338249, 31338673, 31338686, 31338769, 31339457, 31339643
31339744, 31341138, 31341746, 31343110, 31344046, 31344097, 31348711
31348922, 31349426, 31350348, 31353098, 31353610, 31355339, 31356601
31357581, 31357737, 31358308, 31358511, 31359215, 31359366, 31360146
31360155, 31360214, 31360282, 31360314, 31360323, 31360469, 31360529
31362408, 31362692, 31364001, 31364383, 31366716, 31367188, 31367364
31368027, 31369444, 31370500, 31372498, 31373825, 31373837, 31373843
31374283, 31374449, 31374738, 31375865, 31376011, 31376708, 31377129
31377206, 31377487, 31377701, 31377808, 31377936, 31380443, 31381174
31381701, 31383049, 31383396, 31383464, 31383814, 31386394, 31386696
31387033, 31387123, 31387426, 31387443, 31388201, 31388288, 31390936
31390955, 31391991, 31393600, 31393991, 31394341, 31394347, 31394365
31394544, 31395247, 31396027, 31396609, 31396695, 31396980, 31398505
31398617, 31398663, 31398761, 31399131, 31399883, 31400754, 31401831
31402078, 31402598, 31403177, 31403565, 31404014, 31404130, 31404263
31404487, 31404550, 31405300, 31405751, 31408636, 31409483, 31409912
31409964, 31410289, 31411163, 31412209, 31414023, 31414524, 31415324
31416193, 31416213, 31416250, 31417007, 31417192, 31417242, 31417336
31417844, 31417990, 31418442, 31419363, 31420295, 31420316, 31420320
31420337, 31421316, 31422440, 31422620, 31423645, 31424838, 31425167
31425761, 31425800, 31427345, 31429501, 31429590, 31429770, 31429784
31429844, 31429971, 31430722, 31430735, 31430910, 31431005, 31431326
31431771, 31431964, 31431969, 31431971, 31431973, 31431975, 31431986
31432906, 31433092, 31433579, 31433749, 31434421, 31434805, 31434870
31435163, 31435308, 31435735, 31437030, 31437448, 31440426, 31440813
31441916, 31441920, 31442332, 31442714, 31443030, 31444353, 31444516
31445356, 31446431, 31447733, 31448680, 31449354, 31450392, 31450653
31450942, 31451019, 31453585, 31454428, 31454972, 31454988, 31455597
31456857, 31458049, 31458537, 31458634, 31458739, 31459231, 31459242
31459369, 31461990, 31462082, 31463613, 31464165, 31465389, 31466433
31468060, 31468705, 31469001, 31471441, 31471589, 31471856, 31472077
31473148, 31474315, 31475378, 31475635, 31476093, 31476603, 31476701
31476736, 31477424, 31477695, 31479072, 31479075, 31479106, 31479272
31479772, 31481750, 31483949, 31484385, 31484603, 31485340, 31485386
31485507, 31486061, 31486557, 31487441, 31487491, 31487826, 31487844
31488085, 31488464, 31489032, 31489137, 31489481, 31489590, 31489672
31489936, 31490604, 31491634, 31492171, 31492191, 31492588, 31492655
31492856, 31493153, 31493840, 31494095, 31494264, 31494794, 31495254
31495564, 31496174, 31497550, 31498559, 31499370, 31499700, 31500699
31500719, 31500971, 31501139, 31502301, 31503349, 31503674, 31503934
31505088, 31506095, 31507107, 31507129, 31508229, 31508712, 31509279
31510891, 31510910, 31511142, 31511519, 31511940, 31512044, 31512262
31513011, 31515163, 31515869, 31515879, 31515911, 31515929, 31516164

31516184, 31516255, 31516265, 31517502, 31518371, 31522708, 31523548
31523578, 31523585, 31523620, 31523646, 31523736, 31523836, 31525310
31525609, 31525783, 31526250, 31526903, 31527103, 31527199, 31527381
31528724, 31528738, 31528962, 31529594, 31529967, 31530985, 31530995
31532084, 31532176, 31532308, 31532339, 31533050, 31533113, 31533274
31533799, 31533817, 31533833, 31535073, 31535782, 31535870, 31535955
31536401, 31536731, 31537521, 31537736, 31538274, 31538363, 31538891
31539566, 31541805, 31541864, 31541905, 31542347, 31542356, 31542851
31542956, 31543810, 31544097, 31545477, 31546864, 31547220, 31547445
31547480, 31548675, 31549221, 31549468, 31551142, 31552563, 31552615
31552738, 31552755, 31553289, 31553674, 31553813, 31553968, 31555126
31555173, 31555346, 31555539, 31555800, 31556139, 31556950, 31557518
31557663, 31558194, 31559079, 31559085, 31559415, 31559563, 31560592
31561886, 31563138, 31564060, 31564795, 31567124, 31567403, 31567441
31567719, 31568423, 31569057, 31569867, 31570054, 31570161, 31571415
31571742, 31572006, 31572046, 31572267, 31573269, 31573457, 31574122
31574150, 31574244, 31574267, 31575529, 31575649, 31575665, 31576738
31577569, 31578202, 31578994, 31580079, 31580122, 31580374, 31580437
31581627, 31583865, 31584056, 31584555, 31584853, 31585040, 31585351
31585491, 31585789, 31586381, 31586862, 31588933, 31590826, 31591384
31591400, 31591409, 31591421, 31595025, 31595632, 31597104, 31597727
31598146, 31599363, 31599990, 31600023, 31600291, 31600894, 31601385
31602782, 31603199, 31603380, 31603625, 31605119, 31605370, 31605737
31606474, 31607937, 31608753, 31609974, 31610024, 31612535, 31613275
31613838, 31615736, 31616101, 31616104, 31617492, 31619276, 31620252
31620748, 31620944, 31622250, 31623413, 31623463, 31625579, 31625618
31625959, 31626438, 31626493, 31626528, 31626572, 31627587, 31628155
31628311, 31628753, 31629056, 31630551, 31630794, 31630946, 31631985
31632273, 31632534, 31632605, 31632663, 31633224, 31634510, 31634805
31635875, 31635963, 31635980, 31637094, 31637607, 31637680, 31638398
31638733, 31638943, 31639082, 31640139, 31640197, 31640240, 31642462
31642556, 31642639, 31644775, 31645288, 31647304, 31648120, 31648157
31649447, 31649818, 31649819, 31649958, 31649962, 31650046, 31650112
31650202, 31652641, 31653080, 31653167, 31653634, 31653647, 31653758
31653913, 31653916, 31653917, 31654116, 31654119, 31654122, 31654125
31654133, 31655807, 31656263, 31656601, 31657211, 31657324, 31657462
31657483, 31658464, 31658819, 31658943, 31659065, 31660283, 31661865
31661879, 31662143, 31662504, 31662625, 31662925, 31663189, 31663788
31664399, 31666449, 31666684, 31667096, 31667180, 31667940, 31668033
31668061, 31668065, 31668312, 31668694, 31668872, 31669064, 31670014
31670263, 31670353, 31671568, 31672605, 31673406, 31674380, 31674801
31675568, 31675852, 31675860, 31676941, 31677345, 31677460, 31677479
31677587, 31678629, 31679900, 31680709, 31680713, 31680985, 31682766
31683044, 31683260, 31683311, 31683373, 31683708, 31684080, 31684494

31685612, 31685882, 31685989, 31686979, 31688127, 31688978, 31691030
31691089, 31691480, 31695062, 31695693, 31696043, 31696577, 31696853
31697741, 31699230, 31700234, 31701239, 31701517, 31701910, 31703614
31705178, 31705265, 31705356, 31705704, 31706595, 31706956, 31707190
31708133, 31708175, 31709647, 31709739, 31709777, 31710272, 31711155
31711720, 31711889, 31711997, 31712260, 31714645, 31715935, 31716510
31716873, 31717010, 31718000, 31718134, 31718346, 31718842, 31719167
31720344, 31720839, 31720942, 31721557, 31721863, 31721880, 31722558
31722646, 31723226, 31723323, 31723651, 31727229, 31727560, 31728160
31728440, 31728444, 31728447, 31728477, 31728486, 31728858, 31730485
31730766, 31731076, 31731407, 31732311, 31732672, 31734007, 31734012
31734017, 31734583, 31735662, 31736095, 31737059, 31737603, 31739198
31739891, 31740252, 31741938, 31743771, 31744832, 31745130, 31745233
31745528, 31746054, 31747706, 31747818, 31747935, 31747989, 31748000
31748182, 31748233, 31748944, 31750577, 31750581, 31752492, 31752502
31752633, 31753202, 31753425, 31753478, 31753692, 31754240, 31754546
31754887, 31754980, 31755245, 31755451, 31756415, 31756465, 31756568
31756650, 31757357, 31757775, 31757824, 31758083, 31758344, 31758846
31758939, 31758960, 31759565, 31760278, 31760592, 31760738, 31761510
31762819, 31763030, 31763707, 31763905, 31764089, 31764239, 31764866
31764913, 31765068, 31765246, 31765257, 31765296, 31766499, 31766534
31766675, 31766696, 31767204, 31767237, 31767598, 31767852, 31768490
31768497, 31768505, 31769267, 31769373, 31769530, 31770289, 31771302
31771370, 31771410, 31771468, 31771745, 31771836, 31772002, 31772070
31773582, 31773909, 31774019, 31774132, 31775101, 31776121, 31776659
31776785, 31776994, 31777410, 31777489, 31779833, 31780567, 31781897
31783422, 31783451, 31783782, 31783985, 31785445, 31785572, 31786282
31786838, 31787057, 31787655, 31788104, 31788594, 31788704, 31788761
31788785, 31789167, 31789178, 31789335, 31790500, 31790757, 31792465
31792615, 31793126, 31793691, 31793713, 31794336, 31794882, 31795231
31796208, 31796277, 31796882, 31798001, 31798669, 31798702, 31798742
31799858, 31800053, 31800059, 31800139, 31800757, 31804838, 31805812
31807179, 31807516, 31809510, 31810213, 31812352, 31812824, 31815099
31815227, 31816158, 31816343, 31816631, 31820632, 31820662, 31820842
31820859, 31820926, 31821129, 31821835, 31822026, 31822951, 31823051
31823716, 31824504, 31824792, 31824934, 31825151, 31825324, 31825410
31827339, 31827605, 31827912, 31828378, 31828999, 31829366, 31829617
31829639, 31831950, 31832785, 31832901, 31833172, 31833585, 31833948
31834191, 31834214, 31834677, 31834871, 31835805, 31835854, 31836113
31836454, 31839038, 31839779, 31839888, 31840180, 31840490, 31840516
31840992, 31841147, 31841210, 31841696, 31842545, 31843028, 31843462
31843476, 31843845, 31844137, 31844357, 31844557, 31844560, 31845092
31845403, 31845803, 31845955, 31846454, 31847489, 31847541, 31848331
31848365, 31848391, 31848903, 31849859, 31850132, 31850227, 31851383

31851449, 31852482, 31852506, 31852574, 31854285, 31854692, 31855307
31855484, 31855526, 31855996, 31857143, 31858580, 31858621, 31858833
31859067, 31859143, 31860193, 31860406, 31860760, 31862359, 31862593
31862611, 31863118, 31863250, 31863890, 31864818, 31864947, 31866141
31866159, 31867037, 31867331, 31867351, 31869601, 31869944, 31869954
31869966, 31870010, 31870150, 31870164, 31870190, 31870196, 31871384
31871692, 31872230, 31872320, 31873155, 31875140, 31876138, 31876368
31876867, 31878256, 31878314, 31880154, 31881527, 31883124, 31883343
31883739, 31883845, 31886547, 31886695, 31886745, 31886848, 31887130
31888148, 31888731, 31889222, 31890230, 31890516, 31892029, 31892856
31895670, 31897178, 31897786, 31897854, 31898193, 31898257, 31900585
31902517, 31902662, 31903523, 31903786, 31903962, 31904739, 31904933
31905033, 31907042, 31907137, 31907510, 31907565, 31907792, 31907962
31908345, 31908482, 31908571, 31908750, 31909295, 31909807, 31912638
31912834, 31913650, 31913839, 31914003, 31914943, 31915444, 31915968
31916644, 31917378, 31917494, 31917856, 31919563, 31919952, 31921267
31922161, 31922580, 31923463, 31923622, 31925462, 31926203, 31926811
31926848, 31927078, 31927510, 31927930, 31930204, 31932042, 31932196
31933451, 31933837, 31933842, 31933846, 31933914, 31934254, 31934301
31935672, 31935717, 31935970, 31936588, 31936983, 31938116, 31938288
31939461, 31939486, 31940176, 31940458, 31941148, 31941948, 31942136
31942144, 31942258, 31942274, 31942473, 31943497, 31943691, 31945038
31945407, 31945659, 31945701, 31945827, 31945928, 31946936, 31947732
31947861, 31949490, 31950244, 31950577, 31951628, 31952046, 31952052
31953394, 31953989, 31956113, 31956435, 31956920, 31957152, 31957564
31957674, 31957683, 31958038, 31958958, 31959140, 31959253, 31960389
31961578, 31961940, 31964519, 31965012, 31965391, 31965542, 31968431
31970188, 31971792, 31972615, 31972671, 31973203, 31974424, 31974597
31974693, 31976303, 31977024, 31977257, 31980216, 31980296, 31981745
31981751, 31982879, 31985494, 31985738, 31985961, 31986808, 31986836
31986905, 31988079, 31988833, 31990386, 31991705, 31992615, 31993051
31993795, 31994145, 31994206, 31994298, 31995577, 31996264, 31996331
31997107, 31997457, 31997660, 31998181, 31998189, 31998861, 31999453
32001851, 32002411, 32003551, 32003908, 32004148, 32004299, 32004977
32005046, 32005048, 32005053, 32005215, 32006467, 32006703, 32006824
32007076, 32007698, 32008408, 32008586, 32008716, 32008819, 32009197
32009334, 32009754, 32010275, 32010593, 32010707, 32011107, 32011888
32012788, 32012975, 32013403, 32014520, 32015820, 32016884, 32017301
32017422, 32017671, 32018632, 32018953, 32020701, 32022223, 32022711
32025328, 32028155, 32028269, 32032653, 32032733, 32032887, 32033795
32034766, 32035268, 32035536, 32035893, 32035899, 32035902, 32036045
32037237, 32037962, 32038054, 32038780, 32038812, 32038844, 32038996
32040940, 32041799, 32042256, 32042352, 32042706, 32043743, 32044533
32044903, 32045377, 32046125, 32046587, 32047226, 32048412, 32048921

32050048, 32051896, 32052587, 32054806, 32056529, 32057333, 32057565
32057639, 32058260, 32060164, 32060577, 32061018, 32061146, 32061648
32062227, 32064682, 32066061, 32067130, 32067356, 32067675, 32068110
32068187, 32068190, 32069160, 32069508, 32069696, 32069834, 32071457
32071582, 32072944, 32073027, 32073710, 32074450, 32074728, 32075009
32075020, 32075130, 32076305, 32076561, 32077318, 32079573, 32079739
32080081, 32080655, 32081074, 32081381, 32082098, 32087331, 32087597
32087956, 32088132, 32088478, 32089051, 32089820, 32090518, 32090725
32092797, 32093558, 32094825, 32095097, 32095380, 32095610, 32095658
32096252, 32097387, 32097589, 32097604, 32097767, 32097882, 32097962
32098224, 32098535, 32099153, 32099539, 32099580, 32101305, 32101499
32102542, 32102854, 32103383, 32103427, 32104324, 32104402, 32104610
32105135, 32105239, 32105412, 32107505, 32107621, 32108094, 32108115
32108566, 32108576, 32109384, 32109796, 32112798, 32112822, 32113113
32113791, 32114541, 32114572, 32114746, 32115642, 32117115, 32117253
32117490, 32118727, 32119144, 32119339, 32119565, 32120283, 32120453
32121014, 32121326, 32121673, 32121803, 32121885, 32122574, 32123331
32124176, 32124570, 32124594, 32124607, 32124611, 32125142, 32127227
32127448, 32127911, 32129659, 32130083, 32130485, 32130504, 32131010
32131401, 32131774, 32132464, 32132504, 32133039, 32138257, 32138478
32138782, 32139432, 32139659, 32140616, 32140800, 32142788, 32143492
32143562, 32144917, 32147340, 32148419, 32148662, 32149848, 32150818
32150854, 32151098, 32152341, 32153396, 32153619, 32153909, 32156194
32157050, 32157078, 32161260, 32161381, 32162391, 32164053, 32165367
32165759, 32165814, 32165887, 32167592, 32167923, 32169151, 32170162
32170190, 32171622, 32171791, 32172050, 32172773, 32172777, 32173142
32173543, 32174321, 32174405, 32174492, 32174571, 32175329, 32175780
32176922, 32177701, 32177869, 32178217, 32178966, 32179209, 32179306
32181149, 32182097, 32182783, 32183102, 32183756, 32184235, 32184577
32184855, 32185296, 32186186, 32186983, 32187775, 32189869, 32189952
32190132, 32190190, 32190284, 32190419, 32190573, 32191427, 32191451
32193431, 32195333, 32195815, 32195946, 32196492, 32196738, 32197147
32198292, 32198396, 32199681, 32200524, 32201743, 32201903, 32201936
32203068, 32203354, 32205455, 32205825, 32207088, 32207920, 32208144
32208326, 32208346, 32208691, 32209784, 32210660, 32212041, 32212062
32212635, 32212916, 32213376, 32213696, 32214021, 32214195, 32214654
32214743, 32214782, 32215240, 32215991, 32216027, 32218369, 32218395
32218498, 32218552, 32219179, 32219318, 32219835, 32219988, 32220017
32220709, 32221141, 32222473, 32223669, 32224583, 32225117, 32225353
32225742, 32225899, 32227352, 32228188, 32229431, 32229919, 32230213
32230775, 32230953, 32231049, 32231356, 32234161, 32235513, 32236601
32236685, 32236798, 32237489, 32237778, 32238935, 32239137, 32239730
32241889, 32243007, 32243148, 32243814, 32243882, 32243985, 32244187
32245711, 32245850, 32246090, 32248131, 32248405, 32248649, 32249207

32249371, 32249509, 32249640, 32249674, 32250232, 32250238, 32251364
32252036, 32252213, 32252262, 32252294, 32254063, 32254399, 32254686
32255029, 32255073, 32255753, 32258021, 32258423, 32259063, 32259322
32259535, 32259785, 32260010, 32260290, 32263923, 32264556, 32266406
32266906, 32267171, 32267610, 32268669, 32268800, 32274403, 32277643
32277793, 32279351, 32280901, 32284241, 32284325, 32284485, 32284725
32285086, 32285717, 32285789, 32287797, 32289552, 32289858, 32290313
32290399, 32290949, 32291114, 32291139, 32292180, 32292805, 32293615
32294566, 32294851, 32296259, 32296941, 32297373, 32297469, 32297849
32298173, 32298782, 32300098, 32300822, 32300849, 32301856, 32302561
32303160, 32303657, 32304293, 32304712, 32305792, 32307046, 32307586
32309046, 32309488, 32309723, 32312131, 32312412, 32312586, 32316070
32316252, 32316326, 32317012, 32317306, 32318528, 32318820, 32318914
32319410, 32321317, 32321319, 32321765, 32322629, 32322738, 32323488
32323600, 32323816, 32324219, 32325574, 32325611, 32327201, 32328231
32329914, 32330269, 32330540, 32331889, 32332107, 32334745, 32335257
32335769, 32338476, 32338736, 32338953, 32339801, 32340392, 32340885
32341260, 32342172, 32342345, 32342750, 32343678, 32344099, 32344168
32344199, 32345001, 32345178, 32345272, 32345785, 32346649, 32346733
32347957, 32353343, 32355765, 32355912, 32356340, 32356545, 32356609
32356628, 32357412, 32357665, 32359044, 32361175, 32361677, 32362016
32362066, 32362698, 32363549, 32363711, 32364147, 32366303, 32366461
32366536, 32367151, 32368480, 32368789, 32368792, 32369041, 32372725
32374050, 32374431, 32375438, 32375493, 32376774, 32376872, 32376922
32379140, 32379303, 32379775, 32380591, 32381403, 32381605, 32382021
32382207, 32385068, 32385141, 32385832, 32386482, 32386683, 32386720
32386877, 32387555, 32387818, 32388247, 32389047, 32389497, 32390629
32390855, 32391021, 32392724, 32393612, 32394623, 32396326, 32397350
32398714, 32401086, 32402243, 32403509, 32403748, 32404638, 32405239
32406222, 32408640, 32409344, 32409942, 32410175, 32412340, 32413042
32413512, 32414944, 32414996, 32415846, 32415989, 32416652, 32416655
32417227, 32417242, 32417274, 32417301, 32417438, 32417632, 32417766
32419774, 32421958, 32422965, 32423985, 32425097, 32425124, 32425194
32426213, 32426315, 32427158, 32427173, 32427226, 32427953, 32428097
32428189, 32430745, 32431251, 32431290, 32431413, 32432078, 32432245
32435911, 32436342, 32436460, 32436721, 32436757, 32437538, 32439726
32440681, 32441128, 32441671, 32442229, 32442404, 32443087, 32443531
32443744, 32443935, 32444159, 32446565, 32449622, 32450344, 32453583
32453611, 32453888, 32455219, 32455650, 32455742, 32455961, 32459153
32460136, 32460145, 32462153, 32464021, 32464584, 32465193, 32465209
32465466, 32465495, 32465853, 32465894, 32466474, 32467812, 32468643
32469004, 32469225, 32471100, 32471251, 32471346, 32471642, 32472589
32473465, 32474686, 32474926, 32474997, 32478452, 32480419, 32480510
32480528, 32480541, 32481807, 32484945, 32485859, 32486528, 32489206

32490128, 32490416, 32491443, 32492343, 32492382, 32492422, 32492452
32495545, 32495572, 32497756, 32498459, 32498569, 32498752, 32499155
32500117, 32501930, 32503790, 32504340, 32504786, 32505009, 32505439
32505557, 32505634, 32506309, 32506473, 32507542, 32508585, 32509271
32509584, 32509606, 32509814, 32510116, 32512145, 32512918, 32515850
32516336, 32517405, 32517797, 32518029, 32518679, 32519995, 32520691
32520994, 32522300, 32523206, 32523613, 32523750, 32525039, 32526703
32529396, 32529483, 32530202, 32531259, 32531627, 32531647, 32533019
32533225, 32533461, 32534925, 32535106, 32535159, 32536006, 32538436
32538824, 32539300, 32539322, 32539914, 32540706, 32541049, 32542641
32544464, 32544740, 32544784, 32545415, 32546408, 32548580, 32549351
32550051, 32550589, 32550751, 32551177, 32551246, 32552602, 32553241
32555120, 32556165, 32556891, 32559543, 32561759, 32561791, 32561841
32562587, 32563106, 32563114, 32563940, 32565870, 32567750, 32567788
32568163, 32569603, 32569745, 32573703, 32573942, 32576097, 32576508
32576534, 32577408, 32578113, 32578616, 32578792, 32579075, 32579529
32580082, 32580852, 32583315, 32583355, 32583375, 32583692, 32584375
32586534, 32587472, 32587567, 32587793, 32587994, 32588298, 32588656
32589147, 32589990, 32593845, 32593886, 32593955, 32594965, 32595551
32596355, 32596705, 32597099, 32597637, 32598406, 32601769, 32602194
32602344, 32602599, 32602735, 32602871, 32602990, 32603092, 32603152
32603564, 32603619, 32605116, 32606489, 32607991, 32608297, 32608821
32609886, 32610271, 32613788, 32614583, 32615310, 32615776, 32616678
32618819, 32619195, 32619298, 32619327, 32620859, 32620919, 32621140
32621309, 32622507, 32622612, 32626756, 32627140, 32628131, 32628221
32629028, 32629772, 32629859, 32631551, 32631787, 32633251, 32634049
32635881, 32635931, 32639432, 32639860, 32639950, 32641748, 32642587
32645139, 32646025, 32647170, 32648248, 32651063, 32651769, 32651773
32652143, 32652573, 32652605, 32653470, 32653669, 32654962, 32655446
32655691, 32656231, 32656275, 32657251, 32659574, 32659930, 32662165
32663019, 32671437, 32671481, 32672057, 32675095, 32675227, 32676084
32676350, 32676659, 32677000, 32677702, 32682430, 32686338, 32686850
32690400, 32692372, 32693242, 32697431, 32697781, 32698508, 32698569
32700396, 32700455, 32700989, 32701048, 32704013, 32704119, 32704765
32705800, 32706821, 32710165, 32710534, 32710750, 32711741, 32712220
32712916, 32715945, 32716726, 32718316, 32718721, 32720344, 32720458
32724654, 32725484, 32728984, 32730701, 32731498, 32733671, 32733845
32734021, 32734171, 32734800, 32735915, 32735980, 32736370, 32737969
32738356, 32739966, 32740421, 32740503, 32740515, 32740987, 32743290
32743511, 32746831, 32747738, 32749028, 32753472, 32754845, 32755493
32755517, 32755731, 32756914, 32757219, 32758096, 32760906, 32761294
32761932, 32762231, 32764690, 32765738, 32766397, 32766407, 32768752
32769880, 32771735, 32775512, 32775526, 32776891, 32781826, 32784393
32784403, 32786309, 32788660, 32789228, 32790012, 32793286, 32794120

32795016, 32795712, 32797486, 32800137, 32800539, 32801192, 32801303
32801337, 32803807, 32806112, 32806915, 32807517, 32809152, 32810125
32810668, 32811069, 32811131, 32816003, 32817950, 32818019, 32818230
32818545, 32822847, 32823692, 32827206, 32828636, 32829060, 32829563
32829937, 32831451, 32831855, 32831901, 32833378, 32834168, 32834394
32838028, 32838533, 32841689, 32841994, 32842823, 32843672, 32843754
32846272, 32846876, 32847975, 32848816, 32851841, 32852504, 32855257
32857370, 32857881, 32858446, 32863795, 32866089, 32868369, 32870681
32872839, 32874995, 32875003, 32875118, 32878039, 32879447, 32879990
32880225, 32880390, 32881462, 32881853, 32883252, 32888458, 32889096
32889434, 32891500, 32892883, 32893686, 32893951, 32894842, 32895105
32897184, 32897679, 32898672, 32898971, 32900208, 32902635, 32903472
32903625, 32907741, 32907975, 32908241, 32908249, 32908946, 32909255
32909292, 32910846, 32913527, 32914508, 32914711, 32915747, 32915760
32915847, 32916025, 32918394, 32922090, 32925421, 32930360, 32930423
32930665, 32931078, 32931941, 32935932, 32936005, 32936402, 32936859
32936961, 32939376, 32939883, 32940714, 32940955, 32941509, 32946711
32947264, 32952285, 32953258, 32955962, 32956092, 32956896, 32961939
32962162, 32965460, 32966389, 32968221, 32969466, 32969863, 32970478
32973406, 32976022, 32977489, 32980826, 32983419, 32983750, 32983871
32984679, 32985908, 32987004, 32987206, 32987308, 32988028, 32991527
32993522, 32993998, 32995206, 32995242, 32995863, 32996071, 32998659
32999086, 32999329, 33000440, 33000980, 33003817, 33008265, 33009224
33009351, 33010173, 33010444, 33011198, 33013379, 33015716, 33018951
33020510, 33021036, 33021642, 33022140, 33023671, 33026533, 33026796
33027087, 33027377, 33027525, 33027539, 33027553, 33028013, 33028286
33028462, 33032579, 33034103, 33034619, 33035201, 33036321, 33037531
33037895, 33038479, 33040335, 33043590, 33044062, 33045137, 33046179
33047827, 33048277, 33049012, 33050626, 33056383, 33056579, 33059891
33060161, 33061339, 33063919, 33064565, 33065437, 33065979, 33072392
33072854, 33075133, 33075246, 33084064, 33085296, 33085361, 33090110
33090781, 33090848, 33092087, 33096609, 33097433, 33099872, 33100352
33101055, 33101058, 33102477, 33105276, 33105656, 33106822, 33107872
33108317, 33109335, 33110192, 33110992, 33111729, 33113848, 33114640
33117641, 33120828, 33121866, 33121880, 33123985, 33126216, 33127032
33127141, 33131526, 33131742, 33135083, 33136252, 33142123, 33142533
33142739, 33144001, 33145153, 33148063, 33149578, 33150236, 33152388
33159956, 33163187, 33165183, 33166116, 33166242, 33169254, 33172549
33172631, 33172679, 33178223, 33178248, 33182152, 33184467, 33185773
33186578, 33188597, 33190454, 33191073, 33192462, 33196009, 33196035
33196475, 33197296, 33205781, 33207143, 33207342, 33211160, 33211334
33212112, 33215225, 33216667, 33218194, 33218518, 33219840, 33221061
33223248, 33225678, 33230882, 33232128, 33233560, 33234302, 33235620
33237523, 33242408, 33252648, 33253504, 33261786, 33275880, 33278133

33278509, 33282110, 33282971, 33287418, 33289442, 33289604, 33292174
33292896, 33295267, 33303555, 33304435, 33304775, 33304830, 33305150
33307945, 33308107, 33308199, 33308244, 33317279, 33322672, 33325981
33330508, 33331329, 33332891, 33334404, 33337385, 33338247, 33338891
33349744, 33352794, 33353474, 33355007, 33358968, 33367909, 33373644
33380472, 33381652, 33382620, 33384092, 33384505, 33387767, 33388473
33388927, 33397495, 33407135, 33408858, 33415279, 33416405, 33417828
33417987, 33420249, 33425127, 33448908, 33456516, 33457584, 33457842
33458732, 33459161, 33471858, 33482590, 33489699, 33490031, 33500486
33507610, 33507953, 33514179, 33515115, 33540746, 33558058, 33558251
33558391, 33559316, 33563137, 33563167, 33599734, 33613512, 33613829
33613833, 33618962, 33632051, 33635094, 33651003, 33656104, 33656608
33661960, 33674035

Version 19.0.0.0.ru-2021-10.rur-2021-10.r1

Version 19.0.0.0.ru-2021-10.rur-2021-10.r1 includes the following:

- Patch [33192793](#): DATABASE RELEASE UPDATE 19.13.0.0.0
- Patch [33192694](#): OJVM RELEASE UPDATE 19.13.0.0.0
- Patch [32327201](#): RDBMS - DSTV36 UPDATE - TZDATA2020E
- Patch [29213893](#): DBMS_STATS FAILING WITH ERROR ORA-01422 WHEN GATHERING STATS FOR USER TABLE
- Patch [28730253](#): SUPPORT NEW ERA REIWA FOR JAPANESE IMPERIAL CALENDAR
- PreUpgrade Jar: preupgrade_19_cbuild_12_lf.zip

Combined patches for version 19.0.0.0.ru-2021-10.rur-2021-10.r1, released October 2021

Bugs fixed:

7391838, 8460502, 8476681, 14570574, 14735102, 15931756, 15959416
16662822, 16664572, 16750494, 17275499, 17395507, 17428816, 17468475
17777718, 18534283, 18697534, 19080742, 19138896, 19697993, 20007421
20083476, 20313356, 20319830, 20479545, 20867658, 20922160, 21119541
21232786, 21245711, 21374587, 21528318, 21629064, 21639146, 21888352
21965541, 22066547, 22252368, 22325312, 22387320, 22553815, 22580355
22725871, 22729345, 22748979, 23020668, 23094775, 23125587, 23294761

23296836, 23311885, 23606241, 23645975, 23734075, 23734111, 23763462
24336782, 24356932, 24559425, 24561942, 24596874, 24669730, 24687075
24833686, 24957575, 24971456, 25030027, 25033515, 25092651, 25093917
25148135, 25404117, 25415139, 25416731, 25541233, 25560538, 25562258
25607406, 25607716, 25661172, 25756945, 25792962, 25804387, 25804908
25806201, 25809128, 25883179, 25905368, 25913778, 25979242, 25986062
25997810, 26001677, 26003708, 26108369, 26127355, 26173091, 26203132
26256280, 26280704, 26284288, 26352615, 26440142, 26476244, 26497655
26499997, 26500553, 26577716, 26587659, 26611353, 26621826, 26668264
26716835, 26739322, 26758837, 26777814, 26785852, 26789742, 26800890
26819036, 26860844, 26872233, 26897528, 26951566, 26957541, 26963540
26978857, 27004798, 27004828, 27019512, 27036163, 27044169, 27044246
27063461, 27086374, 27091809, 27101798, 27126122, 27126938, 27130348
27131416, 27166935, 27195575, 27195935, 27207214, 27221350, 27222128
27243840, 27244999, 27254335, 27260704, 27261477, 27277677, 27302372
27329690, 27359766, 27359770, 27362994, 27369515, 27378053, 27381279
27392968, 27406105, 27411022, 27423500, 27439716, 27453490, 27458357
27458493, 27460010, 27489107, 27497101, 27572040, 27582210, 27589260
27597359, 27604329, 27622946, 27629928, 27636387, 27639208, 27654410
27658166, 27661222, 27666312, 27684864, 27692173, 27697886, 27700413
27710072, 27729678, 27742354, 27745728, 27751111, 27760043, 27764052
27768096, 27782078, 27785931, 27786168, 27801144, 27828892, 27829722
27841399, 27846298, 27873364, 27877830, 27880025, 27899093, 27907898
27917890, 27929509, 27933036, 27934711, 27935464, 27941110, 27957203
27957963, 27962025, 27967484, 27998559, 28001632, 28007516, 28031385
28052648, 28064977, 28072567, 28078186, 28089605, 28092783, 28104176
28109326, 28112563, 28125947, 28127569, 28129791, 28133903, 28138566
28138847, 28144569, 28145995, 28156781, 28167557, 28173612, 28181021
28185286, 28187837, 28189466, 28198802, 28201045, 28204104, 28204262
28205555, 28209985, 28210681, 28234255, 28248841, 28263142, 28271258
28271693, 28276054, 28279176, 28279456, 28294563, 28302580, 28313275
28319114, 28322973, 28326928, 28338211, 28350595, 28351919, 28362187
28364580, 28370061, 28371123, 28373960, 28375383, 28379065, 28381939
28383667, 28386259, 28387185, 28387574, 28390273, 28392179, 28395302
28397317, 28402823, 28403019, 28406374, 28410431, 28414968, 28431445
28432345, 28435333, 28436414, 28442896, 28454215, 28461031, 28461789
28463226, 28470673, 28475242, 28479352, 28482048, 28482049, 28484299
28489419, 28492006, 28498976, 28499269, 28502773, 28503081, 28504631
28505321, 28513333, 28521330, 28522750, 28523644, 28526715, 28530171
28530697, 28534475, 28534493, 28535127, 28537481, 28538439, 28541606
28542455, 28544270, 28546290, 28547068, 28547926, 28553981, 28558489
28558645, 28561704, 28564479, 28565296, 28567417, 28567819, 28569897
28570589, 28572165, 28572407, 28572533, 28572544, 28572667, 28572834
28578945, 28587723, 28589194, 28589509, 28589644, 28592647, 28593127

28593682, 28594086, 28597221, 28598022, 28601957, 28602253, 28605066
28606598, 28607316, 28607632, 28608211, 28612239, 28618343, 28620697
28621543, 28622202, 28625580, 28625862, 28625873, 28627033, 28628592
28630381, 28632796, 28636532, 28639299, 28640772, 28642469, 28642551
28642899, 28643583, 28643654, 28643718, 28644549, 28645570, 28646200
28646939, 28649388, 28651078, 28655209, 28657026, 28659098, 28661333
28661362, 28663289, 28663782, 28670402, 28672124, 28672457, 28673945
28681153, 28682182, 28682796, 28689483, 28690694, 28692103, 28692275
28692282, 28693954, 28694526, 28694639, 28694872, 28694877, 28696373
28697526, 28698087, 28699321, 28700945, 28703812, 28704412, 28705231
28707931, 28708400, 28708585, 28709063, 28710385, 28710469, 28710663
28710734, 28714461, 28714720, 28715655, 28715727, 28717406, 28718302
28718469, 28719348, 28720204, 28720418, 28721497, 28722229, 28729900
28730079, 28730253, 28734355, 28740708, 28740799, 28741374, 28742555
28745367, 28747846, 28749853, 28751498, 28752923, 28755011, 28755084
28755309, 28755846, 28757960, 28758722, 28760206, 28763291, 28765983
28767240, 28769456, 28770865, 28771022, 28771947, 28772390, 28772816
28774416, 28776431, 28776811, 28777073, 28777214, 28777478, 28778754
28781599, 28781754, 28785273, 28785321, 28785531, 28788272, 28789531
28789533, 28791576, 28791852, 28793062, 28794230, 28795551, 28795563
28795734, 28800508, 28802066, 28802734, 28804517, 28805242, 28806517
28807247, 28808314, 28808652, 28808656, 28810381, 28811560, 28811592
28813317, 28813931, 28815123, 28815355, 28815557, 28816871, 28817449
28818063, 28819640, 28820669, 28821847, 28824482, 28827682, 28831971
28833912, 28835937, 28836716, 28837979, 28838385, 28839869, 28842408
28844656, 28844738, 28845346, 28846759, 28847541, 28847572, 28849776
28850084, 28851458, 28851467, 28852325, 28854004, 28854212, 28854733
28855520, 28855922, 28857552, 28861861, 28862532, 28863263, 28863432
28863487, 28865544, 28865569, 28867698, 28867992, 28870496, 28871040
28872645, 28872829, 28873575, 28874416, 28875089, 28876253, 28876639
28876926, 28877252, 28878865, 28880218, 28880864, 28881191, 28881848
28882146, 28882751, 28882784, 28884931, 28887305, 28888083, 28888327
28889389, 28889730, 28891867, 28891941, 28892794, 28897123, 28897512
28899663, 28900506, 28901126, 28902135, 28904380, 28905312, 28905390
28905457, 28905615, 28907196, 28909769, 28909992, 28910498, 28910586
28911140, 28912691, 28914144, 28915561, 28917080, 28918429, 28919145
28921844, 28922227, 28922485, 28922532, 28922608, 28922767, 28925250
28925460, 28925634, 28925880, 28927452, 28928462, 28930944, 28932914
28933079, 28933158, 28935293, 28935956, 28936114, 28937717, 28938167
28938422, 28938698, 28940179, 28940281, 28940472, 28941901, 28942455
28942694, 28945421, 28945994, 28946233, 28946574, 28948554, 28949888
28950868, 28951332, 28951493, 28951533, 28952168, 28954762, 28955606
28955883, 28956145, 28956908, 28957260, 28957292, 28957723, 28958088
28958094, 28958590, 28959493, 28960863, 28962775, 28963036, 28965084

28965095, 28965231, 28965376, 28966444, 28968211, 28968779, 28970122
28974083, 28974902, 28974999, 28977322, 28978664, 28979289, 28980448
28980910, 28981871, 28983095, 28983486, 28984313, 28985114, 28985272
28985362, 28985478, 28986207, 28986231, 28986257, 28986326, 28986481
28986696, 28988482, 28988864, 28989306, 28990681, 28993295, 28993353
28994307, 28994542, 28994783, 28995287, 28996376, 28998369, 28999046
29000000, 29001305, 29001888, 29002273, 29002488, 29002784, 29002927
29003207, 29003407, 29003617, 29003738, 29005748, 29006318, 29006621
29007321, 29007353, 29007775, 29008035, 29008669, 29009513, 29010126
29010517, 29011936, 29012609, 29013475, 29013832, 29014076, 29014385
29015118, 29016294, 29017265, 29018655, 29018680, 29019121, 29020423
29021063, 29021352, 29022986, 29024028, 29024054, 29024448, 29024552
29024732, 29024795, 29024876, 29026154, 29026582, 29026606, 29027456
29027694, 29027933, 29027940, 29030184, 29030927, 29031575, 29031600
29032234, 29032276, 29032457, 29032607, 29033052, 29033145, 29033164
29033200, 29033280, 29033655, 29034331, 29034587, 29036278, 29037290
29038528, 29038728, 29038730, 29039089, 29039510, 29040739, 29041739
29041775, 29043554, 29043651, 29043725, 29044086, 29044763, 29044954
29046482, 29047127, 29047850, 29048178, 29048289, 29048498, 29048605
29048728, 29048792, 29048858, 29049014, 29049673, 29050357, 29050560
29050765, 29050886, 29051263, 29051702, 29051953, 29052726, 29052850
29053783, 29053902, 29055644, 29056024, 29056270, 29056560, 29056767
29056894, 29058476, 29059011, 29060216, 29061016, 29061959, 29062692
29062848, 29062860, 29062868, 29110526, 29110783, 29110790, 29110797
29110802, 29110805, 29111598, 29111631, 29112455, 29113282, 29113305
29115794, 29115857, 29116779, 29117337, 29117526, 29117642, 29118543
29119077, 29119733, 29120223, 29122224, 29122254, 29122367, 29123297
29123324, 29123432, 29123444, 29123482, 29124104, 29124368, 29125036
29125374, 29125380, 29125708, 29125786, 29126345, 29127957, 29128693
29128935, 29129450, 29129476, 29129497, 29129691, 29129712, 29130219
29131539, 29131772, 29132456, 29132869, 29132938, 29133470, 29134447
29135383, 29135649, 29136111, 29138641, 29139070, 29139727, 29139761
29139780, 29139956, 29141316, 29141341, 29141685, 29141886, 29142609
29142667, 29143516, 29144995, 29145214, 29145730, 29146077, 29146157
29146810, 29147849, 29148799, 29149170, 29149829, 29150338, 29151520
29152357, 29152603, 29152752, 29154631, 29154636, 29154725, 29154829
29155099, 29155208, 29157051, 29157389, 29158680, 29158899, 29158990
29159216, 29159661, 29159909, 29159936, 29160174, 29160462, 29160824
29161597, 29161923, 29162095, 29162749, 29163073, 29163156, 29163415
29163437, 29163524, 29163567, 29164376, 29164446, 29165682, 29167111
29167342, 29167374, 29167940, 29168137, 29168219, 29168433, 29169073
29169215, 29169540, 29169739, 29170232, 29170717, 29171683, 29171942
29172618, 29172826, 29173140, 29173373, 29173618, 29173817, 29174004
29174753, 29175638, 29175829, 29176318, 29177466, 29177543, 29177886

29178385, 29179097, 29180313, 29180455, 29180559, 29180721, 29180893
29181078, 29181153, 29181231, 29181568, 29181620, 29181743, 29181923
29182019, 29182517, 29182901, 29182920, 29183298, 29183912, 29184297
29184666, 29185193, 29186091, 29186456, 29186605, 29188255, 29189302
29189307, 29189889, 29190235, 29190474, 29190663, 29190740, 29191541
29191827, 29192419, 29192468, 29192685, 29193207, 29194205, 29194367
29194493, 29194827, 29194981, 29195279, 29195337, 29195758, 29196151
29196725, 29198092, 29198913, 29199163, 29199635, 29199733, 29200316
29200700, 29201143, 29201494, 29201539, 29201695, 29201787, 29202104
29202461, 29202850, 29203041, 29203122, 29203166, 29203227, 29203425
29203443, 29203604, 29205281, 29205323, 29205419, 29205463, 29205767
29205918, 29206109, 29206605, 29206631, 29207073, 29208260, 29208732
29209545, 29210577, 29210610, 29210624, 29210683, 29211457, 29211724
29212012, 29212433, 29212611, 29213320, 29213351, 29213613, 29213641
29213775, 29213850, 29213879, 29213893, 29214561, 29214960, 29216312
29216723, 29216746, 29216984, 29217294, 29217472, 29217828, 29217848
29217856, 29218570, 29219205, 29219273, 29219627, 29220079, 29221248
29221745, 29221891, 29221942, 29222031, 29222784, 29222892, 29223833
29223859, 29223967, 29224065, 29224294, 29224605, 29224710, 29225076
29225168, 29225758, 29225861, 29227602, 29228869, 29229164, 29229754
29229839, 29229844, 29229955, 29230252, 29230565, 29231133, 29232117
29232154, 29232449, 29232533, 29232653, 29233415, 29233810, 29233953
29234123, 29235934, 29236573, 29237538, 29237575, 29237744, 29240307
29240668, 29240759, 29241345, 29241651, 29242017, 29242561, 29242884
29242906, 29243749, 29243958, 29244495, 29244766, 29244968, 29245063
29245137, 29245160, 29246163, 29246337, 29247183, 29247415, 29247712
29247906, 29248495, 29248552, 29248723, 29248835, 29248858, 29249289
29249412, 29249583, 29249991, 29250059, 29250317, 29251259, 29251564
29252510, 29252790, 29253184, 29253871, 29254031, 29254177, 29254623
29254930, 29255178, 29255273, 29255431, 29255435, 29255616, 29255705
29255718, 29255973, 29256279, 29256426, 29259119, 29259320, 29260224
29260407, 29260452, 29260956, 29261547, 29261548, 29261695, 29261906
29262143, 29262512, 29262887, 29265446, 29265448, 29265780, 29266248
29266899, 29267292, 29268412, 29269171, 29269228, 29269825, 29270585
29271019, 29273168, 29273360, 29273539, 29273570, 29273735, 29273812
29273847, 29274428, 29274564, 29274623, 29274627, 29275461, 29276272
29277317, 29278218, 29278684, 29279658, 29279751, 29279854, 29281112
29281527, 29281691, 29281796, 29282090, 29282233, 29282666, 29282898
29285197, 29285453, 29285503, 29285621, 29285788, 29285956, 29286037
29286220, 29286229, 29287130, 29287705, 29290110, 29290235, 29292232
29292253, 29292378, 29292837, 29293072, 29293574, 29293806, 29294753
29296257, 29297863, 29297915, 29298220, 29299049, 29299082, 29299830
29299844, 29301139, 29301463, 29301566, 29302565, 29302614, 29302963
29303712, 29303918, 29304314, 29304692, 29304781, 29304853, 29305093

29306226, 29306713, 29306790, 29307090, 29307109, 29307638, 29309698
29311336, 29311528, 29311588, 29311927, 29312310, 29312672, 29312734
29312753, 29312889, 29313347, 29313417, 29313525, 29314539, 29314636
29314867, 29314949, 29317756, 29318410, 29319441, 29319558, 29320900
29321489, 29321689, 29323946, 29323999, 29324568, 29324735, 29325087
29325105, 29325257, 29325356, 29325497, 29325765, 29325993, 29326233
29327044, 29327892, 29328305, 29329042, 29329087, 29329675, 29329807
29329848, 29330361, 29330791, 29331066, 29331209, 29331380, 29331493
29332292, 29332395, 29332763, 29332771, 29332966, 29333500, 29336843
29336899, 29337294, 29337310, 29337742, 29338315, 29338348, 29338453
29338780, 29338913, 29339101, 29339155, 29339299, 29339452, 29340333
29341209, 29341782, 29342099, 29343086, 29343156, 29343861, 29344541
29345382, 29345937, 29346057, 29346138, 29346211, 29346943, 29347620
29348176, 29348358, 29350052, 29350712, 29350762, 29350868, 29351044
29351386, 29351662, 29351716, 29351735, 29351749, 29351771, 29351786
29352298, 29352724, 29352867, 29352947, 29353271, 29353432, 29353718
29353821, 29353960, 29355654, 29356547, 29356634, 29356704, 29356711
29356752, 29356782, 29357821, 29358509, 29358828, 29360252, 29360285
29360467, 29360672, 29360775, 29360911, 29360950, 29361319, 29361472
29361801, 29362596, 29363090, 29363151, 29364171, 29364177, 29366406
29366818, 29366940, 29367019, 29367561, 29367971, 29368253, 29368310
29368725, 29372069, 29372541, 29372562, 29373418, 29373588, 29374179
29374604, 29374627, 29375355, 29375941, 29375984, 29376346, 29377804
29377986, 29378029, 29378287, 29378834, 29378913, 29379299, 29379381
29379552, 29379750, 29379978, 29380527, 29381000, 29382296, 29382641
29382784, 29382815, 29383695, 29384740, 29384781, 29384854, 29384864
29384960, 29385339, 29385429, 29385652, 29385774, 29386502, 29386557
29386635, 29386660, 29386835, 29387073, 29387274, 29387310, 29387329
29387337, 29388020, 29388072, 29388094, 29388524, 29388830, 29389408
29389889, 29390011, 29390435, 29390785, 29391030, 29391237, 29391301
29391438, 29391849, 29391925, 29392554, 29392966, 29393291, 29393649
29394014, 29394140, 29394749, 29395657, 29396481, 29397841, 29397954
29397996, 29398488, 29398863, 29399046, 29399100, 29399121, 29399336
29399938, 29399959, 29402110, 29402131, 29404425, 29404483, 29405012
29405462, 29405651, 29405996, 29407488, 29407804, 29408853, 29409149
29409455, 29410311, 29410834, 29411037, 29411427, 29411469, 29411931
29412066, 29412269, 29413360, 29413382, 29413517, 29413544, 29413634
29413956, 29415493, 29415774, 29416339, 29416688, 29416700, 29417084
29417113, 29417173, 29417719, 29417884, 29418165, 29418341, 29420254
29420834, 29421059, 29423003, 29423016, 29423156, 29423227, 29423491
29423826, 29424094, 29424999, 29426241, 29426320, 29428230, 29429017
29429087, 29429264, 29429336, 29429466, 29429566, 29429895, 29430524
29430866, 29431192, 29431402, 29431485, 29431985, 29432176, 29434301
29434869, 29435474, 29435652, 29435966, 29436454, 29436514, 29436522

29436727, 29437029, 29437379, 29437594, 29437712, 29438150, 29438277
29438736, 29439522, 29440651, 29441196, 29442400, 29442936, 29443187
29443250, 29443559, 29444072, 29444275, 29444282, 29444602, 29444906
29445548, 29446319, 29446669, 29447460, 29448498, 29449477, 29449845
29449852, 29450162, 29450193, 29450273, 29450421, 29450812, 29450936
29451085, 29451386, 29452251, 29452576, 29452936, 29452953, 29454450
29454978, 29455424, 29455773, 29456538, 29456714, 29457312, 29457319
29457370, 29457502, 29457807, 29457978, 29458132, 29460252, 29461420
29461791, 29461971, 29462594, 29462767, 29462957, 29463047, 29463528
29463553, 29463798, 29464616, 29464779, 29465047, 29465177, 29466674
29467622, 29469563, 29469565, 29470059, 29470205, 29470291, 29471633
29471832, 29471857, 29471860, 29472618, 29473708, 29474348, 29475386
29476473, 29476702, 29477015, 29481584, 29482021, 29483452, 29483532
29483626, 29483672, 29483685, 29483712, 29483723, 29483771, 29485099
29485731, 29485877, 29486181, 29486848, 29487150, 29487189, 29487407
29488894, 29489436, 29489546, 29490256, 29491784, 29492127, 29492939
29493122, 29493821, 29494245, 29494788, 29494934, 29495057, 29495171
29495684, 29497053, 29497311, 29497588, 29497696, 29497778, 29498198
29500257, 29500826, 29500963, 29501218, 29502561, 29503543, 29503631
29503827, 29504103, 29504492, 29504682, 29505225, 29505589, 29505668
29506942, 29507270, 29507616, 29508681, 29508998, 29509777, 29510278
29511064, 29511611, 29511980, 29512125, 29512773, 29512890, 29514479
29515134, 29515240, 29515476, 29515766, 29515834, 29516300, 29516727
29516766, 29517168, 29517443, 29517883, 29518604, 29518767, 29519131
29521187, 29521688, 29521748, 29521862, 29522358, 29522561, 29522662
29523055, 29523216, 29523511, 29524599, 29524985, 29525366, 29525467
29525886, 29526966, 29527595, 29527610, 29528184, 29528368, 29529147
29529436, 29530440, 29530515, 29530812, 29530909, 29531654, 29531836
29532112, 29532532, 29536342, 29536445, 29536794, 29537829, 29538631
29539027, 29539413, 29540327, 29540831, 29540862, 29541517, 29541742
29541769, 29541973, 29542084, 29542449, 29542474, 29542580, 29542643
29543034, 29543956, 29544552, 29546817, 29547010, 29547867, 29548413
29548427, 29548592, 29548687, 29548722, 29549040, 29549071, 29549104
29549154, 29549730, 29550530, 29552402, 29552773, 29553141, 29554092
29554351, 29554554, 29555105, 29555239, 29557144, 29557261, 29557336
29557556, 29558238, 29558452, 29558926, 29558975, 29559187, 29559395
29559446, 29559908, 29559981, 29564592, 29564593, 29565611, 29579919
29580394, 29580983, 29581460, 29581771, 29583018, 29584261, 29584693
29586143, 29587299, 29587488, 29587720, 29587765, 29588580, 29588732
29589544, 29590666, 29591343, 29591641, 29592011, 29592215, 29592433
29592595, 29597158, 29597536, 29597716, 29597754, 29598039, 29598040
29598046, 29598226, 29598233, 29598338, 29599008, 29599243, 29599300
29599552, 29601461, 29602831, 29603460, 29603884, 29604002, 29604257
29606261, 29607136, 29607797, 29608000, 29608023, 29609603, 29610506

29611020, 29611991, 29613733, 29614206, 29614931, 29614987, 29615824
29616244, 29616414, 29618074, 29618190, 29620042, 29622936, 29623323
29623592, 29624124, 29625065, 29625804, 29625876, 29626154, 29626732
29628200, 29628647, 29629430, 29629650, 29629681, 29629745, 29630221
29631749, 29632095, 29632265, 29632611, 29632751, 29633697, 29633753
29633936, 29634643, 29635427, 29635717, 29635990, 29637362, 29637526
29637560, 29638285, 29638928, 29641736, 29642451, 29643721, 29644426
29644464, 29645167, 29645349, 29647176, 29647770, 29648928, 29649694
29651183, 29651520, 29652809, 29653132, 29653246, 29655164, 29655416
29655668, 29656400, 29656819, 29656843, 29657399, 29657422, 29657744
29657960, 29657973, 29658056, 29661028, 29661065, 29661722, 29663191
29663368, 29663494, 29663601, 29663813, 29664087, 29664161, 29665168
29665940, 29666451, 29667527, 29667994, 29668005, 29669241, 29669413
29670713, 29670782, 29671363, 29672507, 29675446, 29676089, 29676921
29677051, 29677173, 29677733, 29677927, 29678217, 29679856, 29680700
29681987, 29683039, 29683189, 29683211, 29684518, 29685137, 29685276
29687214, 29687220, 29687459, 29687718, 29687727, 29687763, 29688867
29689145, 29689255, 29690795, 29692115, 29692694, 29693847, 29694869
29695425, 29695821, 29695841, 29695964, 29695987, 29696242, 29696310
29697928, 29700125, 29700460, 29700770, 29701720, 29701755, 29701937
29703932, 29704426, 29705793, 29706141, 29706160, 29707099, 29707493
29707896, 29708324, 29708353, 29708876, 29708915, 29710188, 29710858
29713810, 29715220, 29715647, 29715703, 29716029, 29716194, 29716227
29716491, 29716602, 29716871, 29717659, 29717901, 29718198, 29719146
29720133, 29720373, 29721418, 29721576, 29722026, 29722092, 29722167
29722389, 29723113, 29724497, 29724658, 29725421, 29725425, 29725476
29725781, 29726695, 29737941, 29738374, 29738400, 29739576, 29741319
29741976, 29742223, 29742926, 29744225, 29744400, 29744637, 29745288
29745624, 29746962, 29747493, 29747648, 29747653, 29748285, 29748325
29748336, 29748513, 29749471, 29750673, 29751094, 29753244, 29754196
29754640, 29754951, 29755821, 29756274, 29756444, 29757099, 29757264
29757651, 29757687, 29758203, 29758217, 29758661, 29761678, 29761837
29761911, 29763158, 29764644, 29765035, 29765219, 29765347, 29765393
29765493, 29766207, 29766435, 29766503, 29766679, 29768487, 29768899
29769549, 29769695, 29769901, 29770750, 29771032, 29771242, 29772514
29772761, 29773185, 29773197, 29773205, 29773459, 29773633, 29773842
29774362, 29775393, 29775473, 29779196, 29779901, 29780140, 29780633
29782211, 29782284, 29782501, 29782823, 29782866, 29783142, 29784106
29785169, 29785239, 29785251, 29785311, 29785544, 29785550, 29785831
29787292, 29787766, 29789911, 29791152, 29791880, 29791916, 29792213
29792433, 29793141, 29793151, 29793318, 29794174, 29794462, 29795712
29795957, 29796335, 29796378, 29796916, 29797209, 29797726, 29801164
29802382, 29802695, 29803948, 29804875, 29805368, 29805772, 29806390
29806964, 29807964, 29809792, 29809837, 29810012, 29810013, 29811616

29812084, 29812166, 29812489, 29813503, 29813650, 29813671, 29814455
29814995, 29815341, 29815713, 29816887, 29817278, 29817547, 29817784
29818794, 29819753, 29820341, 29821130, 29821582, 29822714, 29825525
29827647, 29827792, 29827852, 29828644, 29829339, 29831196, 29831404
29831567, 29833406, 29833984, 29834506, 29836096, 29836424, 29838337
29838485, 29838740, 29838773, 29839481, 29839715, 29840619, 29841267
29841687, 29842369, 29843238, 29843277, 29843692, 29843831, 29844131
29844226, 29844275, 29845449, 29845530, 29845691, 29846126, 29846525
29846645, 29846688, 29847627, 29848084, 29848849, 29849100, 29849139
29850552, 29850566, 29850930, 29851020, 29851308, 29851733, 29853485
29856420, 29856506, 29856859, 29856890, 29858121, 29858376, 29858420
29859068, 29860022, 29860994, 29861075, 29864203, 29864261, 29865188
29865590, 29865658, 29867728, 29868639, 29869052, 29869086, 29869149
29869404, 29869857, 29869877, 29869887, 29869906, 29870065, 29870533
29871098, 29871312, 29871360, 29872401, 29872937, 29872983, 29873206
29873665, 29873751, 29874090, 29874761, 29875200, 29875459, 29875565
29875919, 29876358, 29876989, 29877608, 29878076, 29881050, 29881478
29881575, 29881643, 29881839, 29882427, 29882454, 29882729, 29884958
29885182, 29885890, 29886809, 29887045, 29887111, 29888621, 29889184
29889358, 29890740, 29891075, 29891853, 29891857, 29891916, 29892388
29892604, 29893132, 29893197, 29893287, 29894021, 29896510, 29897418
29897720, 29897863, 29900203, 29900824, 29901021, 29901419, 29901961
29902299, 29902327, 29902330, 29902659, 29903190, 29903299, 29903357
29903454, 29904002, 29906678, 29907942, 29908389, 29908639, 29908777
29909658, 29910218, 29910402, 29912135, 29912286, 29913805, 29913934
29913966, 29914449, 29914544, 29915182, 29915217, 29915848, 29916198
29916975, 29919782, 29919789, 29920025, 29920376, 29920804, 29921214
29921318, 29921559, 29922225, 29922435, 29922461, 29923452, 29924147
29924181, 29924479, 29925177, 29926466, 29927756, 29928040, 29928210
29928340, 29928427, 29928564, 29930457, 29931956, 29932202, 29932310
29932430, 29932780, 29932953, 29933718, 29934048, 29934052, 29934158
29934557, 29935685, 29937565, 29937655, 29937956, 29938063, 29938225
29939075, 29939400, 29939795, 29940373, 29941062, 29942096, 29942275
29942554, 29943670, 29943879, 29944035, 29944159, 29944660, 29944963
29945645, 29946101, 29946388, 29947145, 29947242, 29947428, 29948165
29950018, 29950220, 29951620, 29951759, 29952700, 29955625, 29956016
29956222, 29957412, 29957493, 29958925, 29960325, 29960884, 29961353
29961360, 29961609, 29961847, 29962160, 29962248, 29962834, 29962927
29962939, 29965052, 29965207, 29965603, 29965888, 29966768, 29967223
29967386, 29968085, 29968703, 29969557, 29969985, 29970081, 29970261
29970298, 29970587, 29970861, 29971027, 29971481, 29971888, 29971936
29971951, 29972134, 29972176, 29973012, 29989783, 29989845, 29990779
29991257, 29993717, 29997326, 29997553, 29997937, 29997959, 30000518
30000664, 30001105, 30001331, 30003187, 30004660, 30004856, 30006159

30006280, 30006411, 30006472, 30006705, 30006985, 30007450, 30007536
30007797, 30008035, 30008125, 30008198, 30008214, 30008456, 30009528
30009710, 30012181, 30012737, 30013243, 30013535, 30014200, 30015070
30017836, 30018017, 30018903, 30019864, 30021830, 30024618, 30025814
30026016, 30026596, 30027614, 30027649, 30028182, 30028599, 30028649
30029519, 30029806, 30031027, 30031613, 30032233, 30032376, 30032484
30033040, 30033547, 30034456, 30035444, 30035598, 30036258, 30038392
30038576, 30039796, 30039800, 30039959, 30040157, 30040511, 30041501
30041514, 30042490, 30043398, 30043610, 30043930, 30044108, 30044507
30045242, 30045273, 30045389, 30045484, 30045983, 30046497, 30047510
30047531, 30047702, 30047765, 30047931, 30048688, 30049966, 30051176
30051783, 30051804, 30052740, 30052928, 30053036, 30053501, 30053748
30054980, 30056058, 30057718, 30057799, 30058149, 30058453, 30059106
30059109, 30059821, 30060267, 30060330, 30062364, 30062429, 30062736
30062819, 30064268, 30066352, 30067565, 30068384, 30068792, 30068871
30070064, 30071446, 30072018, 30072038, 30072905, 30073314, 30073422
30073744, 30074250, 30074296, 30074349, 30074469, 30074472, 30074820
30075037, 30076058, 30076197, 30076253, 30076604, 30078675, 30078934
30079949, 30080111, 30080266, 30080297, 30081055, 30081546, 30081580
30082145, 30082402, 30083100, 30083216, 30083488, 30083807, 30084458
30084971, 30085897, 30086596, 30086992, 30087165, 30087509, 30088229
30088421, 30090568, 30092254, 30092280, 30092859, 30094929, 30094948
30095499, 30095591, 30095952, 30096138, 30097092, 30097115, 30098251
30099302, 30099420, 30099454, 30099852, 30100354, 30101090, 30101186
30101541, 30101847, 30102774, 30103551, 30103553, 30104348, 30104378
30104555, 30105458, 30106748, 30106901, 30108012, 30109365, 30110224
30110370, 30110518, 30114477, 30114489, 30114534, 30116085, 30116203
30116753, 30116854, 30117209, 30117335, 30117469, 30117593, 30118261
30118279, 30120608, 30122523, 30122583, 30123138, 30125765, 30126145
30126470, 30127145, 30127522, 30127805, 30127904, 30128047, 30128231
30130240, 30131286, 30131645, 30132708, 30132989, 30133841, 30134103
30134746, 30135396, 30135731, 30135942, 30136102, 30136346, 30137792
30138948, 30139392, 30140425, 30141240, 30142527, 30142812, 30142815
30142907, 30143470, 30143593, 30145712, 30146593, 30146969, 30147195
30147307, 30147308, 30147473, 30147928, 30148343, 30148929, 30148999
30149035, 30149658, 30150606, 30150710, 30153552, 30153885, 30154633
30155241, 30155320, 30155388, 30155489, 30155814, 30155837, 30155999
30156569, 30157526, 30158313, 30159329, 30159511, 30159536, 30159690
30159752, 30159760, 30160025, 30160625, 30161094, 30163243, 30164238
30164714, 30165493, 30165503, 30165876, 30165892, 30165897, 30166257
30166352, 30167787, 30169254, 30170104, 30172925, 30173113, 30173370
30173556, 30174102, 30174394, 30174401, 30175180, 30175291, 30175478
30175587, 30177597, 30178250, 30178839, 30178990, 30179012, 30179038
30179644, 30180208, 30180643, 30181756, 30182498, 30183367, 30183696

30183715, 30183920, 30184102, 30185852, 30186319, 30186476, 30186706
30187627, 30187866, 30188631, 30189516, 30189535, 30190090, 30191274
30192691, 30192729, 30192853, 30193165, 30193262, 30193505, 30193506
30193584, 30193736, 30194612, 30194710, 30194972, 30195667, 30195668
30195684, 30196195, 30196358, 30196629, 30198239, 30198598, 30198861
30198905, 30199890, 30200034, 30200132, 30200237, 30200680, 30200758
30202349, 30202388, 30203929, 30204042, 30204542, 30206220, 30206493
30206675, 30207473, 30207519, 30208327, 30208690, 30208723, 30209222
30209736, 30210429, 30210753, 30210884, 30211567, 30213031, 30213540
30214769, 30214826, 30215130, 30215302, 30215351, 30217206, 30217562
30217982, 30218044, 30218317, 30219222, 30220932, 30221115, 30221237
30221298, 30222512, 30222669, 30222975, 30223712, 30223847, 30224544
30224650, 30224725, 30224868, 30224950, 30225265, 30225439, 30225443
30225718, 30225837, 30225844, 30226244, 30227400, 30228422, 30228567
30229030, 30229126, 30229683, 30232638, 30233105, 30233934, 30234132
30234227, 30235878, 30235919, 30235979, 30236092, 30236399, 30236554
30236746, 30236964, 30237477, 30237640, 30238211, 30238715, 30239480
30240010, 30240547, 30240858, 30240930, 30240972, 30241567, 30241807
30241829, 30241920, 30242120, 30242724, 30243216, 30244340, 30244831
30246053, 30246179, 30247305, 30248520, 30248531, 30248564, 30249432
30249738, 30249927, 30251003, 30252005, 30252098, 30252156, 30252458
30252977, 30253035, 30253090, 30253608, 30253705, 30253835, 30254206
30254525, 30254576, 30254726, 30255143, 30255528, 30256542, 30257412
30257908, 30259120, 30259469, 30260523, 30260595, 30263013, 30263377
30264405, 30265523, 30265608, 30265615, 30265703, 30266791, 30267155
30269428, 30269748, 30270647, 30270744, 30271114, 30272329, 30274090
30274188, 30274324, 30274662, 30275548, 30275569, 30275578, 30275784
30276144, 30276243, 30277120, 30277451, 30277589, 30277648, 30277733
30277887, 30278402, 30281428, 30281615, 30282501, 30282591, 30282918
30283296, 30283577, 30283579, 30283581, 30283832, 30283932, 30284219
30284369, 30284751, 30285026, 30285166, 30285251, 30285341, 30285457
30285540, 30285843, 30286961, 30288343, 30288491, 30289074, 30289458
30290700, 30291536, 30292305, 30293345, 30294267, 30294465, 30294671
30294865, 30295110, 30295137, 30295549, 30295790, 30295808, 30297905
30299367, 30299817, 30299934, 30300030, 30300342, 30300363, 30300523
30300538, 30304037, 30305163, 30305264, 30305395, 30305568, 30305603
30305880, 30306407, 30307814, 30307883, 30308368, 30308578, 30308624
30308772, 30308947, 30309098, 30309798, 30310195, 30311826, 30312094
30312546, 30313749, 30313848, 30313989, 30314079, 30314198, 30314837
30316667, 30316897, 30317005, 30317209, 30317397, 30318638, 30318943
30319080, 30319099, 30320029, 30321076, 30321398, 30322980, 30323219
30323658, 30323849, 30324180, 30324466, 30324649, 30325407, 30325786
30326115, 30326882, 30327149, 30327678, 30327810, 30328168, 30328209
30328690, 30329209, 30329751, 30330123, 30331356, 30331759, 30332505

30332893, 30334484, 30334563, 30335127, 30335832, 30335987, 30336032
30336383, 30336530, 30336742, 30336996, 30337245, 30338434, 30338591
30339049, 30339103, 30340540, 30341713, 30342371, 30342878, 30343370
30344614, 30345201, 30345432, 30345809, 30345926, 30345950, 30346330
30346847, 30346867, 30347410, 30349714, 30350177, 30350543, 30352532
30352581, 30352623, 30352715, 30355490, 30356060, 30356461, 30357463
30357698, 30357897, 30358416, 30359614, 30360383, 30360653, 30361070
30361635, 30362003, 30362850, 30363088, 30363193, 30363311, 30363716
30364329, 30364481, 30364613, 30364835, 30365745, 30367193, 30368048
30368482, 30368534, 30368668, 30368917, 30371264, 30371623, 30371909
30372081, 30373419, 30373541, 30373550, 30374345, 30374570, 30374739
30375109, 30376986, 30377347, 30377692, 30377729, 30380511, 30380907
30381207, 30381525, 30381614, 30382646, 30382982, 30383286, 30384121
30384152, 30387628, 30387666, 30388853, 30389229, 30389414, 30389507
30389821, 30390279, 30390382, 30390635, 30391272, 30392011, 30392870
30392987, 30393110, 30393653, 30393944, 30394509, 30394738, 30394974
30395132, 30396120, 30396946, 30396974, 30397100, 30398099, 30398251
30398257, 30398422, 30398770, 30399906, 30402386, 30403284, 30403412
30403763, 30403881, 30403902, 30403989, 30404117, 30404153, 30404357
30404639, 30406227, 30406709, 30408515, 30408808, 30409207, 30409339
30409472, 30409590, 30412188, 30412772, 30412863, 30412885, 30412921
30413137, 30413294, 30414491, 30414679, 30414714, 30416034, 30416603
30417648, 30417732, 30418926, 30419024, 30419196, 30419450, 30420105
30420452, 30421009, 30421026, 30421204, 30421439, 30421476, 30421706
30422487, 30423135, 30423218, 30424347, 30430921, 30431274, 30431504
30431582, 30431698, 30431703, 30431717, 30431867, 30432470, 30433177
30434793, 30436326, 30436399, 30437003, 30437149, 30438224, 30439985
30440651, 30440712, 30441277, 30441687, 30441959, 30442266, 30442749
30442805, 30442874, 30442884, 30443393, 30446436, 30446583, 30446820
30447060, 30447498, 30447589, 30447994, 30448182, 30448348, 30448355
30448917, 30449194, 30449837, 30450787, 30453442, 30454090, 30455427
30457633, 30457697, 30458080, 30458568, 30458593, 30460095, 30460558
30460842, 30460922, 30461123, 30461458, 30462439, 30463938, 30464250
30464655, 30466081, 30466214, 30469777, 30470402, 30470947, 30472891
30473634, 30474167, 30474386, 30474774, 30475041, 30475115, 30475813
30476768, 30477588, 30477685, 30477691, 30477767, 30479252, 30479647
30479715, 30480591, 30480872, 30483065, 30483140, 30483217, 30483521
30484042, 30484623, 30484801, 30485255, 30486436, 30486896, 30487387
30487697, 30489582, 30490014, 30490578, 30490671, 30492380, 30493331
30493518, 30494259, 30494900, 30495035, 30495078, 30495133, 30495483
30496957, 30497057, 30497120, 30497765, 30498824, 30500224, 30500297
30500344, 30500582, 30501574, 30502415, 30503943, 30505029, 30505497
30506794, 30506991, 30507032, 30507313, 30508100, 30509112, 30509277
30510347, 30510527, 30510718, 30512690, 30513285, 30513353, 30513480

30513848, 30515886, 30516868, 30517214, 30517516, 30517635, 30518349
30518447, 30518923, 30519188, 30520662, 30522285, 30522998, 30523137
30523538, 30523601, 30523750, 30524736, 30527198, 30527275, 30528547
30528637, 30528687, 30528704, 30528731, 30528935, 30529790, 30529915
30529940, 30530585, 30532811, 30533132, 30533580, 30534351, 30534549
30534662, 30534827, 30535905, 30536237, 30537403, 30537405, 30537533
30537584, 30538141, 30538818, 30539519, 30539866, 30540109, 30540407
30544247, 30544595, 30544629, 30544752, 30545040, 30545281, 30545556
30549255, 30549368, 30549637, 30549789, 30549881, 30551000, 30551123
30554178, 30556326, 30556523, 30556581, 30556807, 30557386, 30557803
30558561, 30559129, 30559218, 30559252, 30560365, 30560513, 30561404
30561590, 30561737, 30564139, 30564343, 30564898, 30565004, 30565595
30565805, 30566054, 30567372, 30568514, 30568896, 30570083, 30571306
30572816, 30573236, 30573703, 30575243, 30575697, 30576112, 30576393
30576853, 30577071, 30577591, 30578221, 30579051, 30580813, 30580887
30581448, 30582221, 30582500, 30584767, 30585407, 30586493, 30587001
30588738, 30589914, 30591028, 30591475, 30592859, 30593046, 30593104
30593863, 30594167, 30595114, 30595408, 30595860, 30596024, 30596320
30596488, 30596694, 30598682, 30598746, 30598919, 30599405, 30599407
30600173, 30600184, 30602230, 30602828, 30603211, 30605215, 30605676
30606345, 30606451, 30608583, 30609799, 30610097, 30610406, 30610667
30611527, 30611603, 30612199, 30613937, 30613971, 30614411, 30616406
30616738, 30617002, 30617626, 30618230, 30619138, 30619414, 30619525
30619728, 30619787, 30620805, 30621255, 30621910, 30622528, 30622755
30623138, 30623142, 30624243, 30624792, 30624864, 30624874, 30625121
30628834, 30628899, 30629139, 30629643, 30629799, 30630391, 30630829
30630930, 30631393, 30631523, 30633259, 30633395, 30633938, 30634548
30634559, 30635183, 30635302, 30635326, 30635360, 30637270, 30637319
30637841, 30638712, 30640436, 30641541, 30641755, 30641900, 30642124
30644530, 30644766, 30644889, 30645590, 30645896, 30645938, 30646077
30647133, 30649310, 30650297, 30650404, 30651231, 30651570, 30651621
30651674, 30652515, 30652595, 30652813, 30652853, 30654131, 30654558
30655906, 30656839, 30657196, 30657365, 30657566, 30657624, 30657706
30657875, 30657906, 30657940, 30658421, 30658533, 30658555, 30658702
30659940, 30660412, 30661000, 30661939, 30662651, 30662736, 30663591
30663646, 30664266, 30665036, 30665399, 30665720, 30666902, 30668407
30668754, 30670328, 30670369, 30670584, 30671606, 30671720, 30671813
30671958, 30674373, 30674959, 30676209, 30677633, 30679595, 30679771
30679804, 30681085, 30681462, 30681516, 30681521, 30682289, 30684902
30685163, 30686017, 30686131, 30686809, 30687047, 30689557, 30689988
30690686, 30691604, 30691731, 30691857, 30692462, 30692473, 30693791
30694947, 30695670, 30696566, 30696821, 30698289, 30699770, 30702732
30703610, 30704826, 30705448, 30708735, 30710506, 30710807, 30711370
30712670, 30713133, 30714151, 30714715, 30716001, 30716863, 30718841

30718862, 30719327, 30719419, 30720736, 30720844, 30722105, 30722705
30723671, 30724679, 30724881, 30726204, 30727701, 30727759, 30728196
30729278, 30729604, 30729839, 30730026, 30732711, 30733270, 30733563
30734242, 30734362, 30734707, 30735091, 30735153, 30735736, 30737970
30739013, 30739876, 30740115, 30740250, 30740669, 30740997, 30741263
30748411, 30748707, 30749181, 30749644, 30749722, 30750219, 30750991
30751171, 30751521, 30751527, 30751639, 30751968, 30753432, 30755348
30758836, 30758854, 30758943, 30759573, 30760739, 30761871, 30761878
30763272, 30763305, 30763639, 30763754, 30763970, 30764405, 30764663
30764706, 30764976, 30765486, 30765995, 30767277, 30767654, 30768636
30769312, 30770717, 30772069, 30773164, 30773696, 30773797, 30776416
30776676, 30776929, 30777519, 30777759, 30778855, 30779240, 30781032
30781041, 30781461, 30781970, 30782266, 30782300, 30782414, 30783395
30783551, 30785101, 30786237, 30786641, 30786655, 30787365, 30788973
30789904, 30790047, 30790441, 30801050, 30801296, 30801510, 30803210
30804646, 30806757, 30806984, 30807723, 30807888, 30808109, 30808364
30808869, 30809087, 30810680, 30810765, 30812574, 30814266, 30814285
30815269, 30815495, 30815852, 30815994, 30816760, 30816938, 30819340
30819629, 30820155, 30821297, 30822207, 30822502, 30822919, 30823744
30825391, 30825419, 30825656, 30826474, 30827849, 30828205, 30828350
30829779, 30829844, 30830555, 30832775, 30833454, 30834068, 30834110
30834705, 30835184, 30835219, 30835853, 30836129, 30838605, 30839253
30839315, 30839451, 30839836, 30840791, 30840793, 30841241, 30842277
30843271, 30844839, 30845806, 30846063, 30846159, 30846782, 30847442
30847871, 30848028, 30848097, 30848773, 30851448, 30851951, 30852954
30855101, 30856358, 30857501, 30857721, 30858810, 30858877, 30858919
30860741, 30860803, 30861988, 30862285, 30863115, 30864607, 30865805
30866141, 30866988, 30867685, 30868010, 30868186, 30869131, 30870439
30870513, 30871716, 30871792, 30873527, 30874084, 30874270, 30874337
30874660, 30876666, 30879169, 30879708, 30880774, 30880913, 30881161
30881407, 30883715, 30883785, 30883877, 30886188, 30887501, 30887777
30887976, 30887989, 30889443, 30889607, 30889723, 30890720, 30890971
30891760, 30891792, 30893601, 30895426, 30895577, 30896620, 30896685
30898366, 30898381, 30898748, 30898939, 30901889, 30902655, 30904672
30905604, 30906274, 30906407, 30909596, 30909918, 30910264, 30910267
30913399, 30914272, 30914674, 30915781, 30919403, 30919587, 30919691
30919804, 30921136, 30921259, 30922450, 30922936, 30922996, 30923514
30923517, 30923597, 30923940, 30925316, 30925419, 30925828, 30927440
30927821, 30930149, 30930339, 30931068, 30931311, 30931981, 30932674
30932923, 30936251, 30936831, 30936942, 30937340, 30937391, 30937410
30938413, 30939307, 30939317, 30939934, 30940259, 30940382, 30940868
30940869, 30941056, 30944643, 30945005, 30945772, 30946072, 30946141
30946595, 30946768, 30946843, 30946876, 30946896, 30947294, 30950786
30952104, 30952191, 30953157, 30953266, 30953836, 30954062, 30955702

30956571, 30956647, 30957739, 30958493, 30960314, 30960356, 30960736
30961566, 30964194, 30965111, 30965554, 30965649, 30966205, 30967084
30968737, 30968781, 30970518, 30972817, 30972841, 30972887, 30972947
30972951, 30972959, 30972966, 30973085, 30973113, 30973127, 30973137
30973143, 30973197, 30973698, 30973877, 30974207, 30974813, 30976603
30977294, 30977411, 30978554, 30978747, 30979701, 30980023, 30980115
30980317, 30980733, 30981182, 30981240, 30983064, 30985027, 30985906
30986423, 30987088, 30987105, 30987243, 30987717, 30987724, 30988444
30989951, 30990034, 30992120, 30992330, 30992597, 30993198, 30993518
30993604, 30994996, 30996945, 30996991, 30997375, 30997960, 30998035
30998662, 30998759, 30998847, 31000312, 31001017, 31001455, 31001490
31001859, 31002223, 31002346, 31002923, 31003137, 31003659, 31003759
31004077, 31004719, 31004844, 31004871, 31005003, 31006011, 31006259
31006792, 31006953, 31008240, 31008858, 31008907, 31009032, 31009271
31009545, 31009590, 31009680, 31010218, 31010554, 31010976, 31011361
31013127, 31013531, 31014323, 31015330, 31016413, 31019249, 31021068
31021109, 31021157, 31021324, 31021542, 31021780, 31022858, 31025267
31025520, 31025531, 31025859, 31026220, 31026591, 31026860, 31027747
31028883, 31028986, 31029936, 31030898, 31031240, 31031955, 31032463
31032904, 31032913, 31034794, 31035287, 31035916, 31037421, 31038220
31038447, 31038817, 31039337, 31039627, 31039928, 31041540, 31042208
31042337, 31043483, 31043630, 31043695, 31043747, 31044145, 31044460
31044504, 31044951, 31045929, 31046188, 31046619, 31047022, 31047169
31047333, 31047697, 31047740, 31048025, 31048741, 31049215, 31049995
31050557, 31051056, 31051075, 31052735, 31052809, 31053669, 31054177
31054874, 31055142, 31056909, 31057402, 31058548, 31061482, 31061504
31062010, 31062645, 31063315, 31063380, 31063769, 31064025, 31065701
31065838, 31066082, 31066250, 31066265, 31066554, 31067456, 31067483
31067892, 31069059, 31070528, 31071080, 31073440, 31073586, 31074032
31075323, 31075960, 31077117, 31077365, 31078391, 31078757, 31079204
31080474, 31081558, 31082719, 31084778, 31084921, 31086467, 31086869
31086954, 31087361, 31087679, 31088115, 31088341, 31089270, 31090262
31091469, 31091868, 31092129, 31092233, 31092581, 31092921, 31094183
31094228, 31094249, 31094374, 31094688, 31095972, 31096846, 31097760
31097961, 31098661, 31098870, 31099312, 31099926, 31099981, 31100172
31101386, 31101840, 31103065, 31103804, 31104809, 31105896, 31106140
31106577, 31107577, 31108603, 31108644, 31109506, 31109924, 31110021
31112088, 31112530, 31112972, 31113089, 31113177, 31113249, 31113426
31113682, 31114116, 31114265, 31114671, 31115201, 31115502, 31117282
31118486, 31118702, 31118809, 31118844, 31119057, 31119846, 31120361
31122876, 31124213, 31124363, 31124821, 31124914, 31125773, 31125849
31125918, 31126053, 31126058, 31127043, 31127457, 31127961, 31127968
31127969, 31128086, 31129851, 31130156, 31132732, 31134430, 31137765
31138106, 31139643, 31140940, 31141792, 31142377, 31142749, 31142815

31143146, 31143415, 31143870, 31145389, 31145403, 31145525, 31145804
31146338, 31146727, 31151483, 31153120, 31153485, 31155085, 31155305
31155634, 31156301, 31156383, 31156898, 31158151, 31158341, 31158380
31159382, 31161861, 31162711, 31162915, 31163379, 31165038, 31165577
31165722, 31166801, 31168440, 31170082, 31171096, 31171147, 31171631
31172207, 31172233, 31172642, 31174836, 31175365, 31176451, 31176502
31177193, 31177204, 31177221, 31178051, 31178058, 31178103, 31180519
31181375, 31181380, 31182159, 31182451, 31182756, 31182793, 31183413
31184230, 31185224, 31188038, 31188398, 31190624, 31191224, 31192039
31193292, 31193511, 31193695, 31193745, 31193936, 31194264, 31195090
31195430, 31195600, 31195838, 31196272, 31196310, 31196812, 31200057
31200845, 31201001, 31201366, 31201611, 31202536, 31204412, 31204878
31205834, 31206070, 31206201, 31207446, 31208287, 31213034, 31214119
31214928, 31215422, 31215438, 31215548, 31215854, 31216823, 31216995
31217946, 31218837, 31218904, 31219047, 31219975, 31220188, 31220549
31220837, 31220881, 31220912, 31221454, 31222780, 31223382, 31224819
31225538, 31226448, 31226534, 31228670, 31230775, 31233170, 31234765
31234790, 31234983, 31235797, 31236624, 31240626, 31242319, 31242976
31244968, 31245856, 31247532, 31247838, 31248496, 31249008, 31249406
31249689, 31249696, 31250120, 31250152, 31250221, 31251325, 31252659
31254297, 31254535, 31254929, 31255369, 31255869, 31256383, 31257740
31257826, 31258101, 31258344, 31258697, 31258995, 31260692, 31261467
31261641, 31262275, 31262388, 31265651, 31265773, 31268557, 31270711
31270847, 31271032, 31274074, 31281708, 31282037, 31287296, 31287741
31287871, 31289115, 31290017, 31290300, 31290427, 31291986, 31292298
31293484, 31293867, 31298871, 31301460, 31303032, 31304573, 31304945
31305114, 31305309, 31305624, 31306248, 31306261, 31306867, 31306927
31307715, 31309379, 31309867, 31310564, 31310624, 31311830, 31312450
31312976, 31313117, 31313177, 31313214, 31313444, 31313812, 31314323
31314885, 31315495, 31315876, 31316250, 31317032, 31321092, 31322720
31323383, 31325584, 31326320, 31326608, 31326977, 31326998, 31327046
31327259, 31327278, 31327349, 31327391, 31327896, 31331354, 31331372
31333156, 31334606, 31334961, 31335037, 31335142, 31336298, 31338249
31338673, 31338686, 31338769, 31339457, 31339643, 31339744, 31341138
31341746, 31343110, 31344046, 31344097, 31348711, 31348922, 31349426
31350348, 31353098, 31353610, 31355339, 31356601, 31357581, 31357737
31358308, 31358511, 31359215, 31359366, 31360146, 31360155, 31360214
31360282, 31360314, 31360323, 31360469, 31360529, 31362408, 31362692
31364001, 31364383, 31366716, 31367188, 31367364, 31368027, 31369444
31372498, 31373825, 31373837, 31373843, 31374283, 31374449, 31374738
31375865, 31376011, 31376708, 31377129, 31377206, 31377487, 31377808
31377936, 31380443, 31381701, 31383049, 31383396, 31383464, 31383814
31386394, 31386696, 31387033, 31387123, 31387426, 31387443, 31388201
31388288, 31390936, 31390955, 31391991, 31393600, 31393991, 31394341

31394347, 31394365, 31394544, 31395247, 31396027, 31396609, 31396695
31396980, 31398505, 31398617, 31398663, 31398761, 31399131, 31399883
31400754, 31401831, 31402078, 31402598, 31403177, 31403565, 31404014
31404130, 31404263, 31404487, 31405300, 31405751, 31408636, 31409483
31409912, 31409964, 31410289, 31411163, 31412209, 31414023, 31414524
31415324, 31416193, 31416213, 31416250, 31417007, 31417192, 31417242
31417336, 31417844, 31417990, 31418442, 31419363, 31420295, 31420316
31420320, 31421316, 31422440, 31422620, 31423645, 31424838, 31425167
31425761, 31425800, 31429501, 31429590, 31429770, 31429784, 31429844
31429971, 31430722, 31430735, 31430910, 31431005, 31431326, 31431771
31431964, 31431969, 31431971, 31431973, 31431975, 31431986, 31433092
31433579, 31433749, 31434421, 31434805, 31434870, 31435163, 31435308
31435735, 31437030, 31437448, 31440426, 31440813, 31441916, 31441920
31442332, 31442714, 31443030, 31444353, 31444516, 31445356, 31446431
31447733, 31448680, 31449354, 31450392, 31450653, 31450942, 31451019
31453585, 31454428, 31454972, 31454988, 31455597, 31456857, 31458049
31459231, 31459242, 31459369, 31462082, 31463613, 31464165, 31465389
31466433, 31468060, 31468705, 31469001, 31471441, 31471589, 31471856
31472077, 31473148, 31474315, 31475378, 31475635, 31476093, 31476603
31476701, 31476736, 31477424, 31477695, 31479072, 31479075, 31479106
31479272, 31479772, 31481750, 31483949, 31484385, 31484603, 31485340
31485386, 31485507, 31486061, 31486557, 31487441, 31487491, 31487826
31487844, 31488085, 31488464, 31489032, 31489137, 31489481, 31489590
31489936, 31490604, 31491634, 31492171, 31492191, 31492588, 31492655
31492856, 31493153, 31493840, 31494095, 31494264, 31494794, 31495254
31495564, 31496174, 31497550, 31498559, 31499370, 31499700, 31500699
31500719, 31500971, 31501139, 31502301, 31503349, 31503674, 31503934
31505088, 31506095, 31507107, 31507129, 31508229, 31508712, 31509279
31510891, 31510910, 31511142, 31511519, 31511940, 31512044, 31512262
31513011, 31515163, 31515869, 31515879, 31515911, 31515929, 31516164
31516184, 31516255, 31516265, 31517502, 31518371, 31522708, 31523548
31523578, 31523585, 31523620, 31523646, 31523736, 31523836, 31525310
31525609, 31525783, 31526250, 31526903, 31527103, 31527199, 31527381
31528724, 31528738, 31528962, 31529594, 31529967, 31530985, 31530995
31532084, 31532176, 31532308, 31532339, 31533050, 31533113, 31533274
31533817, 31533833, 31535073, 31535870, 31535955, 31536401, 31536731
31537521, 31537736, 31538274, 31538363, 31538891, 31539566, 31541805
31541864, 31541905, 31542347, 31542356, 31542851, 31542956, 31543810
31544097, 31545477, 31546864, 31547220, 31547445, 31547480, 31548675
31549221, 31549468, 31551142, 31552563, 31552615, 31552738, 31552755
31553289, 31553674, 31553813, 31553968, 31555126, 31555173, 31555346
31555539, 31555800, 31556950, 31557518, 31557663, 31558194, 31559079
31559085, 31559415, 31559563, 31560592, 31561886, 31563138, 31564060
31564795, 31567124, 31567403, 31567441, 31567719, 31568423, 31569057

31569867, 31570054, 31570161, 31571415, 31571742, 31572006, 31572046
31572267, 31573269, 31573457, 31574122, 31574150, 31574244, 31574267
31575529, 31575649, 31575665, 31576738, 31577569, 31578202, 31578994
31580079, 31580122, 31580374, 31580437, 31581627, 31584056, 31584555
31584853, 31585351, 31585491, 31585789, 31586381, 31586862, 31588933
31590826, 31591384, 31591400, 31591409, 31591421, 31595025, 31595632
31597104, 31597727, 31598146, 31599363, 31599990, 31600023, 31600291
31600894, 31601385, 31603199, 31603380, 31603625, 31605119, 31605370
31605737, 31606474, 31607937, 31608753, 31609974, 31610024, 31612535
31613838, 31615736, 31616101, 31616104, 31617492, 31619276, 31620252
31620748, 31620944, 31622250, 31623413, 31623463, 31625579, 31625618
31625959, 31626438, 31626493, 31626528, 31626572, 31627587, 31628311
31628753, 31629056, 31630551, 31630794, 31630946, 31631985, 31632273
31632534, 31632605, 31632663, 31633224, 31634510, 31634805, 31635875
31635963, 31635980, 31637094, 31637607, 31637680, 31638398, 31638733
31638943, 31640139, 31640197, 31640240, 31642556, 31642639, 31644775
31647304, 31648120, 31648157, 31649447, 31649818, 31649819, 31649958
31649962, 31650046, 31650112, 31650202, 31652641, 31653080, 31653167
31653634, 31653647, 31653758, 31653913, 31653916, 31653917, 31654116
31654119, 31654122, 31654125, 31654133, 31655807, 31656263, 31657324
31657462, 31657483, 31658464, 31658819, 31658943, 31659065, 31660283
31661865, 31661879, 31662143, 31662504, 31662625, 31662925, 31663189
31663788, 31664399, 31666449, 31666684, 31667096, 31667180, 31667940
31668033, 31668061, 31668065, 31668694, 31668872, 31669064, 31670014
31670263, 31670353, 31671568, 31672605, 31673406, 31674380, 31674801
31675568, 31675852, 31675860, 31676941, 31677345, 31677460, 31677479
31677587, 31678629, 31679900, 31680709, 31680713, 31680985, 31682766
31683044, 31683260, 31683311, 31683373, 31683708, 31684080, 31684494
31685612, 31685882, 31685989, 31686979, 31688127, 31688978, 31691030
31691089, 31691480, 31695062, 31695693, 31696043, 31696577, 31696853
31697741, 31699230, 31700234, 31701239, 31701517, 31701910, 31703614
31705178, 31705265, 31705704, 31706595, 31706956, 31707190, 31708133
31708175, 31709647, 31709739, 31709777, 31710272, 31711155, 31711720
31711889, 31711997, 31712260, 31714645, 31715935, 31716510, 31716873
31717010, 31718000, 31718134, 31718346, 31718842, 31719167, 31720344
31720839, 31720942, 31721557, 31721863, 31721880, 31722558, 31722646
31723226, 31723323, 31723651, 31727229, 31727560, 31728160, 31728440
31728444, 31728447, 31728477, 31728486, 31728858, 31730485, 31730766
31731076, 31731407, 31732311, 31734007, 31734012, 31734017, 31734583
31735662, 31736095, 31737059, 31737603, 31739198, 31739891, 31740252
31741938, 31743771, 31745130, 31745233, 31745528, 31746054, 31747706
31747818, 31747935, 31747989, 31748000, 31748182, 31748233, 31748944
31750577, 31750581, 31752492, 31752502, 31752633, 31753202, 31753425
31753478, 31753692, 31754240, 31754546, 31754887, 31755245, 31755451

31756415, 31756465, 31756568, 31756650, 31757357, 31757775, 31757824
31758083, 31758344, 31758846, 31758939, 31758960, 31759565, 31760278
31760592, 31760738, 31761510, 31762819, 31763030, 31763707, 31763905
31764089, 31764239, 31764866, 31764913, 31765068, 31765246, 31765257
31765296, 31766499, 31766534, 31766675, 31766696, 31767204, 31767237
31767598, 31767852, 31768490, 31768497, 31768505, 31769373, 31769530
31770289, 31771302, 31771370, 31771410, 31771468, 31771745, 31771836
31772002, 31772070, 31773582, 31774019, 31774132, 31775101, 31776121
31776659, 31776785, 31776994, 31777410, 31777489, 31779833, 31781897
31783422, 31783451, 31783782, 31783985, 31785445, 31785572, 31786282
31786838, 31787057, 31787655, 31788104, 31788594, 31788704, 31788761
31788785, 31789178, 31790500, 31790757, 31792465, 31792615, 31793691
31793713, 31794336, 31794882, 31795231, 31796208, 31796277, 31796882
31798001, 31798669, 31798702, 31798742, 31799858, 31800053, 31800059
31800757, 31804838, 31805812, 31807179, 31807516, 31809510, 31810213
31812352, 31812824, 31815099, 31815227, 31816158, 31816343, 31816631
31820632, 31820662, 31820842, 31820859, 31820926, 31821129, 31821835
31822026, 31822951, 31823051, 31824504, 31824792, 31824934, 31825151
31825324, 31825410, 31827339, 31827605, 31827912, 31828378, 31828999
31829366, 31829617, 31829639, 31831950, 31832785, 31832901, 31833172
31833585, 31833948, 31834191, 31834871, 31835805, 31835854, 31836113
31836454, 31839038, 31839779, 31839888, 31840180, 31840490, 31840516
31840992, 31841210, 31841696, 31842545, 31843028, 31843462, 31843476
31843845, 31844557, 31845092, 31845403, 31845803, 31845955, 31846454
31847489, 31847541, 31848331, 31848365, 31848391, 31848903, 31849859
31850132, 31850227, 31851383, 31851449, 31852482, 31852506, 31852574
31854285, 31854692, 31855307, 31855526, 31855996, 31858580, 31858621
31858833, 31859067, 31859143, 31860193, 31860406, 31860760, 31862359
31862593, 31862611, 31863118, 31863890, 31864818, 31864947, 31866141
31866159, 31867037, 31867331, 31867351, 31869601, 31869944, 31869954
31869966, 31870010, 31870150, 31870164, 31870190, 31870196, 31871384
31871692, 31872230, 31873155, 31875140, 31876138, 31876368, 31878256
31878314, 31880154, 31881527, 31883124, 31883343, 31883739, 31883845
31886547, 31886695, 31886745, 31886848, 31887130, 31888148, 31888731
31889222, 31890230, 31890516, 31892029, 31892856, 31895670, 31897178
31897786, 31897854, 31898193, 31898257, 31900585, 31902517, 31902662
31903523, 31903786, 31903962, 31904739, 31904933, 31905033, 31907042
31907137, 31907510, 31907565, 31907792, 31908345, 31908482, 31908571
31908750, 31909295, 31909807, 31912638, 31913650, 31913839, 31914003
31914943, 31915444, 31915968, 31916644, 31917378, 31917494, 31917856
31919563, 31919952, 31921267, 31922161, 31922580, 31923463, 31923622
31925462, 31926203, 31926811, 31926848, 31927078, 31927510, 31927930
31932042, 31932196, 31933451, 31933837, 31933842, 31933846, 31933914
31934254, 31934301, 31935717, 31936588, 31936983, 31938116, 31938288

31939461, 31939486, 31940176, 31940458, 31941148, 31941948, 31942136
31942144, 31942258, 31942274, 31942473, 31943497, 31943691, 31945038
31945407, 31945659, 31945827, 31945928, 31946936, 31947732, 31947861
31949490, 31950244, 31950577, 31952046, 31952052, 31953394, 31953989
31956113, 31956435, 31956920, 31957152, 31957564, 31957674, 31957683
31958038, 31958958, 31959140, 31959253, 31960389, 31961578, 31961940
31964519, 31965012, 31965391, 31965542, 31968431, 31970188, 31971792
31972615, 31972671, 31973203, 31974424, 31974597, 31974693, 31976303
31977024, 31977257, 31980216, 31980296, 31981745, 31981751, 31982879
31985494, 31985738, 31985961, 31986808, 31986836, 31986905, 31988079
31988833, 31990386, 31991705, 31992615, 31993051, 31993795, 31994298
31995577, 31996264, 31997107, 31997457, 31997660, 31998181, 31998189
31998861, 31999453, 32001851, 32002411, 32003551, 32003908, 32004148
32004299, 32004977, 32005046, 32005048, 32005053, 32005215, 32006467
32006703, 32006824, 32007076, 32007698, 32008408, 32008586, 32008819
32009334, 32009754, 32010593, 32010707, 32011107, 32011888, 32012788
32012975, 32013403, 32014520, 32015820, 32016884, 32017301, 32017422
32017671, 32018632, 32018953, 32020701, 32022223, 32022711, 32025328
32028155, 32028269, 32032653, 32032733, 32032887, 32033795, 32034766
32035268, 32035536, 32035893, 32035899, 32035902, 32036045, 32037237
32037962, 32038054, 32038780, 32038844, 32038996, 32040940, 32041799
32042256, 32042352, 32042706, 32044533, 32044903, 32045377, 32046125
32046587, 32047226, 32048412, 32048921, 32050048, 32051896, 32052587
32054806, 32056529, 32057333, 32057565, 32057639, 32058260, 32060164
32060577, 32061018, 32061146, 32061648, 32062227, 32064682, 32066061
32067130, 32067356, 32067675, 32068110, 32068187, 32068190, 32069160
32069508, 32069696, 32069834, 32071457, 32071582, 32072944, 32073027
32073710, 32074450, 32075009, 32075020, 32075130, 32076561, 32077318
32079573, 32079739, 32080081, 32080655, 32081381, 32082098, 32087331
32087597, 32087956, 32088132, 32088478, 32089051, 32089820, 32090518
32090725, 32093558, 32094825, 32095097, 32095380, 32095610, 32096252
32097387, 32097589, 32097604, 32097882, 32097962, 32098224, 32098535
32099153, 32099539, 32101305, 32102542, 32103383, 32103427, 32104324
32104402, 32104610, 32105135, 32105239, 32105412, 32107505, 32107621
32108094, 32108115, 32108566, 32108576, 32109384, 32109796, 32112798
32112822, 32113113, 32113791, 32114541, 32114572, 32114746, 32115642
32117115, 32117253, 32117490, 32118727, 32119339, 32119565, 32120283
32120453, 32121014, 32121326, 32121673, 32121885, 32122574, 32123331
32124176, 32124570, 32124594, 32124607, 32124611, 32125142, 32127227
32127448, 32129659, 32130083, 32130485, 32130504, 32131010, 32131401
32132464, 32132504, 32133039, 32138478, 32138782, 32139432, 32139659
32140800, 32142788, 32143492, 32143562, 32144917, 32147340, 32148419
32148662, 32150818, 32150854, 32151098, 32152341, 32153396, 32153619
32153909, 32156194, 32157050, 32157078, 32161260, 32162391, 32164053

32165367, 32165759, 32165814, 32165887, 32167592, 32167923, 32169151
32170162, 32170190, 32171622, 32171791, 32172050, 32172773, 32172777
32173142, 32173543, 32174321, 32174405, 32174492, 32174571, 32175329
32175780, 32177701, 32177869, 32178217, 32178966, 32179209, 32179306
32181149, 32182097, 32182783, 32183756, 32184235, 32184855, 32185296
32186186, 32186983, 32187775, 32189869, 32189952, 32190132, 32190190
32190284, 32190573, 32191427, 32191451, 32193431, 32195333, 32196492
32196738, 32197147, 32198292, 32198396, 32199681, 32200524, 32201743
32201903, 32201936, 32203068, 32203354, 32205825, 32207088, 32207920
32208144, 32208346, 32208691, 32209784, 32210660, 32212041, 32212635
32212916, 32213376, 32213696, 32214021, 32214195, 32214654, 32214743
32214782, 32215240, 32215991, 32216027, 32218369, 32218395, 32218498
32218552, 32219179, 32219318, 32219835, 32219988, 32220017, 32221141
32222473, 32223669, 32224583, 32225117, 32225353, 32225742, 32225899
32227352, 32228188, 32229431, 32229919, 32230213, 32230775, 32230953
32231049, 32231356, 32234161, 32236601, 32236685, 32236798, 32237489
32238935, 32239730, 32241889, 32243007, 32243814, 32243882, 32243985
32244187, 32245711, 32245850, 32246090, 32248131, 32248405, 32248649
32249207, 32249371, 32249640, 32249674, 32250232, 32250238, 32251364
32252036, 32252213, 32252294, 32254063, 32254399, 32254686, 32255029
32255073, 32258021, 32259063, 32259322, 32259535, 32259785, 32260010
32260290, 32263923, 32264556, 32266406, 32266906, 32267171, 32267610
32268669, 32274403, 32277643, 32277793, 32279351, 32280901, 32284241
32284325, 32284485, 32284725, 32285086, 32285717, 32285789, 32287797
32289552, 32289858, 32290313, 32290399, 32290949, 32291114, 32291139
32292180, 32292805, 32293615, 32294566, 32294851, 32296259, 32296941
32297373, 32297469, 32297849, 32298782, 32300098, 32300822, 32300849
32301856, 32302561, 32303160, 32303657, 32304293, 32304712, 32305792
32307046, 32307586, 32309046, 32309488, 32309723, 32312131, 32312412
32312586, 32316070, 32316252, 32316326, 32317012, 32318528, 32318820
32318914, 32319410, 32321317, 32321319, 32321765, 32322629, 32322738
32323488, 32323600, 32323816, 32324219, 32325574, 32325611, 32327201
32327208, 32328231, 32329914, 32330269, 32330540, 32331889, 32332107
32334745, 32335769, 32338476, 32338736, 32338953, 32339801, 32340392
32341260, 32342172, 32342345, 32343678, 32344099, 32344168, 32344199
32345001, 32345178, 32345272, 32345785, 32346649, 32346733, 32353343
32355765, 32355912, 32356340, 32356545, 32356609, 32356628, 32357412
32357665, 32359044, 32361175, 32361677, 32362016, 32362066, 32362698
32363549, 32363711, 32364147, 32366303, 32366461, 32366536, 32367151
32368480, 32368789, 32368792, 32369041, 32372725, 32374050, 32374431
32375438, 32375493, 32376774, 32376872, 32376922, 32379140, 32379303
32379775, 32380591, 32381403, 32382207, 32385068, 32385141, 32385832
32386482, 32386683, 32386720, 32386877, 32387555, 32387818, 32388247
32389047, 32389497, 32390629, 32390855, 32391021, 32392724, 32393612

32394623, 32396326, 32397350, 32398714, 32401086, 32402243, 32403509
32404638, 32405239, 32406222, 32408640, 32409344, 32409942, 32410175
32412340, 32413042, 32413512, 32414996, 32415846, 32415989, 32416652
32416655, 32417227, 32417242, 32417274, 32417438, 32417632, 32419774
32421958, 32422965, 32423985, 32425097, 32425124, 32425194, 32426213
32426315, 32427158, 32427173, 32427226, 32427953, 32428097, 32428189
32430745, 32431251, 32431290, 32431413, 32432078, 32435911, 32436342
32436460, 32436721, 32436757, 32437538, 32441671, 32442404, 32443087
32443531, 32443744, 32443935, 32444159, 32446565, 32449622, 32450344
32453583, 32453611, 32453888, 32455219, 32455650, 32455742, 32455961
32459153, 32460136, 32462153, 32464021, 32464584, 32465193, 32465209
32465466, 32465495, 32465853, 32465894, 32466474, 32467812, 32469004
32469225, 32471100, 32471251, 32471346, 32471642, 32472589, 32473465
32474686, 32474926, 32474997, 32478452, 32480419, 32480510, 32480528
32480541, 32481807, 32484945, 32485859, 32486528, 32489206, 32490128
32490416, 32491443, 32492343, 32492422, 32492452, 32495545, 32495572
32497756, 32498459, 32499155, 32500117, 32501930, 32503790, 32504340
32504786, 32505009, 32505439, 32505557, 32505634, 32506309, 32506473
32507542, 32509271, 32509584, 32509606, 32510116, 32512145, 32512918
32515850, 32516336, 32517405, 32517797, 32518029, 32518679, 32519995
32520691, 32520994, 32522300, 32523206, 32523613, 32523750, 32525039
32529396, 32529483, 32530202, 32531259, 32531627, 32533019, 32533225
32533461, 32534925, 32535106, 32535159, 32536006, 32538436, 32538824
32539300, 32539322, 32539914, 32541049, 32542641, 32544464, 32544740
32544784, 32545415, 32546408, 32548580, 32549351, 32550589, 32550751
32551177, 32552602, 32553241, 32555120, 32556165, 32556891, 32559543
32561759, 32561791, 32562587, 32563106, 32563940, 32565870, 32567750
32567788, 32568163, 32569603, 32569745, 32573703, 32573942, 32576097
32576508, 32576534, 32577408, 32578113, 32578616, 32578792, 32579075
32579529, 32580082, 32580852, 32583315, 32583355, 32583375, 32584375
32586534, 32587472, 32587567, 32587793, 32587994, 32588298, 32588656
32589147, 32589990, 32593845, 32593886, 32593955, 32594965, 32595551
32596355, 32596705, 32597099, 32597637, 32598406, 32602194, 32602344
32602599, 32602735, 32602990, 32603152, 32603564, 32605116, 32606489
32607991, 32608297, 32609886, 32610271, 32613788, 32614583, 32615310
32615776, 32616678, 32618819, 32619195, 32619298, 32619327, 32620859
32620919, 32621140, 32621309, 32622507, 32622612, 32626756, 32627140
32628131, 32628221, 32629028, 32629772, 32629859, 32631787, 32633251
32635881, 32635931, 32639950, 32641748, 32642587, 32645139, 32646025
32647170, 32648248, 32651063, 32651769, 32651773, 32652143, 32652573
32653669, 32654962, 32655446, 32655691, 32656231, 32656275, 32659574
32659930, 32662165, 32663019, 32671481, 32672057, 32675095, 32675227
32676084, 32676350, 32676659, 32677702, 32682430, 32686338, 32686850
32692372, 32693242, 32697431, 32697781, 32698508, 32698569, 32700455

32700989, 32701048, 32704013, 32704119, 32704765, 32705800, 32710165
32710534, 32710750, 32711741, 32712220, 32715945, 32716726, 32718316
32718721, 32720344, 32720458, 32724654, 32725484, 32728984, 32731498
32733671, 32733845, 32734171, 32734800, 32737969, 32738356, 32739966
32740421, 32740503, 32740987, 32743290, 32743511, 32746831, 32749028
32753472, 32754845, 32755493, 32755517, 32755731, 32756914, 32757219
32758096, 32760906, 32761294, 32762231, 32764690, 32765738, 32768752
32769880, 32775512, 32775526, 32776891, 32784393, 32784403, 32786309
32789228, 32793286, 32794120, 32795016, 32795712, 32797486, 32800137
32801303, 32801337, 32803807, 32806112, 32807517, 32810125, 32810668
32811069, 32811131, 32816003, 32817950, 32818019, 32822847, 32823692
32827206, 32829563, 32831451, 32831855, 32833378, 32834168, 32838028
32838533, 32841689, 32843754, 32846272, 32847975, 32848816, 32851841
32855257, 32857370, 32857881, 32858446, 32868369, 32870681, 32872839
32874995, 32875003, 32875118, 32878039, 32879990, 32880225, 32880390
32881853, 32883252, 32889434, 32892883, 32893686, 32894842, 32895105
32898971, 32900208, 32902635, 32903472, 32903625, 32907741, 32907975
32908241, 32909292, 32913527, 32914508, 32915747, 32915847, 32916025
32918394, 32922090, 32925421, 32930360, 32930423, 32936005, 32936859
32936961, 32939376, 32939883, 32940714, 32941509, 32947264, 32953258
32956092, 32961939, 32965460, 32968221, 32969466, 32973406, 32983750
32987206, 32987308, 32988028, 32993522, 32996071, 32999086, 32999329
33003817, 33009224, 33009351, 33010173, 33011198, 33026533, 33027525
33027539, 33034103, 33035201, 33036321, 33046179, 33048277, 33060161
33061339, 33100352, 33105656, 33109335, 33111729, 33114640, 33117641
33120828, 33121880, 33123985, 33127032, 33127141, 33131742, 33144001
33149578, 33159956, 33172631, 33185773, 33192462, 33211160, 33211334
33212112, 33215225, 33218194, 33218518, 33221061, 33223248, 33242408
33252648, 33275880, 33278133, 33289442, 33295267, 33308199, 33308244
33317279, 33325981, 33332891, 33338891, 33352794, 33367909, 33388473
33456516, 33459161

Version 19.0.0.0.ru-2021-07.rur-2021-07.r1

Version 19.0.0.0.ru-2021-07.rur-2021-07.r1 includes the following:

- Patch [32904851](#): DATABASE RELEASE UPDATE 19.12.0.0.0
- Patch [32876380](#): OJVM RELEASE UPDATE 19.12.0.0.0
- Patch [32327201](#): RDBMS - DSTV36 UPDATE - TZDATA2020E
- Patch [29213893](#): DBMS_STATS FAILING WITH ERROR ORA-01422 WHEN GATHERING STATS FOR USER TABLE

- Patch [28730253](#): SUPPORT NEW ERA REIWA FOR JAPANESE IMPERIAL CALENDAR
- PreUpgrade Jar: preupgrade_19_cbuild_10_lf.zip

Combined patches for version 19.0.0.0.ru-2021-07.rur-2021-07.r1, released July 2021

Bugs fixed:

7391838, 8460502, 8476681, 14570574, 14735102, 15931756, 16662822
16664572, 16750494, 17275499, 17395507, 17428816, 17468475, 17777718
18534283, 18697534, 19080742, 19138896, 19697993, 20007421, 20083476
20313356, 20319830, 20479545, 20867658, 20922160, 21119541, 21232786
21245711, 21374587, 21528318, 21629064, 21639146, 21888352, 21965541
22066547, 22252368, 22325312, 22387320, 22580355, 22725871, 22729345
22748979, 23020668, 23094775, 23125587, 23294761, 23296836, 23311885
23606241, 23645975, 23734075, 23763462, 24336782, 24356932, 24561942
24596874, 24669730, 24687075, 24833686, 24957575, 24971456, 25030027
25092651, 25093917, 25148135, 25404117, 25416731, 25560538, 25562258
25607406, 25607716, 25756945, 25792962, 25804387, 25804908, 25806201
25809128, 25883179, 25905368, 25913778, 25986062, 25997810, 26001677
26003708, 26108369, 26127355, 26173091, 26203132, 26256280, 26280704
26284288, 26352615, 26440142, 26476244, 26497655, 26499997, 26500553
26577716, 26587659, 26611353, 26668264, 26716835, 26739322, 26758837
26777814, 26785852, 26789742, 26800890, 26819036, 26860844, 26872233
26897528, 26951566, 26963540, 26978857, 27004798, 27004828, 27019512
27036163, 27044169, 27044246, 27063461, 27086374, 27091809, 27101798
27126122, 27126938, 27130348, 27131416, 27166935, 27195575, 27195935
27221350, 27222128, 27243840, 27244999, 27254335, 27260704, 27261477
27277677, 27302372, 27329690, 27359766, 27359770, 27362994, 27369515
27378053, 27381279, 27392968, 27406105, 27411022, 27423500, 27439716
27453490, 27458357, 27458493, 27460010, 27489107, 27497101, 27572040
27582210, 27589260, 27597359, 27604329, 27622946, 27629928, 27636387
27639208, 27654410, 27658166, 27661222, 27666312, 27684864, 27692173
27697886, 27700413, 27710072, 27729678, 27742354, 27745728, 27751111
27760043, 27764052, 27785931, 27786168, 27801144, 27828892, 27829722
27841399, 27846298, 27873364, 27877830, 27880025, 27907898, 27917890
27929509, 27933036, 27934711, 27935464, 27941110, 27957203, 27957963
27967484, 27998559, 28001632, 28007516, 28031385, 28052648, 28064977
28072567, 28078186, 28089605, 28092783, 28104176, 28109326, 28112563
28125947, 28127569, 28129791, 28133903, 28138566, 28138847, 28144569

28145995, 28156781, 28173612, 28181021, 28185286, 28187837, 28189466
28198802, 28201045, 28204104, 28204262, 28205555, 28209985, 28210681
28234255, 28248841, 28263142, 28271258, 28271693, 28276054, 28279176
28279456, 28294563, 28302580, 28313275, 28319114, 28322973, 28326928
28338211, 28350595, 28351919, 28364580, 28370061, 28371123, 28373960
28375383, 28379065, 28381939, 28383667, 28386259, 28387185, 28387574
28390273, 28392179, 28395302, 28397317, 28402823, 28403019, 28406374
28410431, 28414968, 28431445, 28432345, 28435333, 28436414, 28442896
28454215, 28461789, 28463226, 28470673, 28475242, 28479352, 28482048
28484299, 28489419, 28492006, 28498976, 28499269, 28502773, 28503081
28504631, 28505321, 28513333, 28521330, 28522750, 28523644, 28526715
28530171, 28530697, 28534475, 28534493, 28535127, 28537481, 28538439
28541606, 28542455, 28546290, 28547068, 28547926, 28558489, 28558645
28561704, 28564479, 28565296, 28567417, 28567819, 28569897, 28570589
28572165, 28572407, 28572533, 28572544, 28572667, 28572834, 28578945
28587723, 28589194, 28589509, 28589644, 28592647, 28593127, 28593682
28594086, 28597221, 28598022, 28601957, 28602253, 28605066, 28606598
28607316, 28607632, 28608211, 28612239, 28618343, 28620697, 28621543
28622202, 28625580, 28625862, 28625873, 28627033, 28628592, 28630381
28632796, 28636532, 28639299, 28640772, 28642469, 28642551, 28642899
28643583, 28643654, 28643718, 28644549, 28645570, 28646200, 28646939
28649388, 28655209, 28657026, 28659098, 28661333, 28661362, 28663289
28663782, 28670402, 28672124, 28672457, 28673945, 28681153, 28682182
28682796, 28689483, 28690694, 28692103, 28692275, 28692282, 28693954
28694639, 28694872, 28694877, 28696373, 28697526, 28698087, 28699321
28700945, 28703812, 28704412, 28705231, 28707931, 28708400, 28708585
28709063, 28710385, 28710469, 28710663, 28710734, 28714461, 28714720
28715655, 28715727, 28717406, 28718302, 28718469, 28719348, 28720204
28720418, 28721497, 28722229, 28729900, 28730079, 28730253, 28734355
28740708, 28740799, 28741374, 28742555, 28745367, 28747846, 28749853
28751498, 28752923, 28755011, 28755084, 28755309, 28755846, 28757960
28758722, 28760206, 28763291, 28765983, 28767240, 28769456, 28770865
28771022, 28771947, 28772390, 28772816, 28774416, 28776431, 28776811
28777073, 28777214, 28778754, 28781599, 28781754, 28785273, 28785321
28785531, 28788272, 28789531, 28789533, 28791576, 28791852, 28793062
28794230, 28795551, 28795734, 28800508, 28802066, 28802734, 28804517
28805242, 28806517, 28807247, 28808314, 28808652, 28808656, 28810381
28811560, 28813317, 28813931, 28815123, 28815355, 28815557, 28816871
28817449, 28818063, 28819640, 28820669, 28821847, 28824482, 28827682
28831971, 28833912, 28835937, 28836716, 28837979, 28838385, 28839869
28844656, 28844738, 28845346, 28846759, 28847541, 28847572, 28849776
28850084, 28851458, 28851467, 28852325, 28854004, 28854733, 28855520
28855922, 28857552, 28861861, 28862532, 28863263, 28863432, 28863487
28865544, 28865569, 28867698, 28867992, 28870496, 28871040, 28872645

28872829, 28873575, 28874416, 28875089, 28876253, 28876639, 28876926
28877252, 28878865, 28880864, 28881191, 28881848, 28882146, 28882784
28884931, 28887305, 28888083, 28888327, 28889389, 28889730, 28891941
28892794, 28897123, 28897512, 28899663, 28900506, 28901126, 28902135
28904380, 28905312, 28905390, 28905457, 28905615, 28907196, 28909769
28909992, 28910498, 28910586, 28911140, 28912691, 28914144, 28915561
28917080, 28918429, 28919145, 28921844, 28922227, 28922485, 28922532
28922608, 28922767, 28925250, 28925460, 28925634, 28925880, 28927452
28928462, 28930944, 28932914, 28933079, 28933158, 28935293, 28935956
28936114, 28937717, 28938167, 28938422, 28938698, 28940179, 28940281
28940472, 28941901, 28942455, 28942694, 28945421, 28945994, 28946233
28946574, 28948554, 28949888, 28950868, 28951332, 28951493, 28951533
28952168, 28954762, 28955606, 28955883, 28956145, 28956908, 28957260
28957292, 28957723, 28958088, 28958094, 28958590, 28959493, 28960863
28962775, 28963036, 28965084, 28965095, 28965231, 28965376, 28966444
28968211, 28968779, 28970122, 28974083, 28974999, 28977322, 28978664
28980448, 28980910, 28981871, 28983095, 28983486, 28984313, 28985114
28985272, 28985362, 28985478, 28986207, 28986231, 28986257, 28986326
28986481, 28986696, 28988482, 28988864, 28989306, 28990681, 28993295
28993353, 28994307, 28994542, 28994783, 28995287, 28996376, 28998369
28999046, 29000000, 29001305, 29001888, 29002273, 29002488, 29002784
29002927, 29003207, 29003407, 29003617, 29003738, 29006318, 29006621
29007321, 29007353, 29007775, 29008035, 29008669, 29009513, 29010126
29010517, 29011936, 29012609, 29013475, 29013832, 29014076, 29014385
29015118, 29016294, 29017265, 29018655, 29018680, 29019121, 29020423
29021063, 29021352, 29022986, 29024028, 29024054, 29024448, 29024552
29024732, 29024795, 29024876, 29026154, 29026582, 29026606, 29027456
29027694, 29027933, 29027940, 29030184, 29030927, 29031575, 29031600
29032234, 29032276, 29032457, 29032607, 29033052, 29033145, 29033164
29033200, 29033280, 29033655, 29034587, 29036278, 29037290, 29038528
29038728, 29038730, 29039089, 29039510, 29040739, 29041739, 29041775
29043554, 29043651, 29043725, 29044086, 29044763, 29044954, 29046482
29047127, 29047850, 29048178, 29048289, 29048498, 29048605, 29048728
29048792, 29048858, 29049673, 29050357, 29050560, 29050765, 29050886
29051263, 29051702, 29051953, 29052726, 29052850, 29053783, 29053902
29055644, 29056024, 29056270, 29056560, 29056767, 29056894, 29058476
29059011, 29060216, 29061016, 29061959, 29062692, 29062848, 29062860
29062868, 29110526, 29110783, 29110790, 29110797, 29110802, 29110805
29111598, 29111631, 29112455, 29113282, 29113305, 29115794, 29115857
29117337, 29117526, 29117642, 29118543, 29119077, 29119733, 29120223
29122224, 29122254, 29122367, 29123297, 29123324, 29123432, 29123444
29123482, 29124104, 29124368, 29125036, 29125374, 29125380, 29125708
29125786, 29126345, 29127957, 29128693, 29128935, 29129450, 29129476
29129497, 29129691, 29129712, 29130219, 29131539, 29131772, 29132456

29132869, 29132938, 29133470, 29134447, 29135383, 29135649, 29136111
29138641, 29139070, 29139727, 29139761, 29139780, 29139956, 29141316
29141341, 29141685, 29141886, 29142609, 29142667, 29143516, 29144995
29145214, 29145730, 29146077, 29146157, 29146810, 29147849, 29148799
29149170, 29149829, 29150338, 29151520, 29152357, 29152603, 29152752
29154631, 29154636, 29154725, 29154829, 29155099, 29155208, 29157051
29157389, 29158680, 29158899, 29158990, 29159216, 29159661, 29159909
29159936, 29160174, 29160462, 29160824, 29161597, 29161923, 29162095
29162749, 29163073, 29163156, 29163415, 29163437, 29163524, 29163567
29164376, 29164446, 29165682, 29167111, 29167342, 29167374, 29167940
29168137, 29168219, 29168433, 29169073, 29169215, 29169540, 29169739
29170232, 29170717, 29171683, 29171942, 29172618, 29172826, 29173140
29173373, 29173618, 29173817, 29174004, 29174753, 29175638, 29175829
29176318, 29177466, 29177543, 29177886, 29178385, 29179097, 29180313
29180455, 29180559, 29180721, 29180893, 29181078, 29181153, 29181231
29181568, 29181620, 29181743, 29181923, 29182019, 29182517, 29182901
29182920, 29183298, 29183912, 29184297, 29184666, 29185193, 29186091
29186456, 29186605, 29188255, 29189302, 29189307, 29189889, 29190235
29190474, 29190663, 29190740, 29191541, 29191827, 29192419, 29192468
29192685, 29193207, 29194205, 29194367, 29194493, 29194827, 29194981
29195279, 29195337, 29195758, 29196151, 29196725, 29198092, 29198913
29199163, 29199635, 29199733, 29200316, 29200700, 29201143, 29201494
29201539, 29201695, 29201787, 29202104, 29202461, 29202850, 29203041
29203122, 29203166, 29203227, 29203425, 29203443, 29203604, 29205281
29205323, 29205419, 29205463, 29205767, 29205918, 29206109, 29206605
29206631, 29207073, 29208260, 29208732, 29209545, 29210577, 29210610
29210624, 29210683, 29211457, 29211724, 29212012, 29212433, 29212611
29213320, 29213351, 29213613, 29213641, 29213775, 29213850, 29213879
29213893, 29214561, 29214960, 29216312, 29216723, 29216746, 29216984
29217294, 29217472, 29217828, 29217848, 29217856, 29218570, 29219205
29219273, 29219627, 29220079, 29221248, 29221745, 29221891, 29221942
29222031, 29222784, 29222892, 29223833, 29223859, 29223967, 29224065
29224294, 29224605, 29224710, 29225076, 29225168, 29225758, 29225861
29227602, 29228869, 29229164, 29229754, 29229839, 29229844, 29229955
29230252, 29230565, 29231133, 29232117, 29232154, 29232449, 29232533
29232653, 29233415, 29233810, 29233953, 29234123, 29235934, 29236573
29237538, 29237575, 29237744, 29240307, 29240668, 29240759, 29241345
29241651, 29242017, 29242561, 29242884, 29242906, 29243749, 29243958
29244495, 29244766, 29244968, 29245063, 29245137, 29245160, 29246163
29246337, 29247183, 29247415, 29247712, 29247906, 29248495, 29248552
29248723, 29248835, 29248858, 29249289, 29249412, 29249583, 29249991
29250059, 29250317, 29251259, 29251564, 29252510, 29252790, 29253184
29253871, 29254031, 29254623, 29254930, 29255178, 29255273, 29255431
29255435, 29255616, 29255705, 29255718, 29255973, 29256426, 29259119

29259320, 29260224, 29260407, 29260452, 29260956, 29261547, 29261548
29261695, 29261906, 29262143, 29262512, 29262887, 29265446, 29265448
29265780, 29266248, 29266899, 29267292, 29268412, 29269171, 29269228
29269825, 29270585, 29271019, 29273168, 29273360, 29273539, 29273570
29273735, 29273812, 29273847, 29274428, 29274564, 29274627, 29275461
29276272, 29277317, 29278218, 29278684, 29279658, 29279751, 29279854
29281112, 29281527, 29281691, 29281796, 29282090, 29282233, 29282666
29282898, 29285197, 29285453, 29285503, 29285621, 29285788, 29285956
29286037, 29286220, 29286229, 29287130, 29287705, 29290110, 29290235
29292232, 29292253, 29292378, 29292837, 29293072, 29293574, 29293806
29294753, 29296257, 29297863, 29297915, 29298220, 29299049, 29299082
29299830, 29299844, 29301463, 29301566, 29302565, 29302614, 29302963
29303918, 29304314, 29304692, 29304781, 29304853, 29305093, 29306226
29306713, 29306790, 29307090, 29307109, 29307638, 29309698, 29311336
29311528, 29311588, 29311927, 29312310, 29312672, 29312734, 29312753
29312889, 29313347, 29313417, 29313525, 29314539, 29314636, 29314867
29314949, 29317756, 29318410, 29319441, 29320900, 29321489, 29321689
29323946, 29323999, 29324568, 29324735, 29325087, 29325105, 29325257
29325356, 29325497, 29325765, 29325993, 29326233, 29327044, 29327892
29329042, 29329087, 29329675, 29329807, 29329848, 29330361, 29330791
29331066, 29331209, 29331380, 29331493, 29332292, 29332395, 29332763
29332771, 29333500, 29336843, 29336899, 29337294, 29337310, 29337742
29338315, 29338348, 29338453, 29338780, 29338913, 29339101, 29339155
29339299, 29339452, 29340333, 29341209, 29341782, 29342099, 29343086
29343156, 29343861, 29344541, 29345382, 29345937, 29346057, 29346138
29346211, 29346943, 29347620, 29348176, 29348358, 29350052, 29350712
29350762, 29350868, 29351044, 29351386, 29351662, 29351716, 29351735
29351749, 29351771, 29351786, 29352298, 29352724, 29352867, 29352947
29353271, 29353432, 29353718, 29353821, 29353960, 29355654, 29356547
29356634, 29356704, 29356711, 29356752, 29356782, 29357821, 29358509
29358828, 29360252, 29360285, 29360467, 29360672, 29360775, 29360911
29360950, 29361319, 29361472, 29361801, 29362596, 29363090, 29363151
29364171, 29364177, 29366406, 29366818, 29366940, 29367019, 29367561
29367971, 29368253, 29368310, 29368725, 29372069, 29372541, 29372562
29373418, 29373588, 29374179, 29374604, 29374627, 29375355, 29375941
29375984, 29376346, 29377804, 29377986, 29378029, 29378287, 29378834
29378913, 29379299, 29379381, 29379750, 29379978, 29380527, 29381000
29382296, 29382641, 29382784, 29382815, 29383695, 29384740, 29384781
29384854, 29384864, 29385339, 29385429, 29385652, 29385774, 29386502
29386557, 29386635, 29386660, 29386835, 29387073, 29387274, 29387310
29387329, 29387337, 29388020, 29388072, 29388094, 29388524, 29388830
29389408, 29389889, 29390011, 29390435, 29390785, 29391030, 29391237
29391301, 29391438, 29391849, 29391925, 29392554, 29392966, 29393291
29393649, 29394014, 29394140, 29394749, 29395657, 29396481, 29397841

29397954, 29397996, 29398488, 29398863, 29399046, 29399100, 29399121
29399336, 29399938, 29399959, 29402110, 29402131, 29404425, 29404483
29405012, 29405462, 29405651, 29405996, 29407488, 29407804, 29408853
29409149, 29409455, 29410311, 29410834, 29411037, 29411427, 29411469
29411931, 29412066, 29412269, 29413360, 29413382, 29413517, 29413544
29413634, 29413956, 29415493, 29415774, 29416688, 29416700, 29417084
29417113, 29417173, 29417719, 29417884, 29418165, 29418341, 29420254
29420834, 29421059, 29423003, 29423016, 29423156, 29423227, 29423491
29423826, 29424094, 29424999, 29426241, 29426320, 29428230, 29429017
29429087, 29429264, 29429336, 29429466, 29429566, 29429895, 29430524
29430866, 29431192, 29431402, 29431485, 29431985, 29432176, 29434301
29434869, 29435474, 29435652, 29435966, 29436454, 29436514, 29436522
29436727, 29437029, 29437379, 29437594, 29437712, 29438150, 29438277
29438736, 29439522, 29440651, 29441196, 29442400, 29442936, 29443187
29443250, 29443559, 29444072, 29444275, 29444282, 29444602, 29444906
29445548, 29446319, 29446669, 29447460, 29448498, 29449477, 29449845
29449852, 29450162, 29450193, 29450273, 29450421, 29450812, 29450936
29451085, 29451386, 29452251, 29452576, 29452936, 29452953, 29454450
29454978, 29455424, 29455773, 29456538, 29456714, 29457312, 29457319
29457370, 29457502, 29457807, 29457978, 29458132, 29460252, 29461420
29461791, 29461971, 29462594, 29462767, 29462957, 29463047, 29463528
29463553, 29463798, 29464616, 29464779, 29465047, 29465177, 29466674
29467622, 29469563, 29469565, 29470059, 29470205, 29470291, 29471633
29471832, 29471857, 29471860, 29472618, 29473708, 29475386, 29476473
29476702, 29477015, 29481584, 29482021, 29483452, 29483532, 29483626
29483672, 29483685, 29483712, 29483723, 29483771, 29485099, 29485731
29485877, 29486181, 29486848, 29487150, 29487189, 29487407, 29488894
29489436, 29489546, 29490256, 29491784, 29492127, 29492939, 29493122
29493821, 29494245, 29494788, 29494934, 29495057, 29495171, 29495684
29497053, 29497311, 29497588, 29497696, 29497778, 29498198, 29500257
29500826, 29500963, 29501218, 29502561, 29503543, 29503631, 29503827
29504103, 29504492, 29504682, 29505225, 29505589, 29505668, 29506942
29507270, 29507616, 29508681, 29508998, 29509777, 29510278, 29511064
29511611, 29511980, 29512125, 29512890, 29514479, 29515134, 29515240
29515476, 29515766, 29515834, 29516300, 29516727, 29516766, 29517168
29517443, 29517883, 29518604, 29518767, 29519131, 29521187, 29521688
29521748, 29521862, 29522358, 29522561, 29522662, 29523055, 29523216
29523511, 29524599, 29524985, 29525366, 29525467, 29525886, 29526966
29527595, 29527610, 29528368, 29529147, 29529436, 29530440, 29530515
29530812, 29530909, 29531654, 29531836, 29532112, 29532532, 29536342
29536445, 29536794, 29537829, 29538631, 29539027, 29539413, 29540327
29540831, 29541517, 29541742, 29541769, 29541973, 29542084, 29542449
29542474, 29542580, 29542643, 29543034, 29543956, 29544552, 29546817
29547010, 29547867, 29548413, 29548427, 29548592, 29548687, 29548722

29549040, 29549071, 29549104, 29549154, 29549730, 29550530, 29552402
29552773, 29553141, 29554092, 29554351, 29554554, 29555105, 29555239
29557144, 29557261, 29557336, 29557556, 29558238, 29558452, 29558926
29558975, 29559187, 29559395, 29559446, 29559908, 29559981, 29564592
29564593, 29565611, 29579919, 29580394, 29580983, 29581771, 29583018
29584261, 29584693, 29586143, 29587299, 29587720, 29587765, 29588580
29588732, 29589544, 29590666, 29591343, 29591641, 29592011, 29592215
29592433, 29592595, 29597536, 29597716, 29597754, 29598039, 29598040
29598046, 29598226, 29598233, 29599008, 29599243, 29599300, 29599552
29601461, 29602831, 29603460, 29603884, 29604002, 29604257, 29606261
29607136, 29607797, 29608000, 29608023, 29609603, 29610506, 29611020
29611991, 29613733, 29614206, 29614931, 29614987, 29615824, 29616244
29616414, 29618074, 29618190, 29620042, 29622936, 29623323, 29623592
29624124, 29625065, 29625804, 29625876, 29626154, 29626732, 29628200
29628647, 29629430, 29629650, 29629681, 29629745, 29631749, 29632095
29632265, 29632611, 29633697, 29633753, 29633936, 29634643, 29635427
29635717, 29635990, 29637362, 29637526, 29637560, 29638285, 29638928
29641736, 29642451, 29643721, 29644426, 29644464, 29645167, 29645349
29647176, 29647770, 29648928, 29649694, 29651183, 29651520, 29652809
29653132, 29653246, 29655164, 29655416, 29655668, 29656400, 29656819
29656843, 29657399, 29657422, 29657744, 29657960, 29657973, 29658056
29661028, 29661065, 29661722, 29663191, 29663368, 29663494, 29663601
29663813, 29664087, 29664161, 29665168, 29665940, 29666451, 29667527
29667994, 29668005, 29669241, 29669413, 29670713, 29670782, 29671363
29672507, 29675446, 29676089, 29676921, 29677051, 29677173, 29677733
29677927, 29678217, 29679856, 29680700, 29681987, 29683039, 29683211
29684518, 29685137, 29685276, 29687214, 29687220, 29687459, 29687718
29687727, 29687763, 29688867, 29689145, 29689255, 29690795, 29692115
29692694, 29693847, 29694869, 29695425, 29695821, 29695841, 29695964
29695987, 29696242, 29696310, 29697928, 29700125, 29700460, 29700770
29701720, 29701755, 29701937, 29703932, 29705793, 29706160, 29707099
29707493, 29707896, 29708324, 29708353, 29708876, 29708915, 29710188
29710858, 29713810, 29715220, 29715703, 29716029, 29716194, 29716227
29716491, 29716602, 29716871, 29717659, 29717901, 29718198, 29719146
29720133, 29720373, 29721418, 29721576, 29722026, 29722092, 29722167
29722389, 29724497, 29724658, 29725425, 29725476, 29725781, 29726695
29737941, 29738374, 29738400, 29739576, 29741319, 29741976, 29742223
29742926, 29744225, 29744400, 29744637, 29745288, 29745624, 29746962
29747493, 29747648, 29747653, 29748285, 29748325, 29748336, 29748513
29749471, 29750673, 29751094, 29753244, 29754196, 29754951, 29755821
29756274, 29756444, 29757099, 29757264, 29757651, 29757687, 29758203
29758217, 29758661, 29761678, 29761837, 29761911, 29763158, 29764644
29765035, 29765219, 29765347, 29765393, 29765493, 29766207, 29766435
29766503, 29766679, 29768487, 29768899, 29769549, 29769695, 29769901

29770750, 29771032, 29771242, 29772514, 29772761, 29773197, 29773205
29773459, 29773633, 29773842, 29774362, 29775393, 29775473, 29779196
29780140, 29780633, 29782211, 29782284, 29782501, 29782823, 29782866
29783142, 29784106, 29785169, 29785239, 29785251, 29785311, 29785544
29785550, 29785831, 29787292, 29787766, 29789911, 29791152, 29791880
29791916, 29792213, 29792433, 29793318, 29794174, 29794462, 29795712
29795957, 29796335, 29796378, 29796916, 29797209, 29797726, 29801164
29802382, 29802695, 29803948, 29804875, 29805368, 29805772, 29806390
29806964, 29807964, 29809792, 29809837, 29810013, 29811616, 29812084
29812166, 29812489, 29813503, 29813650, 29813671, 29814995, 29815341
29815713, 29816887, 29817278, 29817547, 29817784, 29818794, 29819753
29820341, 29821130, 29821582, 29822714, 29825525, 29827647, 29827792
29827852, 29828644, 29829339, 29831196, 29831404, 29831567, 29833406
29833984, 29834506, 29836096, 29836424, 29838337, 29838485, 29838740
29838773, 29839481, 29839715, 29840619, 29841267, 29841687, 29842369
29843238, 29843277, 29843692, 29843831, 29844131, 29844226, 29844275
29845449, 29845530, 29845691, 29846126, 29846525, 29846645, 29846688
29847627, 29848084, 29848849, 29849100, 29849139, 29850566, 29850930
29851020, 29851308, 29851733, 29853485, 29856420, 29856506, 29856859
29856890, 29858121, 29858376, 29858420, 29859068, 29860022, 29860994
29861075, 29864203, 29864261, 29865188, 29865590, 29865658, 29867728
29868639, 29869052, 29869086, 29869149, 29869404, 29869857, 29869877
29869887, 29869906, 29870065, 29870533, 29871098, 29871312, 29871360
29872401, 29872937, 29872983, 29873206, 29873665, 29874090, 29874761
29875200, 29875459, 29875565, 29875919, 29876358, 29876989, 29877608
29878076, 29881050, 29881478, 29881575, 29881643, 29881839, 29882427
29882454, 29882729, 29884958, 29885182, 29885890, 29886809, 29887045
29887111, 29888621, 29889184, 29889358, 29890740, 29891075, 29891853
29891857, 29891916, 29892388, 29892604, 29893132, 29893287, 29894021
29896510, 29897418, 29897863, 29900203, 29900824, 29901419, 29901961
29902299, 29902327, 29902330, 29902659, 29903190, 29903299, 29903357
29903454, 29904002, 29906678, 29907942, 29908389, 29908639, 29908777
29909658, 29910218, 29910402, 29912135, 29912286, 29913805, 29913934
29913966, 29914449, 29914544, 29915217, 29915848, 29916198, 29916975
29919782, 29919789, 29920025, 29920376, 29920804, 29921318, 29922225
29922435, 29922461, 29923452, 29924147, 29924181, 29924479, 29925177
29926466, 29927756, 29928040, 29928210, 29928340, 29928427, 29928564
29930457, 29931956, 29932202, 29932310, 29932430, 29932780, 29932953
29933718, 29934048, 29934052, 29934158, 29935685, 29937565, 29937655
29937956, 29938225, 29939075, 29939400, 29939795, 29940373, 29941062
29942096, 29942275, 29942554, 29943670, 29943879, 29944035, 29944159
29944660, 29944963, 29945645, 29946388, 29947145, 29947242, 29947428
29948165, 29950018, 29950220, 29951620, 29951759, 29952700, 29956016
29956222, 29957412, 29957493, 29958925, 29960325, 29960884, 29961353

29961360, 29961609, 29961847, 29962160, 29962248, 29962834, 29962927
29962939, 29965052, 29965207, 29965603, 29965888, 29966768, 29967223
29968085, 29968703, 29969557, 29969985, 29970081, 29970261, 29970298
29970587, 29970861, 29971027, 29971481, 29971888, 29971936, 29971951
29972134, 29972176, 29973012, 29989783, 29989845, 29990779, 29991257
29993717, 29997326, 29997553, 29997937, 29997959, 30000518, 30000664
30001105, 30001331, 30003187, 30004660, 30004856, 30006159, 30006472
30006705, 30006985, 30007450, 30007536, 30007797, 30008035, 30008125
30008198, 30008214, 30008456, 30009528, 30009710, 30012181, 30012737
30013243, 30013535, 30014200, 30015070, 30017836, 30018017, 30018903
30019864, 30021830, 30024618, 30025814, 30026016, 30026596, 30027614
30027649, 30028182, 30028599, 30028649, 30029519, 30029806, 30031027
30032233, 30032376, 30032484, 30033040, 30033547, 30034456, 30035598
30036258, 30038392, 30038576, 30039800, 30039959, 30040157, 30040511
30041501, 30041514, 30042490, 30043398, 30043610, 30043930, 30044108
30044507, 30045242, 30045273, 30045389, 30045484, 30045983, 30046497
30047510, 30047531, 30047702, 30047765, 30047931, 30048688, 30049966
30051176, 30051783, 30051804, 30052740, 30052928, 30053036, 30053501
30053748, 30054980, 30056058, 30057718, 30057799, 30058149, 30058453
30059106, 30059109, 30059821, 30060267, 30060330, 30062364, 30062429
30062736, 30062819, 30064268, 30066352, 30067565, 30068384, 30068792
30068871, 30070064, 30071446, 30072018, 30072905, 30073314, 30073422
30073744, 30074250, 30074296, 30074349, 30074469, 30074472, 30074820
30075037, 30076058, 30076197, 30076253, 30076604, 30078675, 30078934
30079949, 30080111, 30080266, 30081055, 30081546, 30081580, 30082145
30083100, 30083216, 30083488, 30083807, 30084458, 30084971, 30085897
30086596, 30086992, 30087165, 30087509, 30088229, 30088421, 30090568
30092254, 30092280, 30092859, 30094929, 30094948, 30095591, 30095952
30096138, 30097092, 30097115, 30098251, 30099302, 30099420, 30099454
30100354, 30101090, 30101186, 30101541, 30101847, 30102774, 30103551
30103553, 30104348, 30104378, 30104555, 30105458, 30106748, 30106901
30108012, 30109365, 30110224, 30110370, 30110518, 30114477, 30114489
30114534, 30116085, 30116203, 30116753, 30116854, 30117209, 30117335
30117469, 30117593, 30118261, 30118279, 30120608, 30122523, 30122583
30123138, 30125765, 30126145, 30126470, 30127145, 30127522, 30127805
30127904, 30128047, 30128231, 30130240, 30131286, 30131645, 30132708
30132989, 30133841, 30134746, 30135396, 30135731, 30135942, 30136102
30136346, 30137792, 30138948, 30139392, 30141240, 30142527, 30142907
30143470, 30143593, 30146593, 30146969, 30147195, 30147307, 30147308
30147473, 30147928, 30148343, 30148929, 30148999, 30149035, 30149658
30150606, 30150710, 30153552, 30153885, 30154633, 30155241, 30155320
30155489, 30155814, 30155837, 30155999, 30156569, 30157526, 30158313
30159329, 30159511, 30159536, 30159752, 30159760, 30160025, 30160625
30161094, 30163243, 30164714, 30165493, 30165503, 30165876, 30165897

30166352, 30167787, 30169254, 30170104, 30172925, 30173113, 30173370
30173556, 30174102, 30174394, 30174401, 30175180, 30175291, 30175587
30177597, 30178250, 30178839, 30178990, 30179012, 30179038, 30179644
30180208, 30180643, 30181756, 30182498, 30183367, 30183696, 30183715
30183920, 30184102, 30185852, 30186319, 30186476, 30186706, 30187627
30187866, 30188631, 30189516, 30189535, 30190090, 30191274, 30192691
30192729, 30192853, 30193165, 30193262, 30193505, 30193506, 30193584
30193736, 30194612, 30194710, 30194972, 30195667, 30195668, 30195684
30196195, 30196358, 30196629, 30198239, 30198598, 30198861, 30198905
30199890, 30200034, 30200132, 30200237, 30200680, 30200758, 30202349
30202388, 30203929, 30204042, 30204542, 30206220, 30206493, 30206675
30207473, 30207519, 30208327, 30208690, 30208723, 30209222, 30209736
30210429, 30210753, 30210884, 30211567, 30213031, 30213540, 30214769
30214826, 30215130, 30215302, 30215351, 30217206, 30217562, 30217982
30218044, 30218317, 30219222, 30220932, 30221115, 30221237, 30221298
30222512, 30222669, 30222975, 30223712, 30223847, 30224544, 30224650
30224725, 30224868, 30224950, 30225265, 30225439, 30225443, 30225718
30225837, 30225844, 30226244, 30227400, 30228422, 30228567, 30229030
30229683, 30232638, 30233105, 30233934, 30234132, 30234227, 30235878
30235919, 30235979, 30236092, 30236554, 30236746, 30236964, 30237477
30237640, 30238211, 30238715, 30239480, 30240010, 30240547, 30240858
30240930, 30240972, 30241567, 30241807, 30241829, 30241920, 30242120
30242724, 30243216, 30244340, 30244831, 30246053, 30246179, 30247305
30248520, 30248531, 30248564, 30249432, 30249738, 30249927, 30251003
30252005, 30252098, 30252156, 30252458, 30252977, 30253035, 30253090
30253608, 30253705, 30253835, 30254206, 30254525, 30254576, 30254726
30255143, 30255528, 30256542, 30257412, 30257908, 30259120, 30259469
30260523, 30260595, 30263377, 30264405, 30265523, 30265608, 30265615
30265703, 30266791, 30267155, 30269428, 30269748, 30270647, 30270744
30271114, 30272329, 30274090, 30274188, 30274324, 30274662, 30275548
30275569, 30275578, 30275784, 30276144, 30276243, 30277120, 30277451
30277589, 30277648, 30277733, 30277887, 30278402, 30281428, 30281615
30282501, 30282591, 30282918, 30283296, 30283577, 30283579, 30283581
30283832, 30283932, 30284219, 30284369, 30284751, 30285026, 30285166
30285251, 30285341, 30285457, 30285540, 30285843, 30286961, 30288343
30288491, 30289074, 30289458, 30290700, 30291536, 30292305, 30293345
30294267, 30294465, 30294671, 30294865, 30295110, 30295137, 30295549
30295790, 30295808, 30297905, 30299367, 30299817, 30299934, 30300030
30300342, 30300363, 30300523, 30300538, 30304037, 30305163, 30305264
30305395, 30305568, 30305603, 30305880, 30307814, 30307883, 30308368
30308578, 30308624, 30308772, 30308947, 30309098, 30309798, 30310195
30311826, 30312094, 30312546, 30313749, 30313848, 30313989, 30314079
30314198, 30314837, 30316667, 30316897, 30317005, 30317209, 30317397
30318638, 30318943, 30319080, 30319099, 30320029, 30321076, 30321398

30322980, 30323219, 30323658, 30323849, 30324180, 30324466, 30324649
30325407, 30325786, 30326115, 30326882, 30327149, 30327810, 30328168
30328209, 30328690, 30329209, 30329751, 30330123, 30331356, 30331759
30332505, 30332893, 30334484, 30334563, 30335127, 30335832, 30335987
30336032, 30336383, 30336530, 30336742, 30336996, 30337245, 30338434
30338591, 30339049, 30339103, 30340540, 30341713, 30342371, 30342878
30343370, 30344614, 30345201, 30345432, 30345809, 30345926, 30346330
30346847, 30346867, 30347410, 30349714, 30350177, 30350543, 30352532
30352581, 30352623, 30352715, 30355490, 30356060, 30356461, 30357463
30357698, 30357897, 30358416, 30359614, 30360383, 30360653, 30361070
30361635, 30362003, 30362850, 30363088, 30363193, 30363311, 30363716
30364329, 30364481, 30364613, 30364835, 30365745, 30367193, 30368048
30368482, 30368534, 30368668, 30368917, 30371264, 30371623, 30371909
30372081, 30373419, 30373541, 30373550, 30374345, 30374570, 30374739
30375109, 30376986, 30377347, 30377692, 30380511, 30380907, 30381207
30381525, 30381614, 30382646, 30382982, 30383286, 30384121, 30384152
30387628, 30387666, 30388853, 30389229, 30389414, 30389507, 30389821
30390279, 30390635, 30391272, 30392011, 30392870, 30392987, 30393110
30393653, 30393944, 30394509, 30394738, 30394974, 30395132, 30396120
30396946, 30396974, 30397100, 30398099, 30398251, 30398257, 30398422
30398770, 30399906, 30402386, 30403284, 30403412, 30403763, 30403881
30403902, 30403989, 30404117, 30404153, 30404357, 30404639, 30406227
30406709, 30408515, 30408808, 30409207, 30409339, 30409472, 30409590
30412188, 30412772, 30412863, 30412885, 30412921, 30413137, 30413294
30414491, 30414679, 30414714, 30416034, 30416603, 30417648, 30417732
30418926, 30419024, 30419450, 30420105, 30420452, 30421009, 30421026
30421204, 30421439, 30421476, 30421706, 30422487, 30423135, 30423218
30424347, 30430921, 30431274, 30431504, 30431582, 30431698, 30431703
30431717, 30431867, 30433177, 30434793, 30436399, 30437003, 30437149
30438224, 30439985, 30440651, 30440712, 30441277, 30441687, 30441959
30442266, 30442749, 30442805, 30442874, 30442884, 30443393, 30446436
30446583, 30446820, 30447060, 30447498, 30447589, 30447994, 30448182
30448348, 30448355, 30448917, 30449194, 30449837, 30450787, 30453442
30454090, 30455427, 30457633, 30457697, 30458568, 30458593, 30460095
30460558, 30460842, 30460922, 30461123, 30461458, 30463938, 30464250
30464655, 30466081, 30466214, 30469777, 30470402, 30470947, 30472891
30473634, 30474167, 30474774, 30475041, 30475115, 30475813, 30476768
30477588, 30477685, 30477691, 30477767, 30479252, 30479647, 30479715
30480872, 30483065, 30483140, 30483217, 30483521, 30484042, 30484623
30484801, 30485255, 30486436, 30486896, 30487387, 30487697, 30489582
30490014, 30490578, 30490671, 30492380, 30493331, 30493518, 30494259
30494900, 30495035, 30495078, 30495133, 30495483, 30496957, 30497057
30497120, 30497765, 30498824, 30500224, 30500297, 30500344, 30500582
30501574, 30502415, 30503943, 30505029, 30505497, 30506794, 30506991

30507032, 30507313, 30508100, 30509112, 30509277, 30510347, 30510527
30510718, 30512690, 30513285, 30513353, 30513480, 30513848, 30515886
30516868, 30517214, 30517516, 30517635, 30518349, 30518447, 30518923
30519188, 30522285, 30522998, 30523137, 30523538, 30523601, 30523750
30524736, 30527198, 30527275, 30528547, 30528637, 30528687, 30528704
30528731, 30528935, 30529790, 30529915, 30529940, 30530585, 30532811
30533132, 30533580, 30534351, 30534549, 30534662, 30534827, 30535905
30536237, 30537403, 30537405, 30537533, 30537584, 30538141, 30538818
30539519, 30539866, 30540109, 30540407, 30544247, 30544595, 30544629
30545040, 30545281, 30545556, 30549255, 30549368, 30549637, 30549789
30549881, 30551000, 30551123, 30554178, 30556326, 30556523, 30556581
30556807, 30557386, 30557803, 30558561, 30559129, 30559218, 30559252
30560365, 30560513, 30561404, 30561590, 30561737, 30564139, 30564343
30564898, 30565004, 30565595, 30565805, 30566054, 30567372, 30568514
30568896, 30570083, 30571306, 30572816, 30573236, 30573703, 30575243
30575697, 30576112, 30576393, 30576853, 30577071, 30577591, 30578221
30579051, 30580813, 30580887, 30581448, 30582221, 30582500, 30586493
30587001, 30588738, 30589914, 30591028, 30591475, 30592859, 30593046
30593104, 30593863, 30594167, 30595114, 30595408, 30595860, 30596024
30596320, 30596488, 30596694, 30598682, 30598746, 30598919, 30599405
30599407, 30600173, 30600184, 30602230, 30602828, 30603211, 30605215
30605676, 30606345, 30606451, 30608583, 30609799, 30610406, 30610667
30611603, 30612199, 30613937, 30613971, 30614411, 30616406, 30616738
30617002, 30617626, 30618230, 30619138, 30619414, 30619525, 30619728
30619787, 30620805, 30621255, 30621910, 30622528, 30622755, 30623138
30623142, 30624243, 30624792, 30624864, 30624874, 30625121, 30628834
30628899, 30629139, 30629643, 30629799, 30630391, 30630829, 30630930
30631393, 30631523, 30633259, 30633938, 30634548, 30634559, 30635183
30635302, 30635326, 30635360, 30637270, 30637319, 30637841, 30638712
30640436, 30641541, 30641755, 30641900, 30644530, 30644766, 30644889
30645590, 30645896, 30646077, 30647133, 30649310, 30650297, 30650404
30651231, 30651570, 30651621, 30651674, 30652515, 30652595, 30652813
30652853, 30654131, 30654558, 30655906, 30656839, 30657196, 30657365
30657566, 30657624, 30657706, 30657875, 30657906, 30657940, 30658421
30658533, 30658555, 30658702, 30659940, 30660412, 30661000, 30661939
30662651, 30662736, 30663591, 30663646, 30664266, 30665036, 30665399
30665720, 30668407, 30668754, 30670328, 30670369, 30670584, 30671720
30671813, 30671958, 30674373, 30674959, 30676209, 30677633, 30679595
30679771, 30679804, 30681085, 30681462, 30681516, 30681521, 30684902
30685163, 30686017, 30686131, 30686809, 30687047, 30689557, 30689988
30690686, 30691604, 30691731, 30691857, 30692462, 30692473, 30693791
30694947, 30695670, 30696566, 30696821, 30698289, 30699770, 30702732
30703610, 30704826, 30705448, 30708735, 30710506, 30710807, 30711370
30712670, 30713133, 30714151, 30714715, 30716001, 30716863, 30718841

30718862, 30719327, 30719419, 30720736, 30720844, 30722705, 30723671
30724679, 30724881, 30726204, 30727701, 30727759, 30728196, 30729278
30729604, 30729839, 30730026, 30732711, 30733270, 30733563, 30734242
30734362, 30734707, 30735091, 30735153, 30735736, 30737970, 30739013
30739876, 30740115, 30740250, 30740669, 30740997, 30741263, 30748411
30748707, 30749181, 30749644, 30749722, 30750219, 30750991, 30751171
30751521, 30751527, 30751639, 30751968, 30753432, 30755348, 30758836
30758854, 30758943, 30760739, 30761871, 30761878, 30763272, 30763305
30763639, 30763754, 30763970, 30764405, 30764663, 30764706, 30765486
30765995, 30767277, 30768636, 30769312, 30770717, 30772069, 30773164
30773696, 30773797, 30776416, 30776676, 30776929, 30777519, 30777759
30778855, 30779240, 30781032, 30781041, 30781461, 30781970, 30782266
30782300, 30782414, 30783395, 30783551, 30785101, 30786237, 30786641
30786655, 30787365, 30788973, 30789904, 30790047, 30790441, 30801296
30801510, 30803210, 30804646, 30806757, 30806984, 30807723, 30807888
30808109, 30808869, 30809087, 30810680, 30810765, 30812574, 30814266
30814285, 30815269, 30815495, 30815852, 30815994, 30816760, 30816938
30819340, 30819629, 30820155, 30821297, 30822207, 30822502, 30822919
30823744, 30825391, 30825419, 30825656, 30826474, 30827849, 30828205
30828350, 30829779, 30829844, 30830555, 30832775, 30833454, 30834068
30834110, 30834705, 30835184, 30835219, 30835853, 30836129, 30838605
30839253, 30839451, 30839836, 30840793, 30841241, 30842277, 30843271
30844839, 30845806, 30846063, 30846159, 30846782, 30847442, 30847871
30848028, 30848097, 30848773, 30851448, 30851951, 30852954, 30855101
30856358, 30857501, 30857721, 30858877, 30858919, 30860741, 30860803
30861988, 30862285, 30863115, 30864607, 30865805, 30866141, 30866988
30867685, 30868010, 30868186, 30869131, 30870439, 30870513, 30871716
30871792, 30873527, 30874084, 30874270, 30874337, 30874660, 30879169
30879708, 30880774, 30880913, 30881161, 30881407, 30883715, 30883785
30883877, 30886188, 30887501, 30887777, 30887976, 30889443, 30889607
30889723, 30890720, 30890971, 30891760, 30891792, 30893601, 30895426
30895577, 30896620, 30896685, 30898366, 30898381, 30898748, 30898939
30901889, 30902655, 30904672, 30905604, 30906274, 30906407, 30909596
30909918, 30910264, 30910267, 30913399, 30914272, 30914674, 30915781
30919403, 30919587, 30919691, 30919804, 30921136, 30922936, 30922996
30923514, 30923517, 30923597, 30923940, 30925316, 30925419, 30925828
30927440, 30927821, 30930149, 30930339, 30931068, 30931311, 30931981
30932674, 30932923, 30936251, 30936831, 30936942, 30937340, 30937391
30937410, 30938413, 30939307, 30939317, 30939934, 30940259, 30940382
30940868, 30940869, 30941056, 30944643, 30945005, 30945772, 30946072
30946141, 30946595, 30946768, 30946843, 30946876, 30946896, 30947294
30950786, 30952104, 30952191, 30953157, 30953266, 30953836, 30954062
30955702, 30956571, 30956647, 30957739, 30958493, 30960314, 30960356
30960736, 30961566, 30964194, 30965111, 30965554, 30965649, 30967084

30968737, 30968781, 30970518, 30972817, 30972841, 30972887, 30972947
30972951, 30972959, 30972966, 30973085, 30973113, 30973127, 30973137
30973143, 30973197, 30973698, 30973877, 30974207, 30974813, 30976603
30977294, 30977411, 30978554, 30979701, 30980023, 30980115, 30980317
30980733, 30981182, 30981240, 30985027, 30985906, 30986423, 30987088
30987105, 30987243, 30987724, 30988444, 30989951, 30990034, 30992120
30992330, 30992597, 30993198, 30993518, 30993604, 30994996, 30996945
30996991, 30997375, 30997960, 30998035, 30998662, 30998759, 30998847
31000312, 31001017, 31001455, 31001490, 31001859, 31002223, 31002923
31003137, 31003659, 31004077, 31004719, 31004844, 31004871, 31005003
31006011, 31006792, 31006953, 31008240, 31008858, 31008907, 31009032
31009545, 31009590, 31009680, 31010218, 31010554, 31010976, 31011361
31013127, 31013531, 31014323, 31015330, 31016413, 31019249, 31021068
31021109, 31021157, 31021324, 31021542, 31021780, 31022858, 31025267
31025520, 31025531, 31025859, 31026220, 31026591, 31026860, 31027747
31028883, 31028986, 31029936, 31030898, 31031240, 31031955, 31032463
31032904, 31032913, 31034794, 31035287, 31035916, 31037421, 31038220
31038447, 31038817, 31039337, 31039627, 31039928, 31041540, 31042208
31042337, 31043483, 31043630, 31043695, 31043747, 31044145, 31044460
31044504, 31044951, 31045929, 31046188, 31046619, 31047022, 31047169
31047697, 31047740, 31048025, 31048741, 31049215, 31049995, 31051056
31051075, 31052735, 31052809, 31053669, 31054177, 31054874, 31055142
31056909, 31057402, 31058548, 31061482, 31061504, 31062010, 31062645
31063315, 31063380, 31063769, 31064025, 31065701, 31065838, 31066082
31066250, 31066265, 31066554, 31067456, 31067483, 31067892, 31069059
31070528, 31071080, 31073440, 31073586, 31074032, 31075323, 31075960
31077117, 31077365, 31078391, 31078757, 31079204, 31080474, 31081558
31082719, 31084778, 31084921, 31086467, 31086869, 31086954, 31087361
31087679, 31088115, 31088341, 31089270, 31090262, 31091469, 31091868
31092129, 31092233, 31092581, 31092921, 31094183, 31094228, 31094249
31094374, 31094688, 31095972, 31096846, 31097760, 31097961, 31098661
31098870, 31099312, 31099926, 31100172, 31101386, 31101840, 31103065
31103804, 31104809, 31105896, 31106140, 31106577, 31107577, 31108603
31108644, 31109506, 31110021, 31112088, 31112530, 31112972, 31113089
31113177, 31113249, 31113426, 31114116, 31114265, 31114671, 31115201
31115502, 31117282, 31118486, 31118702, 31118809, 31118844, 31119057
31119846, 31120361, 31122876, 31124213, 31124363, 31124821, 31124914
31125773, 31125849, 31125918, 31126053, 31126058, 31127043, 31127457
31127961, 31127968, 31127969, 31129851, 31130156, 31132732, 31134430
31137765, 31138106, 31139643, 31140940, 31141792, 31142377, 31142749
31142815, 31143146, 31143415, 31143870, 31145403, 31145804, 31146338
31146727, 31151483, 31153120, 31153485, 31155305, 31155634, 31156301
31156383, 31158151, 31158341, 31158380, 31159382, 31161861, 31162711
31162915, 31163379, 31165038, 31165577, 31165722, 31168440, 31170082

31171096, 31171147, 31171631, 31172207, 31172642, 31174836, 31175365
31176502, 31177193, 31177204, 31177221, 31178051, 31178103, 31180519
31181375, 31181380, 31182159, 31182451, 31182756, 31182793, 31183413
31184230, 31185224, 31188038, 31188398, 31190624, 31191224, 31192039
31193292, 31193511, 31193695, 31193745, 31193936, 31194264, 31195090
31195430, 31195600, 31195838, 31196272, 31196310, 31200057, 31200845
31201001, 31201366, 31201611, 31202536, 31204412, 31204878, 31205834
31206070, 31206201, 31207446, 31208287, 31213034, 31214119, 31214928
31215422, 31215438, 31215854, 31216823, 31216995, 31217946, 31218837
31218904, 31219047, 31219975, 31220188, 31220549, 31220837, 31220881
31220912, 31221454, 31222780, 31223382, 31225538, 31226448, 31228670
31230775, 31233170, 31234765, 31234790, 31234983, 31235797, 31236624
31240626, 31242319, 31242976, 31244968, 31247532, 31247838, 31248496
31249008, 31249406, 31249696, 31250120, 31250152, 31250221, 31252659
31254297, 31254535, 31254929, 31255369, 31255869, 31256383, 31257740
31257826, 31258101, 31258344, 31258697, 31258995, 31260692, 31261467
31261641, 31262275, 31265651, 31265773, 31268557, 31270711, 31270847
31271032, 31274074, 31281708, 31287741, 31287871, 31289115, 31290017
31290300, 31292298, 31293484, 31293867, 31298871, 31301460, 31303032
31304573, 31304945, 31305114, 31305309, 31305624, 31306248, 31306261
31306867, 31306927, 31307715, 31309379, 31309867, 31310564, 31310624
31311830, 31312450, 31312976, 31313117, 31313177, 31313214, 31313444
31313812, 31314323, 31314885, 31315495, 31315876, 31316250, 31317032
31321092, 31322720, 31323383, 31325584, 31326320, 31326608, 31326977
31326998, 31327046, 31327259, 31327278, 31327349, 31327391, 31327896
31331354, 31331372, 31333156, 31334606, 31334961, 31335037, 31335142
31336298, 31338249, 31338673, 31338686, 31338769, 31339457, 31339643
31339744, 31341138, 31341746, 31343110, 31344046, 31344097, 31348711
31348922, 31350348, 31353098, 31353610, 31355339, 31356601, 31357581
31357737, 31358308, 31358511, 31359215, 31359366, 31360146, 31360155
31360323, 31360469, 31360529, 31362408, 31362692, 31364001, 31364383
31366716, 31367188, 31367364, 31368027, 31369444, 31372498, 31373825
31373837, 31373843, 31374283, 31374449, 31374738, 31375865, 31376011
31376708, 31377129, 31377206, 31377487, 31377808, 31377936, 31380443
31381701, 31383049, 31383396, 31383464, 31383814, 31386394, 31386696
31387033, 31387426, 31387443, 31388201, 31388288, 31390936, 31390955
31391991, 31393600, 31393991, 31394341, 31394347, 31394365, 31394544
31395247, 31396027, 31396609, 31396695, 31396980, 31398617, 31398663
31398761, 31399131, 31399883, 31400754, 31401831, 31402078, 31402598
31403177, 31403565, 31404014, 31404130, 31404263, 31404487, 31405300
31408636, 31409483, 31409912, 31409964, 31410289, 31411163, 31412209
31414023, 31414524, 31415324, 31416250, 31417007, 31417192, 31417336
31417844, 31417990, 31418442, 31419363, 31420295, 31420316, 31420320
31421316, 31422440, 31422620, 31423645, 31424838, 31425167, 31425761

31425800, 31429501, 31429590, 31429770, 31429784, 31429844, 31429971
31430722, 31430735, 31430910, 31431005, 31431326, 31431771, 31431964
31431971, 31431973, 31431975, 31431986, 31433092, 31433579, 31433749
31434421, 31434805, 31434870, 31435163, 31435308, 31435735, 31437030
31440426, 31440813, 31441916, 31441920, 31442332, 31442714, 31444353
31444516, 31445356, 31446431, 31447733, 31448680, 31449354, 31450392
31450653, 31451019, 31453585, 31454428, 31454972, 31454988, 31455597
31456857, 31458049, 31459231, 31459242, 31459369, 31462082, 31463613
31464165, 31465389, 31466433, 31468060, 31468705, 31469001, 31471441
31471856, 31472077, 31474315, 31475378, 31475635, 31476093, 31476603
31476701, 31476736, 31477424, 31477695, 31479072, 31479075, 31479106
31479272, 31479772, 31481750, 31483949, 31484385, 31484603, 31485340
31485386, 31485507, 31486061, 31486557, 31487441, 31487491, 31487826
31487844, 31488464, 31489032, 31489137, 31489590, 31490604, 31491634
31492171, 31492191, 31492588, 31492655, 31492856, 31493153, 31493840
31494095, 31494264, 31494794, 31495254, 31495564, 31496174, 31498559
31499370, 31499700, 31500699, 31500719, 31500971, 31501139, 31502301
31503349, 31503674, 31503934, 31505088, 31506095, 31507107, 31508229
31508712, 31509279, 31510891, 31510910, 31511142, 31511519, 31511940
31512044, 31512262, 31513011, 31515869, 31515879, 31515911, 31515929
31516164, 31516184, 31516255, 31516265, 31517502, 31523548, 31523578
31523585, 31523646, 31523736, 31523836, 31525310, 31525783, 31526903
31527103, 31527199, 31527381, 31528724, 31528962, 31529594, 31529967
31530985, 31530995, 31532084, 31532176, 31532339, 31533050, 31533113
31533274, 31533817, 31533833, 31535073, 31535870, 31535955, 31536401
31536731, 31537521, 31537736, 31538274, 31538363, 31538891, 31539566
31541805, 31541864, 31541905, 31542347, 31542851, 31543810, 31544097
31545477, 31546864, 31547220, 31547445, 31547480, 31548675, 31549221
31549468, 31551142, 31552563, 31552615, 31552738, 31552755, 31553289
31553674, 31553813, 31553968, 31555126, 31555173, 31555346, 31555539
31555800, 31556950, 31557518, 31557663, 31558194, 31559079, 31559085
31559415, 31559563, 31560592, 31561886, 31563138, 31564060, 31564795
31567124, 31567403, 31567441, 31567719, 31568423, 31569057, 31569867
31570054, 31570161, 31571415, 31571742, 31572006, 31572046, 31572267
31573269, 31573457, 31574122, 31574150, 31574244, 31574267, 31575529
31575649, 31575665, 31576738, 31577569, 31578202, 31578994, 31580079
31580122, 31580374, 31580437, 31581627, 31584056, 31584555, 31584853
31585351, 31585491, 31585789, 31586381, 31586862, 31588933, 31590826
31591384, 31591400, 31591409, 31591421, 31595025, 31595632, 31597104
31597727, 31598146, 31599363, 31599990, 31600023, 31600291, 31600894
31601385, 31603199, 31605119, 31605737, 31606474, 31607937, 31608753
31609974, 31610024, 31613838, 31616101, 31616104, 31617492, 31619276
31620252, 31620748, 31620944, 31622250, 31623413, 31623463, 31625579
31625618, 31625959, 31626438, 31626493, 31626528, 31626572, 31627587

31628311, 31628753, 31629056, 31630551, 31630794, 31630946, 31631985
31632273, 31632534, 31632605, 31632663, 31633224, 31634510, 31634805
31635963, 31635980, 31637094, 31637607, 31637680, 31638398, 31638733
31638943, 31640240, 31642556, 31642639, 31644775, 31647304, 31648120
31648157, 31649819, 31649958, 31649962, 31650046, 31650202, 31652641
31653080, 31653167, 31653634, 31653647, 31653758, 31653913, 31653916
31653917, 31654116, 31654119, 31654122, 31654125, 31654133, 31655807
31656263, 31657324, 31657462, 31657483, 31658464, 31658819, 31658943
31659065, 31661865, 31661879, 31662143, 31662504, 31662625, 31662925
31663189, 31663788, 31664399, 31666449, 31666684, 31667096, 31667180
31667940, 31668033, 31668061, 31668065, 31668694, 31668872, 31669064
31670014, 31670263, 31670353, 31671568, 31672605, 31673406, 31674380
31675568, 31675852, 31675860, 31676941, 31677460, 31677479, 31678629
31679900, 31680709, 31680985, 31682766, 31683044, 31683260, 31683311
31683373, 31683708, 31684080, 31684494, 31685612, 31685882, 31686979
31688127, 31688978, 31691030, 31691089, 31691480, 31695062, 31695693
31696043, 31696577, 31696853, 31697741, 31699230, 31700234, 31701239
31701910, 31703614, 31705704, 31706595, 31706956, 31707190, 31708133
31708175, 31709647, 31709739, 31709777, 31711889, 31711997, 31712260
31714645, 31715935, 31716873, 31717010, 31718000, 31718134, 31718346
31718842, 31719167, 31720839, 31720942, 31721557, 31721863, 31721880
31722558, 31722646, 31723226, 31723323, 31723651, 31727229, 31727560
31728160, 31728440, 31728444, 31728447, 31728477, 31728486, 31728858
31730485, 31730766, 31732311, 31734012, 31734017, 31734583, 31735662
31736095, 31737059, 31737603, 31739198, 31739891, 31740252, 31741938
31743771, 31745130, 31745233, 31745528, 31746054, 31747706, 31747818
31747935, 31747989, 31748000, 31748182, 31748944, 31750577, 31750581
31752492, 31752502, 31752633, 31753202, 31753425, 31753478, 31753692
31754546, 31754887, 31755245, 31756415, 31756465, 31756568, 31756650
31757357, 31757775, 31757824, 31758083, 31758344, 31758846, 31758939
31758960, 31759565, 31760592, 31760738, 31761510, 31762819, 31763030
31763707, 31763905, 31764089, 31764239, 31764866, 31764913, 31765068
31765246, 31765257, 31765296, 31766499, 31766534, 31766675, 31766696
31767204, 31767237, 31767598, 31767852, 31768490, 31768497, 31768505
31769373, 31769530, 31770289, 31771302, 31771370, 31771410, 31771468
31771836, 31772002, 31772070, 31773582, 31775101, 31776121, 31776785
31776994, 31777410, 31777489, 31779833, 31781897, 31783422, 31783451
31783782, 31783985, 31785445, 31785572, 31786282, 31786838, 31787057
31787655, 31788104, 31788594, 31788704, 31788761, 31788785, 31790500
31790757, 31792465, 31792615, 31793713, 31794336, 31794882, 31795231
31796208, 31796277, 31796882, 31798001, 31798669, 31798702, 31798742
31799858, 31800757, 31804838, 31805812, 31807179, 31807516, 31809510
31810213, 31812824, 31815099, 31816158, 31816343, 31816631, 31820632
31820662, 31820859, 31820926, 31821129, 31821835, 31822026, 31822951

31823051, 31824504, 31824934, 31825324, 31825410, 31827339, 31827605
31827912, 31828378, 31828999, 31829366, 31829617, 31829639, 31831950
31832785, 31832901, 31833172, 31833585, 31833948, 31834191, 31834871
31835805, 31835854, 31836113, 31836454, 31839038, 31839779, 31839888
31840180, 31840490, 31840516, 31840992, 31841696, 31842545, 31843028
31843462, 31843476, 31845092, 31845403, 31845803, 31845955, 31846454
31847489, 31847541, 31848331, 31848365, 31848391, 31848903, 31849859
31850132, 31850227, 31851383, 31851449, 31852482, 31852574, 31854285
31854692, 31855307, 31855526, 31855996, 31858580, 31858621, 31858833
31859067, 31859143, 31860193, 31860406, 31862359, 31862593, 31862611
31863118, 31863890, 31864947, 31866141, 31866159, 31867037, 31867351
31869601, 31869944, 31869954, 31869966, 31870010, 31870150, 31870164
31870190, 31870196, 31871384, 31871692, 31872230, 31873155, 31875140
31876138, 31876368, 31878256, 31878314, 31880154, 31881527, 31883124
31883343, 31883739, 31883845, 31886547, 31886695, 31886745, 31887130
31888148, 31888731, 31889222, 31890230, 31890516, 31892029, 31892856
31895670, 31897786, 31897854, 31898193, 31898257, 31900585, 31902517
31902662, 31903523, 31903786, 31903962, 31904739, 31904933, 31905033
31907042, 31907137, 31907510, 31907565, 31907792, 31908345, 31908482
31908750, 31909295, 31909807, 31913650, 31913839, 31914003, 31914943
31915444, 31915968, 31916644, 31917378, 31917494, 31917856, 31919563
31919952, 31921267, 31922161, 31922580, 31923463, 31925462, 31926203
31926811, 31927510, 31927930, 31932196, 31934254, 31934301, 31935717
31936588, 31938116, 31938288, 31939461, 31939486, 31940458, 31941148
31942136, 31942144, 31942258, 31942274, 31942473, 31943497, 31943691
31945038, 31945407, 31945659, 31945827, 31945928, 31946936, 31947732
31947861, 31950244, 31950577, 31952046, 31952052, 31953394, 31953989
31956113, 31956435, 31956920, 31957152, 31957564, 31957674, 31957683
31958958, 31959253, 31960389, 31961578, 31961940, 31964519, 31965012
31965542, 31968431, 31970188, 31971792, 31972615, 31972671, 31973203
31974424, 31974597, 31974693, 31976303, 31977024, 31977257, 31980296
31981745, 31981751, 31985494, 31985738, 31986808, 31986836, 31986905
31988079, 31990386, 31991705, 31993795, 31996264, 31997457, 31998181
31998861, 31999453, 32001851, 32002411, 32003551, 32004148, 32004977
32005046, 32005048, 32005053, 32005215, 32006467, 32006703, 32006824
32007076, 32007698, 32008408, 32008586, 32008819, 32009754, 32010593
32010707, 32011107, 32011888, 32012788, 32012975, 32013403, 32014520
32015820, 32016884, 32017301, 32017422, 32017671, 32018632, 32022223
32022711, 32025328, 32028155, 32028269, 32032653, 32032733, 32032887
32033795, 32034766, 32035268, 32035536, 32035899, 32035902, 32036045
32037237, 32037962, 32038054, 32038844, 32038996, 32040940, 32042256
32042352, 32042706, 32044533, 32045377, 32046125, 32046587, 32047226
32048412, 32048921, 32050048, 32051896, 32052587, 32054806, 32057639
32058260, 32060164, 32060577, 32061018, 32061146, 32061648, 32062227

32064682, 32066061, 32067130, 32067356, 32067675, 32068110, 32068187
32069160, 32069696, 32069834, 32071582, 32072944, 32073710, 32074450
32075009, 32075020, 32075130, 32076561, 32077318, 32079573, 32079739
32080081, 32080655, 32082098, 32087331, 32087956, 32088132, 32088478
32089051, 32089820, 32090518, 32090725, 32093558, 32094825, 32095097
32095380, 32097387, 32097589, 32097604, 32097882, 32097962, 32099153
32099539, 32101305, 32103383, 32103427, 32104324, 32104402, 32104610
32105135, 32105239, 32105412, 32107505, 32107621, 32108094, 32108115
32108566, 32108576, 32109384, 32109796, 32112798, 32112822, 32113113
32113791, 32114572, 32115642, 32117115, 32117253, 32117490, 32118727
32119339, 32120283, 32120453, 32121014, 32121326, 32121673, 32121885
32122574, 32123331, 32124176, 32124570, 32124594, 32124607, 32125142
32127227, 32127448, 32129659, 32130083, 32130485, 32130504, 32131010
32131401, 32133039, 32138478, 32138782, 32139432, 32139659, 32140800
32142788, 32143492, 32143562, 32144917, 32147340, 32148419, 32150818
32150854, 32151098, 32152341, 32153396, 32153619, 32153909, 32156194
32157050, 32157078, 32161260, 32162391, 32164053, 32165367, 32165759
32165814, 32165887, 32167592, 32167923, 32169151, 32170162, 32170190
32171622, 32171791, 32172050, 32172773, 32172777, 32173142, 32173543
32174321, 32174405, 32174571, 32175329, 32175780, 32177701, 32177869
32179306, 32182097, 32182783, 32184855, 32186983, 32187775, 32189869
32189952, 32190132, 32190190, 32190284, 32190573, 32191427, 32191451
32193431, 32195333, 32196492, 32196738, 32197147, 32200524, 32201743
32201936, 32203068, 32203354, 32207088, 32207920, 32208144, 32208346
32208691, 32209784, 32210660, 32212041, 32212635, 32212916, 32213376
32214021, 32214195, 32214743, 32214782, 32215991, 32216027, 32218369
32218395, 32218498, 32218552, 32219179, 32219318, 32219988, 32220017
32221141, 32222473, 32223669, 32224583, 32225353, 32225899, 32227352
32228188, 32229431, 32229919, 32230213, 32230775, 32231049, 32234161
32236601, 32236798, 32237489, 32238935, 32239730, 32241889, 32243814
32243882, 32243985, 32244187, 32245711, 32245850, 32246090, 32248131
32248405, 32248649, 32249207, 32249640, 32249674, 32250232, 32250238
32251364, 32252036, 32252213, 32252294, 32254399, 32255029, 32255073
32258021, 32259063, 32259322, 32259535, 32259785, 32260010, 32260290
32263923, 32266406, 32266906, 32267171, 32267610, 32268669, 32274403
32277643, 32279351, 32284241, 32284325, 32284485, 32284725, 32285086
32285717, 32285789, 32287797, 32289552, 32289858, 32290313, 32290399
32290949, 32291114, 32291139, 32292180, 32293615, 32294566, 32294851
32296259, 32296941, 32300098, 32301856, 32302561, 32304293, 32304712
32305792, 32307586, 32309046, 32309723, 32312131, 32312586, 32316070
32316252, 32317012, 32318528, 32318820, 32318914, 32319410, 32321317
32321319, 32321765, 32322738, 32323488, 32323600, 32323816, 32325574
32327201, 32327208, 32329914, 32330269, 32330540, 32331889, 32332107
32334745, 32335769, 32338476, 32338736, 32339801, 32341260, 32343678

32344099, 32344168, 32344199, 32345001, 32345178, 32345272, 32345785
32346733, 32353343, 32355765, 32355912, 32356609, 32356628, 32357412
32357665, 32359044, 32361175, 32362698, 32363549, 32364147, 32366461
32366536, 32367151, 32368789, 32368792, 32375493, 32376872, 32379140
32379775, 32381403, 32385141, 32385832, 32386482, 32386683, 32386877
32387555, 32387818, 32388247, 32391021, 32398714, 32401086, 32402243
32404638, 32405239, 32409344, 32409942, 32410175, 32413042, 32413512
32414996, 32415846, 32415989, 32416652, 32416655, 32417227, 32417242
32417274, 32417438, 32417632, 32419774, 32421958, 32425097, 32425124
32425194, 32426315, 32427173, 32431290, 32431413, 32432078, 32435911
32436342, 32436721, 32436757, 32437538, 32442404, 32443087, 32443531
32444159, 32446565, 32449622, 32450344, 32453583, 32455219, 32455650
32459153, 32460136, 32464584, 32465853, 32465894, 32466474, 32467812
32469004, 32469225, 32471251, 32471346, 32471642, 32472589, 32473465
32474926, 32474997, 32480419, 32480541, 32484945, 32485859, 32486528
32489206, 32490128, 32490416, 32492343, 32492422, 32492452, 32495545
32495572, 32497756, 32498459, 32499155, 32500117, 32501930, 32504340
32504786, 32505009, 32505634, 32507542, 32509584, 32509606, 32512145
32512918, 32516336, 32517405, 32518029, 32518679, 32520691, 32520994
32522300, 32523206, 32523750, 32531627, 32533019, 32533225, 32534925
32535106, 32538436, 32539300, 32539322, 32541049, 32542641, 32544784
32549351, 32550589, 32550751, 32551177, 32552602, 32553241, 32555120
32556891, 32559543, 32563106, 32563940, 32567750, 32567788, 32568163
32569745, 32573703, 32573942, 32576508, 32578616, 32580082, 32587472
32589990, 32593845, 32596355, 32596705, 32598406, 32602344, 32602735
32603152, 32606489, 32609886, 32613788, 32615310, 32615776, 32616678
32619298, 32619327, 32620919, 32622612, 32627140, 32628131, 32628221
32631787, 32646025, 32648248, 32652143, 32652573, 32653669, 32654962
32655446, 32655691, 32656231, 32656275, 32659574, 32671481, 32676350
32677702, 32686850, 32697781, 32698569, 32700989, 32704765, 32711741
32712220, 32716726, 32718316, 32720458, 32725484, 32728984, 32738356
32739966, 32740503, 32754845, 32758096, 32765738, 32784393, 32784403
32786309, 32795712, 32810668, 32811069, 32811131, 32816003, 32817950
32818019, 32858446, 32874995, 32881853, 32889434, 32892883, 32895105
32900208, 32902635, 32936961, 32941509, 32996071, 33034103, 33048277
33127032

Version 19.0.0.0.ru-2021-04.rur-2021-04.r1

Version 19.0.0.0.ru-2021-04.rur-2021-04.r1 includes the following:

- Patch [32545013](#): DATABASE RELEASE UPDATE 19.11.0.0.0

- Patch [32399816](#): OJVM RELEASE UPDATE 19.11.0.0.0
- Patch [32327201](#): RDBMS - DSTV36 UPDATE - TZDATA2020E
- Patch [29213893](#): DBMS_STATS FAILING WITH ERROR ORA-01422 WHEN GATHERING STATS FOR USER TABLE
- Patch [28730253](#): SUPPORT NEW ERA REIWA FOR JAPANESE IMPERIAL CALENDAR
- PreUpgrade Jar: preupgrade_19_cbuild_10_lf.zip

Combined patches for version 19.0.0.0.ru-2021-04.rur-2021-04.r1, released April 2021

Bugs fixed:

7391838, 8460502, 8476681, 14735102, 15931756, 16662822, 16664572
17428816, 17468475, 18534283, 19080742, 19138896, 19697993, 20083476
20313356, 20319830, 20479545, 20867658, 20922160, 21232786, 21245711
21374587, 21528318, 21629064, 21639146, 21888352, 21965541, 22066547
22252368, 22580355, 22729345, 22748979, 23020668, 23094775, 23294761
23296836, 23606241, 23645975, 23734075, 23763462, 24356932, 24561942
24596874, 24669730, 24687075, 24833686, 24957575, 24971456, 25030027
25092651, 25093917, 25148135, 25404117, 25416731, 25560538, 25607406
25607716, 25756945, 25792962, 25804387, 25804908, 25806201, 25809128
25883179, 25905368, 25913778, 25986062, 25997810, 26001677, 26003708
26108369, 26127355, 26173091, 26203132, 26280704, 26284288, 26352615
26440142, 26476244, 26497655, 26499997, 26500553, 26577716, 26587659
26611353, 26668264, 26716835, 26739322, 26777814, 26785852, 26789742
26819036, 26860844, 26872233, 26897528, 26963540, 26978857, 27004798
27004828, 27036163, 27044169, 27044246, 27063461, 27086374, 27101798
27126122, 27126938, 27130348, 27166935, 27195575, 27195935, 27221350
27222128, 27243840, 27244999, 27254335, 27260704, 27261477, 27302372
27359766, 27359770, 27362994, 27369515, 27378053, 27392968, 27406105
27411022, 27423500, 27439716, 27453490, 27458357, 27460010, 27489107
27497101, 27572040, 27582210, 27589260, 27597359, 27604329, 27622946
27629928, 27639208, 27658166, 27661222, 27666312, 27684864, 27692173
27697886, 27700413, 27710072, 27729678, 27742354, 27745728, 27751111
27760043, 27764052, 27786168, 27801144, 27828892, 27829722, 27841399
27846298, 27873364, 27877830, 27880025, 27907898, 27917890, 27929509
27934711, 27935464, 27941110, 27957203, 27957963, 27967484, 27998559
28001632, 28007516, 28031385, 28052648, 28064977, 28072567, 28078186
28092783, 28104176, 28109326, 28112563, 28125947, 28127569, 28129791
28133903, 28138566, 28138847, 28144569, 28145995, 28156781, 28181021

28185286, 28187837, 28189466, 28198802, 28204104, 28204262, 28205555
28209985, 28210681, 28234255, 28263142, 28271258, 28271693, 28276054
28279176, 28279456, 28294563, 28302580, 28313275, 28319114, 28322973
28326928, 28338211, 28350595, 28370061, 28371123, 28373960, 28375383
28379065, 28381939, 28383667, 28386259, 28387185, 28387574, 28390273
28392179, 28395302, 28397317, 28402823, 28403019, 28406374, 28410431
28414968, 28431445, 28432345, 28435333, 28436414, 28442896, 28454215
28461789, 28463226, 28470673, 28475242, 28479352, 28482048, 28484299
28489419, 28492006, 28498976, 28499269, 28502773, 28504631, 28505321
28513333, 28521330, 28522750, 28523644, 28526715, 28530171, 28530697
28534475, 28534493, 28535127, 28537481, 28538439, 28541606, 28542455
28546290, 28547068, 28547926, 28558489, 28558645, 28561704, 28564479
28565296, 28567417, 28567819, 28569897, 28570589, 28572165, 28572407
28572533, 28572544, 28572667, 28572834, 28578945, 28587723, 28589194
28589509, 28589644, 28592647, 28593682, 28594086, 28597221, 28598022
28601957, 28602253, 28605066, 28606598, 28608211, 28612239, 28618343
28620697, 28621543, 28622202, 28625580, 28625862, 28627033, 28628592
28630381, 28632796, 28636532, 28639299, 28640772, 28642469, 28642551
28642899, 28643583, 28643654, 28643718, 28644549, 28645570, 28646200
28646939, 28649388, 28655209, 28657026, 28661333, 28661362, 28663289
28663782, 28670402, 28672124, 28672457, 28673945, 28681153, 28682796
28689483, 28690694, 28692103, 28692275, 28692282, 28693954, 28694639
28694872, 28694877, 28696373, 28697526, 28698087, 28699321, 28700945
28703812, 28704412, 28705231, 28707931, 28708400, 28709063, 28710385
28710469, 28710663, 28710734, 28714461, 28715655, 28715727, 28717406
28718469, 28719348, 28720204, 28720418, 28721497, 28722229, 28729900
28730079, 28730253, 28734355, 28740708, 28740799, 28741374, 28742555
28745367, 28747846, 28749853, 28751498, 28752923, 28755011, 28755084
28755309, 28755846, 28757960, 28758722, 28760206, 28763291, 28765983
28767240, 28769456, 28771022, 28771947, 28772390, 28772816, 28774416
28776431, 28776811, 28777073, 28777214, 28778754, 28781599, 28781754
28785273, 28785321, 28785531, 28788272, 28789531, 28789533, 28791576
28791852, 28793062, 28794230, 28795551, 28795734, 28800508, 28802066
28802734, 28804517, 28805242, 28806517, 28807247, 28808314, 28808652
28808656, 28810381, 28811560, 28813317, 28813931, 28815123, 28815355
28815557, 28816871, 28817449, 28818063, 28819640, 28820669, 28821847
28824482, 28827682, 28831971, 28833912, 28835937, 28836716, 28837979
28838385, 28844656, 28844738, 28845346, 28846759, 28847541, 28847572
28849776, 28850084, 28851467, 28852325, 28854004, 28854733, 28855520
28855922, 28857552, 28861861, 28862532, 28863263, 28863432, 28863487
28865544, 28865569, 28867698, 28867992, 28870496, 28871040, 28872645
28872829, 28873575, 28874416, 28875089, 28876253, 28876639, 28876926
28877252, 28878865, 28881191, 28881848, 28882784, 28884931, 28887305
28888083, 28888327, 28889389, 28889730, 28891941, 28892794, 28897123

28897512, 28899663, 28900506, 28901126, 28902135, 28904380, 28905312
28905390, 28905457, 28905615, 28907196, 28909769, 28909992, 28910498
28910586, 28911140, 28912691, 28914144, 28915561, 28917080, 28918429
28919145, 28921844, 28922227, 28922485, 28922532, 28922608, 28922767
28925250, 28925460, 28925634, 28925880, 28927452, 28928462, 28930944
28932914, 28933079, 28933158, 28935293, 28935956, 28936114, 28937717
28938422, 28938698, 28940179, 28940281, 28940472, 28941901, 28942455
28942694, 28945421, 28945994, 28946233, 28946574, 28948554, 28949888
28950868, 28951332, 28951493, 28951533, 28952168, 28954762, 28955606
28955883, 28956908, 28957260, 28957292, 28957723, 28958088, 28958094
28959493, 28960863, 28962775, 28963036, 28965084, 28965095, 28965231
28965376, 28966444, 28968211, 28968779, 28970122, 28974083, 28974999
28977322, 28978664, 28980448, 28980910, 28981871, 28983095, 28983486
28984313, 28985114, 28985272, 28985362, 28985478, 28986207, 28986231
28986257, 28986326, 28986481, 28986696, 28988482, 28988864, 28989306
28990681, 28993295, 28993353, 28994307, 28994542, 28994783, 28995287
28996376, 28998369, 28999046, 29000000, 29001305, 29001888, 29002488
29002784, 29002927, 29003207, 29003407, 29003617, 29003738, 29006318
29006621, 29007321, 29007353, 29007775, 29008035, 29008669, 29009513
29010126, 29010517, 29011936, 29012609, 29013475, 29013832, 29014076
29014385, 29015118, 29016294, 29017265, 29018655, 29018680, 29019121
29020423, 29021063, 29021352, 29022986, 29024028, 29024054, 29024448
29024552, 29024732, 29024795, 29024876, 29026154, 29026582, 29026606
29027456, 29027694, 29027933, 29027940, 29030184, 29030927, 29031575
29031600, 29032234, 29032276, 29032457, 29032607, 29033052, 29033145
29033164, 29033200, 29033280, 29033655, 29034587, 29036278, 29037290
29038528, 29038728, 29039089, 29039510, 29040739, 29041739, 29041775
29043554, 29043651, 29043725, 29044086, 29044763, 29044954, 29046482
29047127, 29047850, 29048178, 29048289, 29048498, 29048605, 29048728
29048792, 29048858, 29049673, 29050357, 29050560, 29050765, 29050886
29051263, 29051702, 29051953, 29052726, 29052850, 29053783, 29053902
29055644, 29056024, 29056270, 29056560, 29056767, 29056894, 29058476
29059011, 29060216, 29061016, 29061959, 29062692, 29062848, 29062860
29062868, 29110526, 29110783, 29110790, 29110797, 29110802, 29110805
29111598, 29111631, 29112455, 29113282, 29113305, 29115794, 29115857
29117337, 29117526, 29117642, 29118543, 29119077, 29119733, 29120223
29122224, 29122254, 29122367, 29123297, 29123432, 29123444, 29123482
29124104, 29124368, 29125036, 29125374, 29125380, 29125708, 29125786
29126345, 29127957, 29128693, 29128935, 29129450, 29129476, 29129497
29129691, 29129712, 29130219, 29131539, 29131772, 29132456, 29132869
29132938, 29133470, 29134447, 29135383, 29135649, 29136111, 29138641
29139070, 29139727, 29139761, 29139780, 29139956, 29141316, 29141341
29141685, 29141886, 29142609, 29142667, 29143516, 29144995, 29145214
29145730, 29146077, 29146157, 29146810, 29147849, 29148799, 29149170

29149829, 29150338, 29151520, 29152357, 29152603, 29152752, 29154631
29154636, 29154725, 29154829, 29155099, 29155208, 29157051, 29157389
29158680, 29158899, 29158990, 29159216, 29159661, 29159909, 29159936
29160174, 29160462, 29160824, 29161597, 29161923, 29162095, 29163073
29163156, 29163415, 29163437, 29163524, 29163567, 29164376, 29164446
29165682, 29167111, 29167342, 29167374, 29167940, 29168137, 29168219
29168433, 29169073, 29169215, 29169540, 29169739, 29170232, 29170717
29171683, 29171942, 29172618, 29172826, 29173140, 29173373, 29173618
29173817, 29174004, 29174753, 29175638, 29175829, 29176318, 29177466
29177543, 29177886, 29178385, 29179097, 29180313, 29180455, 29180559
29180721, 29180893, 29181078, 29181153, 29181231, 29181568, 29181620
29181743, 29181923, 29182019, 29182517, 29182901, 29182920, 29183298
29183912, 29184297, 29184666, 29185193, 29186091, 29186456, 29186605
29188255, 29189302, 29189307, 29189889, 29190235, 29190474, 29190663
29190740, 29191541, 29191827, 29192419, 29192468, 29192685, 29193207
29194205, 29194367, 29194493, 29194827, 29194981, 29195279, 29195337
29195758, 29196151, 29196725, 29198092, 29198913, 29199163, 29199635
29199733, 29200316, 29200700, 29201143, 29201494, 29201539, 29201695
29201787, 29202104, 29202461, 29202850, 29203041, 29203122, 29203166
29203227, 29203425, 29203443, 29203604, 29205281, 29205323, 29205419
29205463, 29205767, 29205918, 29206109, 29206605, 29206631, 29207073
29208260, 29208732, 29209545, 29210577, 29210610, 29210624, 29210683
29211457, 29211724, 29212012, 29212433, 29212611, 29213320, 29213351
29213613, 29213641, 29213775, 29213850, 29213879, 29213893, 29214561
29214960, 29216312, 29216723, 29216746, 29216984, 29217294, 29217472
29217828, 29217848, 29217856, 29218570, 29219205, 29219273, 29219627
29220079, 29221248, 29221745, 29221891, 29221942, 29222031, 29222784
29222892, 29223833, 29223859, 29223967, 29224065, 29224294, 29224605
29224710, 29225076, 29225168, 29225758, 29225861, 29227602, 29228869
29229164, 29229754, 29229839, 29229844, 29229955, 29230252, 29230565
29231133, 29232117, 29232154, 29232449, 29232533, 29232653, 29233415
29233810, 29233953, 29234123, 29235934, 29236573, 29237538, 29237575
29237744, 29240307, 29240668, 29240759, 29241345, 29241651, 29242017
29242561, 29242884, 29242906, 29243749, 29243958, 29244495, 29244766
29244968, 29245063, 29245137, 29245160, 29246163, 29246337, 29247183
29247415, 29247712, 29247906, 29248495, 29248552, 29248723, 29248835
29248858, 29249289, 29249412, 29249583, 29249991, 29250059, 29250317
29251259, 29251564, 29252510, 29253184, 29253871, 29254031, 29254623
29254930, 29255178, 29255273, 29255431, 29255435, 29255616, 29255705
29255718, 29255973, 29256426, 29259119, 29259320, 29260224, 29260407
29260452, 29260956, 29261547, 29261548, 29261695, 29261906, 29262512
29262887, 29265448, 29266248, 29266899, 29267292, 29268412, 29269171
29269228, 29269825, 29270585, 29271019, 29273168, 29273360, 29273539
29273570, 29273735, 29273812, 29273847, 29274428, 29274564, 29274627

29275461, 29276272, 29277317, 29278218, 29278684, 29279658, 29279751
29279854, 29281112, 29281527, 29281691, 29281796, 29282090, 29282233
29282666, 29282898, 29285197, 29285453, 29285503, 29285621, 29285788
29285956, 29286037, 29286220, 29286229, 29287130, 29287705, 29290110
29290235, 29292232, 29292253, 29292378, 29292837, 29293072, 29293574
29293806, 29294753, 29296257, 29297863, 29297915, 29298220, 29299049
29299082, 29299830, 29299844, 29301463, 29301566, 29302565, 29302614
29302963, 29303918, 29304314, 29304692, 29304781, 29304853, 29305093
29306226, 29306713, 29307090, 29307109, 29307638, 29309698, 29311336
29311528, 29311588, 29311927, 29312310, 29312672, 29312734, 29312753
29312889, 29313347, 29313417, 29313525, 29314539, 29314636, 29314867
29317756, 29318410, 29319441, 29320900, 29321489, 29321689, 29323946
29323999, 29324568, 29324735, 29325087, 29325105, 29325257, 29325356
29325497, 29325765, 29325993, 29326233, 29327044, 29327892, 29329042
29329087, 29329675, 29329807, 29329848, 29330361, 29330791, 29331066
29331209, 29331380, 29331493, 29332292, 29332395, 29332763, 29332771
29333500, 29336843, 29336899, 29337294, 29337310, 29337742, 29338315
29338348, 29338453, 29338780, 29338913, 29339101, 29339155, 29339299
29340333, 29341209, 29341782, 29342099, 29343086, 29343156, 29343861
29344541, 29345382, 29345937, 29346057, 29346138, 29346211, 29346943
29347620, 29348176, 29348358, 29350052, 29350712, 29350762, 29350868
29351044, 29351386, 29351662, 29351716, 29351735, 29351749, 29351771
29351786, 29352298, 29352724, 29352867, 29352947, 29353271, 29353432
29353718, 29353821, 29353960, 29355654, 29356547, 29356634, 29356704
29356711, 29356752, 29356782, 29357821, 29358509, 29358828, 29360252
29360285, 29360467, 29360672, 29360775, 29360911, 29360950, 29361319
29361472, 29361801, 29362596, 29363151, 29364171, 29364177, 29366406
29366818, 29366940, 29367019, 29367561, 29367971, 29368253, 29368310
29368725, 29372069, 29372541, 29372562, 29373418, 29373588, 29374179
29374604, 29374627, 29375355, 29375941, 29375984, 29376346, 29377804
29377986, 29378029, 29378287, 29378834, 29378913, 29379299, 29379381
29379750, 29379978, 29380527, 29381000, 29382296, 29382641, 29382784
29382815, 29383695, 29384781, 29384854, 29384864, 29385339, 29385429
29385652, 29385774, 29386502, 29386557, 29386635, 29386660, 29386835
29387073, 29387274, 29387310, 29387337, 29388020, 29388072, 29388094
29388524, 29388830, 29389408, 29389889, 29390011, 29390435, 29390785
29391030, 29391237, 29391301, 29391438, 29391849, 29391925, 29392554
29392966, 29393291, 29393649, 29394014, 29394140, 29394749, 29395657
29396481, 29397841, 29397954, 29397996, 29398488, 29398863, 29399046
29399100, 29399121, 29399336, 29399938, 29399959, 29402110, 29402131
29404483, 29405012, 29405462, 29405651, 29405996, 29407488, 29407804
29408853, 29409149, 29409455, 29410311, 29410834, 29411037, 29411427
29411469, 29411931, 29412066, 29412269, 29413360, 29413382, 29413517
29413544, 29413634, 29413956, 29415493, 29415774, 29416688, 29416700

29417084, 29417113, 29417173, 29417719, 29417884, 29418165, 29418341
29420254, 29420834, 29421059, 29423003, 29423016, 29423156, 29423227
29423491, 29423826, 29424094, 29424999, 29426241, 29426320, 29428230
29429017, 29429087, 29429264, 29429466, 29429566, 29429895, 29430524
29430866, 29431192, 29431402, 29431485, 29431985, 29432176, 29434301
29434869, 29435474, 29435652, 29435966, 29436454, 29436514, 29436522
29436727, 29437029, 29437379, 29437594, 29437712, 29438150, 29438277
29438736, 29439522, 29440651, 29441196, 29442400, 29442936, 29443187
29443250, 29443559, 29444072, 29444282, 29444602, 29445548, 29446319
29446669, 29448498, 29449477, 29449845, 29449852, 29450162, 29450193
29450273, 29450421, 29450812, 29450936, 29451085, 29451386, 29452251
29452576, 29452936, 29452953, 29454450, 29454978, 29455424, 29455773
29456538, 29456714, 29457312, 29457319, 29457370, 29457502, 29457807
29457978, 29458132, 29460252, 29461420, 29461791, 29461971, 29462594
29462767, 29462957, 29463047, 29463528, 29463553, 29463798, 29464616
29464779, 29465047, 29465177, 29466674, 29467622, 29469563, 29469565
29470059, 29470205, 29470291, 29471633, 29471832, 29471857, 29471860
29472618, 29473708, 29476473, 29476702, 29477015, 29481584, 29482021
29483452, 29483532, 29483626, 29483672, 29483685, 29483712, 29483723
29483771, 29485099, 29485731, 29485877, 29486181, 29486848, 29487150
29487189, 29487407, 29488894, 29489436, 29489546, 29490256, 29491784
29492127, 29492939, 29493122, 29493821, 29494245, 29494788, 29495057
29495171, 29495684, 29497053, 29497311, 29497588, 29497696, 29497778
29498198, 29500257, 29500826, 29500963, 29501218, 29502561, 29503543
29503631, 29503827, 29504103, 29504492, 29504682, 29505225, 29505589
29505668, 29506942, 29507270, 29507616, 29508681, 29509777, 29510278
29511064, 29511611, 29511980, 29512125, 29512890, 29514479, 29515134
29515240, 29515476, 29515766, 29515834, 29516300, 29516727, 29516766
29517168, 29517443, 29517883, 29518604, 29518767, 29519131, 29521187
29521688, 29521748, 29521862, 29522358, 29522561, 29522662, 29523055
29523216, 29523511, 29524599, 29524985, 29525366, 29525467, 29525886
29526966, 29527595, 29527610, 29528368, 29529147, 29529436, 29530440
29530515, 29530812, 29530909, 29531654, 29531836, 29532112, 29532532
29536342, 29536445, 29536794, 29537829, 29538631, 29539027, 29539413
29540327, 29541517, 29541742, 29541769, 29541973, 29542084, 29542449
29542474, 29542580, 29542643, 29543034, 29543956, 29544552, 29546817
29547010, 29547867, 29548413, 29548427, 29548592, 29548687, 29548722
29549040, 29549071, 29549104, 29549154, 29549730, 29550530, 29552402
29552773, 29553141, 29554092, 29554351, 29555105, 29555239, 29557144
29557261, 29557336, 29557556, 29558238, 29558452, 29558926, 29558975
29559187, 29559395, 29559446, 29559908, 29559981, 29564592, 29564593
29565611, 29579919, 29580394, 29580983, 29581771, 29584261, 29584693
29586143, 29587299, 29587720, 29587765, 29588580, 29588732, 29589544
29590666, 29591343, 29591641, 29592011, 29592215, 29592595, 29597536

29597716, 29597754, 29598039, 29598040, 29598046, 29598226, 29598233
29599008, 29599243, 29599300, 29599552, 29601461, 29602831, 29603460
29603884, 29604002, 29604257, 29606261, 29607136, 29607797, 29608000
29608023, 29609603, 29610506, 29611020, 29611991, 29614206, 29614931
29614987, 29615824, 29616244, 29616414, 29618074, 29618190, 29620042
29622936, 29623323, 29623592, 29624124, 29625065, 29625804, 29625876
29626154, 29626732, 29628200, 29628647, 29629430, 29629650, 29629681
29629745, 29631749, 29632095, 29632265, 29632611, 29633697, 29633753
29633936, 29634643, 29635427, 29635717, 29635990, 29637362, 29637526
29637560, 29638285, 29638928, 29641736, 29642451, 29643721, 29644426
29644464, 29645167, 29645349, 29647176, 29647770, 29648928, 29649694
29651183, 29651520, 29652809, 29653132, 29653246, 29655164, 29655668
29656400, 29656819, 29656843, 29657399, 29657422, 29657744, 29657960
29657973, 29658056, 29661028, 29661065, 29661722, 29663191, 29663368
29663494, 29663601, 29663813, 29664087, 29664161, 29665168, 29665940
29666451, 29667527, 29667994, 29668005, 29669413, 29670713, 29670782
29671363, 29672507, 29675446, 29676089, 29676921, 29677051, 29677173
29677733, 29677927, 29678217, 29679856, 29680700, 29681987, 29683039
29683211, 29684518, 29685137, 29685276, 29687214, 29687220, 29687459
29687718, 29687727, 29687763, 29688867, 29689145, 29689255, 29690795
29692115, 29692694, 29693847, 29694869, 29695425, 29695821, 29695841
29695964, 29695987, 29696242, 29696310, 29697928, 29700125, 29700460
29700770, 29701720, 29701755, 29701937, 29703932, 29705793, 29706160
29707099, 29707493, 29707896, 29708324, 29708353, 29708876, 29708915
29710188, 29710858, 29713810, 29715220, 29715703, 29716029, 29716194
29716227, 29716491, 29716602, 29716871, 29717659, 29717901, 29718198
29719146, 29720133, 29720373, 29721418, 29721576, 29722026, 29722092
29722167, 29722389, 29724497, 29724658, 29725425, 29725476, 29725781
29726695, 29737941, 29738374, 29738400, 29739576, 29741319, 29741976
29742223, 29742926, 29744225, 29744400, 29744637, 29745288, 29745624
29746962, 29747493, 29747648, 29747653, 29748285, 29748325, 29748336
29748513, 29749471, 29750673, 29751094, 29753244, 29754196, 29754951
29755821, 29756274, 29756444, 29757099, 29757264, 29757651, 29757687
29758203, 29758217, 29758661, 29761678, 29761837, 29761911, 29763158
29764644, 29765035, 29765219, 29765347, 29765393, 29765493, 29766207
29766435, 29766503, 29766679, 29768487, 29768899, 29769695, 29769901
29770750, 29771032, 29771242, 29772514, 29772761, 29773197, 29773205
29773459, 29773842, 29774362, 29775393, 29775473, 29779196, 29780140
29782211, 29782284, 29782823, 29782866, 29783142, 29784106, 29785239
29785251, 29785311, 29785544, 29785550, 29785831, 29787292, 29787766
29789911, 29791152, 29791880, 29791916, 29792213, 29792433, 29793318
29794174, 29794462, 29795712, 29795957, 29796335, 29796378, 29796916
29797209, 29797726, 29801164, 29802382, 29802695, 29803948, 29804875
29805368, 29805772, 29806390, 29806964, 29807964, 29809792, 29809837

29810013, 29811616, 29812084, 29812489, 29813503, 29813650, 29813671
29814995, 29815341, 29815713, 29816887, 29817278, 29817547, 29817784
29818794, 29819753, 29820341, 29821130, 29821582, 29822714, 29825525
29827647, 29827792, 29827852, 29828644, 29829339, 29831196, 29831404
29831567, 29833406, 29833984, 29834506, 29836096, 29836424, 29838337
29838485, 29838740, 29838773, 29839715, 29840619, 29841267, 29841687
29842369, 29843238, 29843277, 29843692, 29843831, 29844131, 29844226
29844275, 29845449, 29845530, 29845691, 29846126, 29846525, 29846645
29846688, 29847627, 29848084, 29848849, 29849100, 29849139, 29850930
29851020, 29851308, 29851733, 29853485, 29856420, 29856506, 29856859
29856890, 29858121, 29858376, 29858420, 29859068, 29860022, 29860994
29861075, 29864203, 29864261, 29865188, 29865590, 29865658, 29867728
29868639, 29869052, 29869086, 29869149, 29869404, 29869887, 29869906
29870065, 29870533, 29871098, 29871312, 29871360, 29872401, 29872937
29872983, 29873206, 29873665, 29874090, 29874761, 29875200, 29875459
29875565, 29876358, 29876989, 29877608, 29878076, 29881050, 29881478
29881575, 29881643, 29881839, 29882427, 29882454, 29882729, 29884958
29885182, 29885890, 29886809, 29887045, 29887111, 29888621, 29889184
29889358, 29890740, 29891075, 29891853, 29891916, 29892388, 29892604
29893132, 29893287, 29894021, 29896510, 29897418, 29897863, 29900203
29900824, 29901419, 29901961, 29902299, 29902327, 29902330, 29902659
29903190, 29903299, 29903357, 29903454, 29904002, 29906678, 29907942
29908389, 29908639, 29908777, 29909658, 29910218, 29910402, 29912135
29912286, 29913805, 29913966, 29914449, 29914544, 29915217, 29915848
29916198, 29916975, 29919789, 29920025, 29920376, 29920804, 29921318
29922225, 29922435, 29922461, 29923452, 29924147, 29924181, 29924479
29926466, 29927756, 29928210, 29928340, 29928427, 29928564, 29930457
29931956, 29932202, 29932310, 29932430, 29932780, 29932953, 29933718
29934048, 29934052, 29934158, 29935685, 29937565, 29937655, 29937956
29938225, 29939400, 29939795, 29940373, 29941062, 29942096, 29942275
29942554, 29943670, 29943879, 29944035, 29944159, 29944660, 29944963
29945645, 29946388, 29947145, 29947242, 29947428, 29948165, 29950018
29950220, 29951620, 29951759, 29952700, 29956016, 29956222, 29957412
29957493, 29958925, 29960325, 29960884, 29961353, 29961360, 29961609
29961847, 29962160, 29962248, 29962834, 29962927, 29962939, 29965052
29965207, 29965603, 29965888, 29966768, 29967223, 29968085, 29968703
29969557, 29970081, 29970261, 29970298, 29970587, 29970861, 29971027
29971481, 29971888, 29971936, 29971951, 29972134, 29972176, 29973012
29989783, 29989845, 29990779, 29991257, 29993717, 29997326, 29997553
29997937, 30000664, 30001105, 30001331, 30003187, 30004660, 30004856
30006159, 30006472, 30006705, 30006985, 30007450, 30007536, 30007797
30008125, 30008198, 30008214, 30008456, 30009710, 30012181, 30013535
30014200, 30015070, 30017836, 30018017, 30018903, 30019864, 30021830
30024618, 30025814, 30026016, 30026596, 30027614, 30027649, 30028182

30028599, 30028649, 30029519, 30029806, 30031027, 30032233, 30032376
30032484, 30033040, 30033547, 30034456, 30035598, 30036258, 30038392
30039800, 30039959, 30040157, 30040511, 30041501, 30041514, 30042490
30043398, 30043610, 30043930, 30044108, 30044507, 30045242, 30045273
30045389, 30045484, 30045983, 30046497, 30047510, 30047531, 30047702
30047765, 30047931, 30048688, 30049966, 30051176, 30051783, 30051804
30052740, 30052928, 30053036, 30053501, 30053748, 30054980, 30056058
30057718, 30057799, 30058149, 30058453, 30059106, 30059109, 30059821
30060267, 30060330, 30062364, 30062429, 30062819, 30064268, 30066352
30067565, 30068384, 30068792, 30068871, 30070064, 30071446, 30072018
30072905, 30073314, 30073422, 30073744, 30074250, 30074296, 30074349
30074469, 30074472, 30074820, 30075037, 30076058, 30076197, 30076253
30076604, 30078675, 30078934, 30079949, 30080111, 30080266, 30081546
30081580, 30082145, 30083100, 30083216, 30083488, 30083807, 30084971
30085897, 30086596, 30086992, 30087165, 30087509, 30088229, 30088421
30090568, 30092254, 30092280, 30092859, 30094929, 30094948, 30095591
30095952, 30097092, 30097115, 30098251, 30099302, 30099420, 30099454
30100354, 30101090, 30101186, 30101847, 30102774, 30103551, 30103553
30104348, 30104378, 30104555, 30105458, 30106748, 30106901, 30108012
30109365, 30110224, 30110370, 30110518, 30114477, 30114489, 30114534
30116085, 30116203, 30116753, 30116854, 30117209, 30117335, 30117469
30117593, 30118261, 30118279, 30120608, 30122523, 30122583, 30123138
30125765, 30126145, 30126470, 30127145, 30127522, 30127805, 30127904
30128047, 30128231, 30130240, 30131286, 30131645, 30132708, 30132989
30133841, 30134746, 30135396, 30135731, 30135942, 30136102, 30136346
30137792, 30139392, 30141240, 30142907, 30143470, 30143593, 30146593
30146969, 30147195, 30147307, 30147473, 30147928, 30148929, 30148999
30149035, 30149658, 30150606, 30150710, 30153552, 30153885, 30154633
30155241, 30155320, 30155489, 30155814, 30155837, 30155999, 30156569
30157526, 30158313, 30159329, 30159511, 30159536, 30159752, 30159760
30160025, 30160625, 30161094, 30163243, 30164714, 30165493, 30165503
30165876, 30165897, 30166352, 30167787, 30169254, 30170104, 30172925
30173113, 30173370, 30173556, 30174394, 30174401, 30175180, 30175291
30175587, 30177597, 30178250, 30178839, 30178990, 30179038, 30179644
30180208, 30180643, 30181756, 30182498, 30183367, 30183696, 30183715
30183920, 30184102, 30185852, 30186319, 30186476, 30186706, 30187627
30187866, 30188631, 30189516, 30189535, 30190090, 30191274, 30192691
30192729, 30192853, 30193165, 30193262, 30193505, 30193506, 30193584
30193736, 30194612, 30194710, 30194972, 30195667, 30195668, 30195684
30196195, 30196358, 30196629, 30198239, 30198598, 30198861, 30198905
30199890, 30200034, 30200132, 30200237, 30200680, 30200758, 30202349
30202388, 30203929, 30204042, 30204542, 30206220, 30206493, 30206675
30207473, 30207519, 30208327, 30208690, 30208723, 30209222, 30209736
30210429, 30210753, 30210884, 30211567, 30213031, 30213540, 30214769

30214826, 30215130, 30215302, 30215351, 30217206, 30217562, 30217982
30218044, 30218317, 30219222, 30220932, 30221237, 30221298, 30222512
30222669, 30222975, 30223712, 30223847, 30224544, 30224650, 30224725
30224868, 30224950, 30225265, 30225439, 30225443, 30225718, 30225837
30225844, 30226244, 30227400, 30228422, 30228567, 30229030, 30229683
30232638, 30233105, 30233934, 30234132, 30234227, 30235878, 30235919
30235979, 30236092, 30236554, 30236964, 30237477, 30237640, 30238211
30238715, 30239480, 30240010, 30240547, 30240858, 30240930, 30240972
30241567, 30241807, 30241829, 30241920, 30242120, 30242724, 30243216
30244340, 30244831, 30246053, 30246179, 30247305, 30248520, 30248531
30248564, 30249432, 30249738, 30249927, 30251003, 30252005, 30252098
30252156, 30252458, 30252977, 30253035, 30253090, 30253608, 30253705
30253835, 30254206, 30254525, 30254576, 30254726, 30255143, 30255528
30256542, 30257412, 30257908, 30259120, 30259469, 30260523, 30260595
30263377, 30264405, 30265523, 30265608, 30265615, 30265703, 30266791
30267155, 30269428, 30269748, 30270647, 30270744, 30271114, 30272329
30274090, 30274188, 30274324, 30274662, 30275548, 30275569, 30275578
30275784, 30276144, 30276243, 30277120, 30277451, 30277589, 30277648
30277733, 30277887, 30278402, 30281428, 30281615, 30282501, 30282591
30282918, 30283296, 30283577, 30283579, 30283581, 30283932, 30284219
30284369, 30285026, 30285166, 30285251, 30285341, 30285457, 30285540
30285843, 30286961, 30288343, 30288491, 30289074, 30289458, 30291536
30292305, 30293345, 30294267, 30294465, 30294671, 30294865, 30295110
30295137, 30295549, 30295790, 30295808, 30297905, 30299367, 30299817
30299934, 30300030, 30300342, 30300363, 30300523, 30300538, 30304037
30305264, 30305395, 30305568, 30305880, 30307814, 30307883, 30308368
30308624, 30308772, 30308947, 30309098, 30309798, 30311826, 30312094
30312546, 30313749, 30313848, 30313989, 30314079, 30314198, 30314837
30316667, 30316897, 30317005, 30317209, 30317397, 30318638, 30318943
30319080, 30319099, 30320029, 30321076, 30321398, 30322980, 30323658
30323849, 30324180, 30324466, 30324649, 30325407, 30325786, 30326115
30326882, 30327149, 30327810, 30328168, 30328209, 30328690, 30329209
30329751, 30330123, 30331356, 30331759, 30332505, 30332893, 30334484
30334563, 30335127, 30335832, 30335987, 30336032, 30336383, 30336530
30336742, 30336996, 30337245, 30338434, 30338591, 30339049, 30339103
30340540, 30341713, 30342371, 30342878, 30343370, 30344614, 30345201
30345432, 30345809, 30345926, 30346330, 30346847, 30346867, 30347410
30349714, 30350177, 30350543, 30352532, 30352581, 30352623, 30352715
30355490, 30356060, 30356461, 30357463, 30357698, 30357897, 30358416
30359614, 30360383, 30360653, 30361070, 30361635, 30362003, 30362850
30363088, 30363193, 30363311, 30363716, 30364329, 30364481, 30364613
30364835, 30365745, 30367193, 30368048, 30368482, 30368534, 30368668
30368917, 30371264, 30371623, 30371909, 30372081, 30373419, 30373541
30373550, 30374345, 30374570, 30374739, 30375109, 30376986, 30377347

30377692, 30380511, 30380907, 30381207, 30381525, 30381614, 30382646
30382982, 30383286, 30384121, 30384152, 30387628, 30387666, 30388853
30389229, 30389414, 30389507, 30389821, 30390279, 30390635, 30391272
30392011, 30392870, 30392987, 30393110, 30393653, 30393944, 30394509
30394738, 30394974, 30396120, 30396946, 30396974, 30397100, 30398099
30398251, 30398257, 30398422, 30399906, 30402386, 30403412, 30403763
30403881, 30403902, 30403989, 30404117, 30404153, 30404639, 30406709
30408515, 30408808, 30409207, 30409339, 30409472, 30409590, 30412188
30412772, 30412863, 30412885, 30412921, 30413137, 30413294, 30414491
30414679, 30414714, 30416034, 30416603, 30417648, 30417732, 30418926
30419024, 30419450, 30420105, 30420452, 30421009, 30421026, 30421204
30421439, 30421476, 30421706, 30422487, 30423135, 30423218, 30424347
30430921, 30431274, 30431504, 30431582, 30431698, 30431703, 30431717
30431867, 30433177, 30434793, 30436399, 30437003, 30437149, 30438224
30439985, 30440651, 30440712, 30441277, 30441687, 30441959, 30442266
30442749, 30442805, 30442874, 30442884, 30443393, 30446436, 30446583
30446820, 30447060, 30447498, 30447589, 30447994, 30448182, 30448355
30448917, 30449194, 30449837, 30450787, 30453442, 30454090, 30455427
30457633, 30457697, 30458568, 30458593, 30460095, 30460558, 30460842
30460922, 30461123, 30461458, 30463938, 30464250, 30464655, 30466081
30469777, 30470947, 30472891, 30473634, 30474167, 30474774, 30475041
30475115, 30476768, 30477588, 30477685, 30477691, 30477767, 30479252
30479647, 30479715, 30480872, 30483065, 30483140, 30483217, 30483521
30484042, 30484801, 30485255, 30486436, 30486896, 30487387, 30489582
30490014, 30490578, 30492380, 30493518, 30494259, 30494900, 30495035
30495078, 30495133, 30495483, 30496957, 30497057, 30497120, 30497765
30498824, 30500224, 30500297, 30500344, 30500582, 30501574, 30502415
30503943, 30505029, 30505497, 30506794, 30506991, 30507032, 30507313
30508100, 30509112, 30509277, 30510347, 30510527, 30510718, 30512690
30513285, 30513353, 30513480, 30513848, 30515886, 30516868, 30517214
30517516, 30517635, 30518349, 30518923, 30519188, 30522285, 30522998
30523137, 30523538, 30523601, 30523750, 30524736, 30527198, 30527275
30528547, 30528687, 30528704, 30528731, 30528935, 30529790, 30529940
30530585, 30532811, 30533132, 30533580, 30534351, 30534549, 30534662
30534827, 30535905, 30536237, 30537403, 30537405, 30537533, 30537584
30538141, 30538818, 30539519, 30540109, 30540407, 30544247, 30544595
30544629, 30545281, 30545556, 30549255, 30549368, 30549637, 30549789
30549881, 30551000, 30551123, 30554178, 30556326, 30556581, 30556807
30557386, 30557803, 30558561, 30559129, 30559218, 30559252, 30560365
30560513, 30561404, 30561590, 30561737, 30564139, 30564343, 30564898
30565004, 30565595, 30565805, 30566054, 30567372, 30568514, 30570083
30571306, 30572816, 30573236, 30573703, 30575243, 30575697, 30576112
30576393, 30576853, 30577071, 30577591, 30578221, 30579051, 30580813
30580887, 30581448, 30582221, 30582500, 30586493, 30588738, 30589914

30591028, 30591475, 30592859, 30593046, 30593104, 30593863, 30594167
30595114, 30595408, 30595860, 30596024, 30596320, 30596488, 30596694
30598682, 30598746, 30598919, 30599405, 30599407, 30600173, 30600184
30602230, 30602828, 30605215, 30605676, 30606345, 30606451, 30608583
30609799, 30610406, 30610667, 30611603, 30612199, 30613937, 30613971
30614411, 30616406, 30616738, 30617002, 30617626, 30618230, 30619138
30619414, 30619525, 30619728, 30619787, 30620805, 30621255, 30622528
30622755, 30623138, 30623142, 30624243, 30624792, 30624864, 30624874
30625121, 30628834, 30628899, 30629139, 30629643, 30629799, 30630391
30630930, 30631393, 30631523, 30633259, 30633938, 30634548, 30634559
30635183, 30635302, 30635326, 30635360, 30637270, 30637319, 30638712
30640436, 30641541, 30641755, 30641900, 30644530, 30644766, 30644889
30645590, 30645896, 30646077, 30647133, 30649310, 30650297, 30650404
30651231, 30651570, 30651621, 30651674, 30652515, 30652813, 30652853
30654131, 30654558, 30655906, 30657196, 30657365, 30657566, 30657624
30657706, 30657875, 30657906, 30657940, 30658421, 30658533, 30658555
30658702, 30659940, 30660412, 30661000, 30661939, 30662651, 30662736
30663591, 30663646, 30664266, 30665399, 30665720, 30668407, 30668754
30670328, 30670369, 30670584, 30671720, 30671813, 30671958, 30674373
30674959, 30676209, 30677633, 30679595, 30679771, 30679804, 30681085
30681462, 30681516, 30681521, 30684902, 30685163, 30686017, 30686131
30687047, 30689557, 30689988, 30690686, 30691604, 30691731, 30691857
30692462, 30692473, 30693791, 30694947, 30695670, 30696566, 30696821
30698289, 30699770, 30703610, 30704826, 30705448, 30708735, 30710807
30711370, 30712670, 30713133, 30714151, 30714715, 30716001, 30716863
30718841, 30718862, 30719327, 30719419, 30720736, 30720844, 30722705
30723671, 30724679, 30724881, 30726204, 30727701, 30727759, 30728196
30729278, 30729604, 30729839, 30730026, 30732711, 30733270, 30733563
30734242, 30734362, 30734707, 30735091, 30735153, 30735736, 30737970
30739013, 30739876, 30740115, 30740250, 30740669, 30740997, 30741263
30748411, 30748707, 30749181, 30749644, 30749722, 30750219, 30750991
30751171, 30751521, 30751527, 30751639, 30751968, 30753432, 30755348
30758836, 30758854, 30758943, 30760739, 30761871, 30761878, 30763272
30763305, 30763639, 30763754, 30763970, 30764405, 30764663, 30765486
30765995, 30767277, 30768636, 30769312, 30770717, 30772069, 30773164
30773797, 30776416, 30776676, 30776929, 30777759, 30778855, 30779240
30781032, 30781041, 30781461, 30782266, 30782300, 30782414, 30783395
30783551, 30785101, 30786237, 30786641, 30786655, 30788973, 30789904
30790047, 30790441, 30801296, 30801510, 30803210, 30804646, 30806757
30806984, 30807723, 30807888, 30808109, 30808869, 30809087, 30810680
30810765, 30812574, 30814266, 30814285, 30815269, 30815495, 30815852
30815994, 30816760, 30816938, 30819340, 30819629, 30821297, 30822502
30822919, 30823744, 30825391, 30825419, 30825656, 30826474, 30828205
30828350, 30829779, 30830555, 30832775, 30833454, 30834068, 30834110

30834705, 30835184, 30835219, 30835853, 30836129, 30838605, 30839253
30839451, 30839836, 30840793, 30841241, 30842277, 30843271, 30844839
30846063, 30846159, 30846782, 30847442, 30847871, 30848028, 30848097
30848773, 30851448, 30851951, 30852954, 30855101, 30856358, 30857501
30857721, 30858877, 30858919, 30860803, 30861988, 30863115, 30864607
30865805, 30866141, 30866988, 30869131, 30870439, 30870513, 30871716
30871792, 30873527, 30874270, 30874337, 30874660, 30879169, 30879708
30880774, 30880913, 30881161, 30881407, 30883715, 30883785, 30883877
30886188, 30887501, 30887777, 30887976, 30889443, 30889607, 30889723
30890720, 30890971, 30891760, 30891792, 30895426, 30895577, 30896620
30896685, 30898381, 30898748, 30898939, 30901889, 30902655, 30904672
30905604, 30906274, 30906407, 30909596, 30909918, 30910264, 30910267
30913399, 30914272, 30914674, 30915781, 30919403, 30919587, 30919691
30919804, 30921136, 30922936, 30922996, 30923514, 30923517, 30923597
30923940, 30925316, 30925828, 30927440, 30927821, 30930149, 30930339
30931068, 30931311, 30931981, 30932674, 30932923, 30936251, 30936831
30936942, 30937340, 30937391, 30937410, 30938413, 30939307, 30939317
30939934, 30940259, 30940868, 30940869, 30941056, 30944643, 30945005
30946072, 30946141, 30946595, 30946768, 30946876, 30946896, 30947294
30950786, 30952104, 30952191, 30953157, 30953266, 30953836, 30955702
30956571, 30956647, 30957739, 30958493, 30960314, 30960356, 30960736
30961566, 30964194, 30965554, 30965649, 30967084, 30968737, 30968781
30970518, 30972817, 30972841, 30972887, 30972947, 30972951, 30972959
30972966, 30973085, 30973113, 30973127, 30973137, 30973143, 30973197
30973698, 30973877, 30974207, 30974813, 30977294, 30977411, 30978554
30979701, 30980023, 30980115, 30980317, 30980733, 30981240, 30985027
30985906, 30986423, 30987088, 30987105, 30987243, 30987724, 30988444
30989951, 30990034, 30992120, 30992330, 30992597, 30993198, 30993518
30993604, 30994996, 30996945, 30996991, 30997375, 30997960, 30998035
30998662, 30998759, 30998847, 31001017, 31001455, 31001490, 31001859
31002223, 31002923, 31003137, 31003659, 31004077, 31004719, 31004844
31004871, 31006011, 31006792, 31006953, 31008240, 31008858, 31008907
31009032, 31009545, 31009590, 31009680, 31010218, 31010554, 31010976
31011361, 31013127, 31013531, 31014323, 31015330, 31016413, 31019249
31021068, 31021109, 31021157, 31021324, 31021542, 31021780, 31022858
31025267, 31025520, 31025531, 31025859, 31026220, 31026591, 31026860
31027747, 31028883, 31028986, 31029936, 31030898, 31031240, 31031955
31032904, 31034794, 31035287, 31035916, 31037421, 31038220, 31038447
31038817, 31039337, 31039627, 31039928, 31041540, 31042208, 31042337
31043483, 31043630, 31043747, 31044145, 31044504, 31044951, 31045929
31046188, 31046619, 31047022, 31047169, 31047697, 31047740, 31048025
31048741, 31049215, 31049995, 31051056, 31051075, 31052735, 31052809
31053669, 31054874, 31055142, 31056909, 31057402, 31058548, 31061482
31061504, 31062010, 31062645, 31063315, 31063380, 31063769, 31064025

31065838, 31066082, 31066250, 31066265, 31066554, 31067456, 31067483
31067892, 31069059, 31070528, 31071080, 31073440, 31073586, 31074032
31075323, 31075960, 31077117, 31077365, 31078391, 31078757, 31079204
31080474, 31081558, 31084778, 31084921, 31086467, 31086869, 31086954
31087361, 31087679, 31088115, 31088341, 31089270, 31090262, 31091469
31091868, 31092129, 31092233, 31092581, 31092921, 31094183, 31094228
31094688, 31095972, 31096846, 31097760, 31097961, 31098661, 31098870
31099312, 31100172, 31101386, 31101840, 31103065, 31104809, 31105896
31106140, 31106577, 31107577, 31108603, 31108644, 31109506, 31112530
31112972, 31113089, 31113249, 31113426, 31114265, 31114671, 31115201
31115502, 31117282, 31118486, 31118702, 31118809, 31119057, 31119846
31120361, 31122876, 31124363, 31124821, 31124914, 31125773, 31125849
31125918, 31126053, 31126058, 31127043, 31127457, 31127969, 31129851
31130156, 31132732, 31134430, 31137765, 31138106, 31139643, 31140940
31141792, 31142377, 31142749, 31142815, 31143870, 31145403, 31145804
31146338, 31146727, 31151483, 31153120, 31153485, 31155305, 31155634
31156383, 31158151, 31158341, 31158380, 31159382, 31161861, 31162711
31162915, 31163379, 31165038, 31165577, 31165722, 31168440, 31170082
31171096, 31171147, 31171631, 31172207, 31172642, 31175365, 31176502
31177193, 31177204, 31177221, 31178103, 31180519, 31181380, 31182159
31182451, 31182756, 31182793, 31183413, 31184230, 31185224, 31188038
31188398, 31190624, 31191224, 31192039, 31193292, 31193695, 31193745
31193936, 31194264, 31195090, 31195430, 31195600, 31195838, 31196310
31200845, 31201001, 31201366, 31201611, 31202536, 31204412, 31204878
31206070, 31208287, 31213034, 31214119, 31215422, 31215438, 31215854
31216823, 31216995, 31217946, 31218837, 31218904, 31219047, 31219975
31220549, 31220837, 31220881, 31220912, 31221454, 31222780, 31223382
31225538, 31226448, 31228670, 31230775, 31233170, 31234765, 31234790
31235797, 31236624, 31240626, 31242976, 31244968, 31248496, 31249008
31249406, 31249696, 31250120, 31250152, 31254297, 31254535, 31254929
31255369, 31255869, 31256383, 31257740, 31257826, 31258101, 31258697
31258995, 31260692, 31261467, 31261641, 31265651, 31265773, 31268557
31270711, 31270847, 31271032, 31274074, 31281708, 31287741, 31287871
31289115, 31290017, 31290300, 31292298, 31293484, 31298871, 31301460
31303032, 31304573, 31304945, 31305114, 31305309, 31305624, 31306248
31306261, 31306867, 31306927, 31307715, 31309379, 31309867, 31310564
31310624, 31311830, 31312450, 31312976, 31313117, 31313177, 31313214
31313444, 31313812, 31314885, 31315495, 31315876, 31316250, 31317032
31321092, 31322720, 31323383, 31325584, 31326320, 31326608, 31326977
31326998, 31327046, 31327259, 31327278, 31327349, 31327391, 31327896
31331354, 31331372, 31333156, 31334606, 31334961, 31335037, 31335142
31336298, 31338249, 31338673, 31338686, 31338769, 31339457, 31339643
31339744, 31341138, 31341746, 31343110, 31344046, 31348711, 31348922
31350348, 31353610, 31355339, 31356601, 31357581, 31357737, 31358308

31359215, 31359366, 31360146, 31360323, 31360469, 31360529, 31362408
31362692, 31364001, 31366716, 31367188, 31367364, 31368027, 31369444
31372498, 31373825, 31373837, 31373843, 31374283, 31374449, 31375865
31376011, 31376708, 31377129, 31377487, 31377808, 31377936, 31380443
31381701, 31383049, 31383396, 31383464, 31383814, 31386394, 31387426
31387443, 31388201, 31388288, 31390936, 31391991, 31393600, 31393991
31394341, 31394347, 31394365, 31394544, 31395247, 31396027, 31396695
31398663, 31398761, 31399131, 31399883, 31401831, 31402078, 31402598
31403177, 31403565, 31404014, 31404130, 31404263, 31404487, 31405300
31408636, 31409483, 31409964, 31410289, 31411163, 31412209, 31414023
31414524, 31415324, 31416250, 31417007, 31417192, 31418442, 31419363
31421316, 31422620, 31423645, 31424838, 31425167, 31425761, 31425800
31429501, 31429590, 31429770, 31429844, 31430722, 31430910, 31431005
31431771, 31433092, 31433579, 31433749, 31434421, 31434805, 31434870
31435308, 31437030, 31440426, 31440813, 31441916, 31442332, 31442714
31444353, 31444516, 31446431, 31447733, 31448680, 31449354, 31450392
31450653, 31453585, 31454428, 31454972, 31454988, 31455597, 31456857
31458049, 31459369, 31462082, 31463613, 31465389, 31466433, 31468060
31468705, 31469001, 31471441, 31471856, 31472077, 31474315, 31475378
31475635, 31476093, 31476603, 31476701, 31476736, 31477424, 31477695
31479072, 31479075, 31479106, 31479272, 31479772, 31481750, 31483949
31484385, 31484603, 31485386, 31485507, 31486061, 31486557, 31487441
31487491, 31487826, 31487844, 31488464, 31489137, 31490604, 31491634
31492856, 31493153, 31493840, 31494095, 31494264, 31494794, 31495254
31495564, 31496174, 31498559, 31499370, 31499700, 31500971, 31501139
31502301, 31503349, 31506095, 31507107, 31508229, 31508712, 31509279
31510891, 31510910, 31511142, 31511519, 31511940, 31512044, 31512262
31513011, 31515911, 31516265, 31517502, 31523548, 31525310, 31525783
31526903, 31527103, 31527199, 31528962, 31529594, 31529967, 31530985
31530995, 31532176, 31532339, 31533274, 31533817, 31533833, 31535955
31536401, 31536731, 31537521, 31537736, 31538891, 31539566, 31541805
31541864, 31541905, 31542347, 31542851, 31544097, 31545477, 31546864
31547220, 31547445, 31547480, 31548675, 31549221, 31553289, 31553674
31553813, 31555126, 31555346, 31555539, 31555800, 31557518, 31557663
31559085, 31559415, 31559563, 31560592, 31561886, 31563138, 31564795
31567124, 31567441, 31567719, 31568423, 31569057, 31570054, 31570161
31571415, 31571742, 31572006, 31572046, 31572267, 31573457, 31574122
31574150, 31574244, 31574267, 31575529, 31576738, 31577569, 31578994
31580079, 31580122, 31580374, 31581627, 31584056, 31584555, 31584853
31585351, 31585491, 31585789, 31586381, 31588933, 31590826, 31591384
31591400, 31591409, 31591421, 31595025, 31595632, 31597727, 31598146
31599363, 31599990, 31600023, 31600291, 31600894, 31601385, 31603199
31605119, 31605737, 31606474, 31607937, 31608753, 31609974, 31613838
31616101, 31616104, 31619276, 31620252, 31620748, 31620944, 31623413

31623463, 31625579, 31625618, 31625959, 31626438, 31626493, 31626572
31627587, 31628311, 31628753, 31630551, 31630794, 31630946, 31631985
31632273, 31632663, 31633224, 31634510, 31637607, 31637680, 31640240
31644775, 31648120, 31648157, 31649819, 31650202, 31652641, 31653080
31653634, 31655807, 31656263, 31658464, 31658819, 31658943, 31659065
31661865, 31662504, 31663189, 31663788, 31664399, 31666449, 31667096
31668033, 31668061, 31668694, 31668872, 31669064, 31670014, 31670263
31670353, 31671568, 31672605, 31674380, 31675568, 31675852, 31675860
31676941, 31677460, 31677479, 31678629, 31682766, 31683044, 31683260
31683373, 31683708, 31684080, 31684494, 31686979, 31688978, 31691030
31691089, 31691480, 31695062, 31695693, 31696577, 31696853, 31697741
31699230, 31700234, 31701239, 31701910, 31705704, 31706595, 31706956
31707190, 31708133, 31709647, 31709739, 31709777, 31711889, 31711997
31712260, 31715935, 31716873, 31718134, 31718346, 31718842, 31719167
31720839, 31720942, 31721863, 31721880, 31722558, 31722646, 31723226
31723323, 31723651, 31727560, 31728160, 31730485, 31730766, 31734017
31734583, 31735662, 31736095, 31737059, 31737603, 31739198, 31739891
31741938, 31743771, 31745130, 31745233, 31745528, 31746054, 31747706
31747818, 31747935, 31747989, 31748000, 31748182, 31748944, 31752502
31753202, 31753425, 31753478, 31753692, 31754546, 31754887, 31755245
31756415, 31756568, 31756650, 31757357, 31757775, 31757824, 31758083
31758344, 31758846, 31758939, 31758960, 31759565, 31760592, 31760738
31761510, 31763707, 31763905, 31764089, 31764866, 31764913, 31765068
31765246, 31765257, 31765296, 31766534, 31766696, 31767204, 31767237
31767852, 31769373, 31769530, 31770289, 31771302, 31771370, 31771410
31771468, 31771836, 31775101, 31776994, 31781897, 31783422, 31783451
31783782, 31783985, 31785445, 31785572, 31786838, 31787057, 31787655
31788704, 31788761, 31790500, 31792465, 31792615, 31793713, 31796208
31796277, 31796882, 31798669, 31798702, 31798742, 31799858, 31800757
31804838, 31805812, 31807179, 31807516, 31809510, 31810213, 31815099
31816158, 31816631, 31820632, 31820859, 31820926, 31821129, 31821835
31822026, 31823051, 31824504, 31825410, 31827339, 31827605, 31827912
31828378, 31829366, 31829617, 31829639, 31833172, 31833585, 31833948
31834191, 31834871, 31835854, 31836113, 31836454, 31839038, 31839779
31839888, 31840490, 31842545, 31843028, 31843462, 31843476, 31845092
31845403, 31845803, 31845955, 31846454, 31847489, 31847541, 31848331
31848365, 31848391, 31848903, 31849859, 31850227, 31851383, 31851449
31852482, 31852574, 31854692, 31855526, 31855996, 31858580, 31858833
31860193, 31860406, 31862359, 31862593, 31862611, 31863118, 31866141
31867037, 31867351, 31869601, 31871384, 31871692, 31872230, 31875140
31876368, 31878256, 31878314, 31880154, 31881527, 31883124, 31883343
31886547, 31886695, 31886745, 31887130, 31888148, 31888731, 31889222
31892029, 31895670, 31897786, 31897854, 31898193, 31900585, 31902662
31903523, 31903786, 31903962, 31904933, 31905033, 31907042, 31907137

31907510, 31907565, 31907792, 31908345, 31908750, 31909295, 31913650
31914943, 31915444, 31915968, 31916644, 31917378, 31921267, 31922161
31923463, 31926203, 31926811, 31927930, 31934254, 31934301, 31935717
31939461, 31939486, 31940458, 31942136, 31942144, 31943497, 31945038
31945407, 31945928, 31946936, 31947732, 31947861, 31950577, 31952046
31952052, 31953989, 31956113, 31957152, 31957564, 31957674, 31957683
31958958, 31959253, 31961940, 31965012, 31965542, 31970188, 31971792
31972615, 31974424, 31974597, 31974693, 31976303, 31977024, 31980296
31981745, 31981751, 31985738, 31986836, 31986905, 31988079, 31990386
31991705, 31993795, 31996264, 31997457, 31998181, 31998861, 31999453
32001851, 32002411, 32003551, 32004977, 32005048, 32007076, 32007698
32008408, 32008586, 32008819, 32010707, 32012788, 32012975, 32013403
32014520, 32016884, 32017301, 32017422, 32018632, 32022711, 32028269
32032653, 32032733, 32032887, 32034766, 32035268, 32035536, 32035899
32035902, 32036045, 32037237, 32038996, 32040940, 32042256, 32045377
32046125, 32047226, 32048412, 32050048, 32052587, 32054806, 32057639
32058260, 32060164, 32060577, 32061018, 32061146, 32061648, 32064682
32067675, 32068187, 32069160, 32069696, 32069834, 32071582, 32072944
32073710, 32074450, 32075009, 32075020, 32075130, 32076561, 32077318
32079573, 32079739, 32080081, 32082098, 32087331, 32088132, 32089051
32089820, 32093558, 32094825, 32095097, 32097387, 32097882, 32099153
32101305, 32105135, 32105239, 32105412, 32108576, 32109384, 32109796
32112798, 32112822, 32113113, 32114572, 32118727, 32120283, 32120453
32121326, 32122574, 32123331, 32124176, 32124570, 32124594, 32124607
32125142, 32127227, 32129659, 32130083, 32130485, 32130504, 32131401
32133039, 32138478, 32138782, 32139432, 32142788, 32143492, 32150818
32150854, 32153396, 32153909, 32157050, 32162391, 32164053, 32165367
32165759, 32165887, 32167592, 32167923, 32169151, 32170190, 32171622
32171791, 32172777, 32173543, 32174571, 32177869, 32179306, 32184855
32187775, 32189869, 32189952, 32191451, 32196738, 32197147, 32203354
32207088, 32207920, 32208144, 32208346, 32210660, 32212041, 32212635
32212916, 32214021, 32214782, 32218369, 32218498, 32218552, 32219318
32220017, 32221141, 32222473, 32225353, 32227352, 32230775, 32234161
32239730, 32244187, 32245850, 32246090, 32250232, 32250238, 32252213
32255073, 32259535, 32259785, 32260290, 32266406, 32267171, 32268669
32277643, 32284241, 32285717, 32285789, 32287797, 32290313, 32290399
32291114, 32291139, 32292180, 32296941, 32305792, 32307586, 32312586
32316252, 32319410, 32321319, 32321765, 32323488, 32327201, 32331889
32341260, 32345001, 32353343, 32355912, 32356609, 32357412, 32361175
32363549, 32364147, 32379775, 32385832, 32387555, 32387818, 32391021
32398714, 32401086, 32405239, 32409344, 32409942, 32410175, 32413042
32413512, 32421958, 32425194, 32426315, 32427173, 32431413, 32435911
32436721, 32436757, 32442404, 32444159, 32460136, 32465853, 32471251
32471346, 32490128, 32492343, 32492422, 32495545, 32495572, 32499155

32505009, 32505634, 32518029, 32523206, 32550589, 32559543, 32563940
32568163, 32576508, 32620919

Version 19.0.0.0.ru-2021-01.rur-2021-01.r2

Important

We recommend that you upgrade your DB instance to this version rather than to 19.0.0.0.ru-2021-01.rur-2021-01.r1. The application of the patch for minor engine upgrades to 19.0.0.0.ru-2021-01.rur-2021-01.r1 encountered an issue. Release update 19.10.0.0.210119 (32218454) didn't register correctly in the DBA_REGISTRY_SQLPATCH table.

Version 19.0.0.0.ru-2021-01.rur-2021-01.r2 includes the following:

- Patch [32218454](#): DATABASE RELEASE UPDATE 19.10.0.0.210119
- Patch [32067171](#): OJVM RELEASE UPDATE 19.10.0.0.210119
- Patch [31335037](#): RDBMS - DSTV35 UPDATE - TZDATA2020A
- Patch [31335142](#): DSTV35 UPDATE - TZDATA2020A - NEED OJVM FIX
- Patch [29213893](#): DBMS_STATS FAILING WITH ERROR ORA-01422 WHEN GATHERING STATS FOR USER TABLE
- Patch [29782284](#): ORA-06508:"MDSYS.MDPRVT_IDX" WHILE UPGRADING DATABASE TO 18.3
- Patch [28730253](#): SUPPORT NEW ERA REIWA FOR JAPANESE IMPERIAL CALENDAR
- Patch [29374604](#): IE not starting against 18c Oracle RDBMS Standard Edition
- PreUpgrade Jar: preupgrade_19_cbuild_9_lf.zip
- Support for managing advisor tasks using procedures in the `rdsadmin.rdsadmin_util` package

For more information, see [Managing advisor tasks](#) in the *Amazon RDS User Guide*.

Combined patches for version 19.0.0.0.ru-2021-01.rur-2021-01.r2, released January 2021

Bugs fixed:

7391838, 8460502, 8476681, 14735102, 16664572, 17428816, 17468475
19080742, 19138896, 19697993, 20313356, 20867658, 21232786, 21374587
21528318, 21629064, 21639146, 21888352, 21965541, 22580355, 22729345
22748979, 23294761, 23296836, 23606241, 23645975, 23734075, 23763462
24596874, 24669730, 24687075, 24833686, 24957575, 24971456, 25030027
25092651, 25093917, 25404117, 25416731, 25560538, 25607406, 25756945
25792962, 25804387, 25806201, 25809128, 25883179, 25905368, 25986062
25997810, 26001677, 26127355, 26173091, 26284288, 26352615, 26440142
26476244, 26499997, 26611353, 26668264, 26716835, 26739322, 26777814
26819036, 26872233, 27004828, 27036163, 27044169, 27101798, 27126122
27126938, 27130348, 27166935, 27195575, 27195935, 27221350, 27222128
27244999, 27254335, 27260704, 27261477, 27359766, 27362994, 27369515
27378053, 27392968, 27406105, 27411022, 27423500, 27439716, 27453490
27458357, 27489107, 27572040, 27582210, 27589260, 27604329, 27622946
27629928, 27661222, 27666312, 27684864, 27692173, 27700413, 27710072
27729678, 27742354, 27745728, 27760043, 27801144, 27828892, 27829722
27846298, 27873364, 27877830, 27880025, 27929509, 27934711, 27935464
27941110, 27957203, 27967484, 27998559, 28007516, 28064977, 28072567
28078186, 28092783, 28104176, 28109326, 28125947, 28127569, 28129791
28133903, 28138847, 28144569, 28145995, 28181021, 28187837, 28189466
28204262, 28205555, 28209985, 28210681, 28263142, 28271258, 28271693
28276054, 28279456, 28294563, 28302580, 28313275, 28319114, 28322973
28326928, 28338211, 28350595, 28370061, 28371123, 28373960, 28375383
28379065, 28381939, 28386259, 28390273, 28395302, 28397317, 28402823
28403019, 28406374, 28410431, 28431445, 28435333, 28436414, 28442896
28454215, 28463226, 28470673, 28475242, 28482048, 28484299, 28489419
28492006, 28498976, 28502773, 28504631, 28513333, 28521330, 28530171
28534475, 28535127, 28537481, 28538439, 28541606, 28542455, 28546290
28547068, 28547926, 28558645, 28561704, 28564479, 28565296, 28567417
28567819, 28569897, 28572407, 28572533, 28572544, 28572667, 28572834
28578945, 28587723, 28589509, 28593682, 28594086, 28597221, 28601957
28602253, 28605066, 28606598, 28608211, 28612239, 28618343, 28620697
28621543, 28622202, 28625580, 28625862, 28627033, 28628592, 28630381
28632796, 28636532, 28639299, 28640772, 28642469, 28642899, 28643583
28643654, 28643718, 28644549, 28645570, 28646200, 28646939, 28649388
28655209, 28661333, 28663289, 28663782, 28672457, 28673945, 28681153
28689483, 28690694, 28692103, 28692275, 28694639, 28694872, 28696373
28697526, 28698087, 28699321, 28700945, 28703812, 28705231, 28707931
28708400, 28709063, 28710385, 28710469, 28710663, 28710734, 28714461
28715655, 28715727, 28718469, 28719348, 28720204, 28720418, 28721497
28722229, 28730079, 28730253, 28734355, 28740708, 28740799, 28742555
28745367, 28749853, 28751498, 28752923, 28755011, 28755084, 28755846
28758722, 28760206, 28763291, 28765983, 28767240, 28769456, 28771947

28772390, 28772816, 28774416, 28776431, 28776811, 28777214, 28778754
28781599, 28781754, 28785273, 28785321, 28785531, 28789531, 28791852
28793062, 28794230, 28795551, 28795734, 28800508, 28802734, 28804517
28805242, 28806517, 28808314, 28808652, 28808656, 28810381, 28811560
28813931, 28815123, 28815355, 28815557, 28816871, 28817449, 28818063
28819640, 28820669, 28821847, 28824482, 28827682, 28831971, 28833912
28835937, 28836716, 28837979, 28838385, 28844738, 28845346, 28846759
28847541, 28847572, 28849776, 28850084, 28852325, 28854004, 28854733
28855520, 28855922, 28857552, 28861861, 28862532, 28863263, 28863432
28863487, 28865569, 28867698, 28867992, 28870496, 28871040, 28872645
28872829, 28873575, 28874416, 28875089, 28876253, 28876639, 28876926
28877252, 28878865, 28881191, 28881848, 28882784, 28884931, 28887305
28888083, 28888327, 28889389, 28889730, 28892794, 28897123, 28897512
28899663, 28900506, 28901126, 28905390, 28905457, 28905615, 28907196
28910498, 28910586, 28911140, 28912691, 28915561, 28917080, 28918429
28919145, 28921844, 28922227, 28922532, 28922608, 28925250, 28925460
28925634, 28925880, 28927452, 28928462, 28932914, 28933158, 28935293
28935956, 28936114, 28937717, 28938422, 28938698, 28940179, 28940281
28940472, 28941901, 28942455, 28942694, 28945421, 28945994, 28946233
28948554, 28949888, 28950868, 28951332, 28951533, 28952168, 28954762
28955606, 28955883, 28956908, 28957260, 28957292, 28957723, 28958088
28959493, 28960863, 28962775, 28963036, 28965084, 28965095, 28965231
28965376, 28966444, 28968779, 28974083, 28974999, 28977322, 28980448
28981871, 28983095, 28983486, 28984313, 28985114, 28985272, 28985362
28985478, 28986207, 28986231, 28986257, 28986326, 28986481, 28986696
28988482, 28988864, 28989306, 28993295, 28993353, 28994307, 28994542
28995287, 28996376, 28999046, 29000000, 29001305, 29001888, 29002488
29002784, 29002927, 29003207, 29003407, 29003617, 29003738, 29006318
29006621, 29007321, 29007353, 29007775, 29008035, 29008669, 29009513
29010126, 29010517, 29011936, 29012609, 29013475, 29013832, 29014076
29015118, 29016294, 29017265, 29018655, 29018680, 29019121, 29020423
29021063, 29021352, 29022986, 29024028, 29024054, 29024448, 29024552
29024732, 29024876, 29026154, 29026582, 29026606, 29027456, 29027694
29027933, 29027940, 29030184, 29030927, 29031575, 29031600, 29032234
29032276, 29032457, 29032607, 29033052, 29033145, 29033200, 29033280
29034587, 29036278, 29037290, 29038528, 29038728, 29039089, 29039510
29040739, 29041739, 29041775, 29043554, 29043651, 29043725, 29044086
29044763, 29044954, 29046482, 29047127, 29047850, 29048178, 29048289
29048498, 29048605, 29048728, 29049673, 29050357, 29050560, 29050765
29050886, 29051263, 29051702, 29051953, 29052726, 29052850, 29053783
29053902, 29055644, 29056024, 29056270, 29056560, 29056767, 29056894
29058476, 29059011, 29060216, 29061016, 29061959, 29062692, 29062848
29062860, 29062868, 29110526, 29110783, 29110790, 29110797, 29110802
29110805, 29111598, 29111631, 29112455, 29113282, 29113305, 29115857

29117337, 29117526, 29117642, 29118543, 29119077, 29120223, 29122224
29122254, 29122367, 29123297, 29123432, 29123444, 29123482, 29124368
29125036, 29125374, 29125380, 29125708, 29125786, 29126345, 29127957
29128693, 29128935, 29129450, 29129476, 29129497, 29129691, 29129712
29130219, 29131539, 29131772, 29132456, 29132869, 29132938, 29133470
29134447, 29135383, 29135649, 29136111, 29138641, 29139070, 29139727
29139761, 29139956, 29141316, 29141341, 29141685, 29141886, 29142609
29142667, 29143516, 29144995, 29145214, 29145730, 29146077, 29146157
29146810, 29147849, 29148799, 29149170, 29149829, 29150338, 29151520
29152357, 29152603, 29152752, 29154631, 29154636, 29154725, 29154829
29155099, 29157051, 29157389, 29158680, 29158899, 29159216, 29159661
29159909, 29159936, 29160174, 29160462, 29161597, 29161923, 29162095
29163073, 29163156, 29163415, 29163437, 29163524, 29163567, 29164376
29165682, 29167111, 29167342, 29167374, 29167940, 29168137, 29168219
29168433, 29169073, 29169215, 29169540, 29169739, 29170232, 29170717
29171683, 29171942, 29172618, 29172826, 29173140, 29173373, 29173618
29173817, 29174004, 29174753, 29175638, 29176318, 29177466, 29177543
29177886, 29178385, 29179097, 29180313, 29180455, 29180559, 29180721
29180893, 29181078, 29181153, 29181231, 29181568, 29181620, 29181743
29181923, 29182019, 29182517, 29182901, 29182920, 29183298, 29183912
29184297, 29184666, 29185193, 29186091, 29186456, 29186605, 29188255
29189302, 29189307, 29189889, 29190235, 29190474, 29190663, 29190740
29191541, 29191827, 29192419, 29192468, 29192685, 29193207, 29194205
29194367, 29194493, 29194827, 29194981, 29195279, 29195337, 29195758
29196725, 29198092, 29198913, 29199163, 29199635, 29199733, 29200316
29200700, 29201143, 29201494, 29201539, 29201695, 29201787, 29202104
29202461, 29202850, 29203041, 29203122, 29203166, 29203227, 29203425
29203443, 29203604, 29205281, 29205323, 29205419, 29205463, 29205767
29205918, 29206109, 29206605, 29207073, 29208260, 29208732, 29209545
29210577, 29210610, 29210624, 29210683, 29211457, 29211724, 29212012
29212433, 29212611, 29213320, 29213351, 29213613, 29213641, 29213775
29213850, 29213879, 29213893, 29214561, 29214960, 29216312, 29216723
29216746, 29216984, 29217294, 29217472, 29217828, 29217848, 29217856
29218570, 29219205, 29219273, 29219627, 29220079, 29221248, 29221891
29221942, 29222031, 29222784, 29223833, 29223859, 29223967, 29224065
29224294, 29224605, 29224710, 29225076, 29225168, 29225758, 29225861
29227602, 29228869, 29229164, 29229754, 29229839, 29229844, 29229955
29230252, 29230565, 29231133, 29232117, 29232154, 29232449, 29232653
29233415, 29233810, 29233953, 29234123, 29235934, 29236573, 29237538
29237575, 29237744, 29240307, 29240668, 29240759, 29241345, 29241651
29242017, 29242884, 29242906, 29243749, 29243958, 29244495, 29244766
29244968, 29245063, 29245137, 29245160, 29246163, 29247183, 29247415
29247712, 29247906, 29248495, 29248552, 29248723, 29248835, 29248858
29249289, 29249412, 29249583, 29249991, 29250059, 29250317, 29251259

29251564, 29253184, 29253871, 29254031, 29254623, 29254930, 29255178
29255273, 29255431, 29255435, 29255616, 29255705, 29255718, 29255973
29256426, 29259119, 29259320, 29260224, 29260452, 29260956, 29261547
29261548, 29261695, 29261906, 29262512, 29262887, 29265448, 29266248
29266899, 29267292, 29268412, 29269171, 29269228, 29269825, 29270585
29271019, 29273168, 29273360, 29273539, 29273570, 29273735, 29273812
29273847, 29274428, 29274564, 29274627, 29275461, 29276272, 29277317
29278218, 29278684, 29279658, 29279751, 29279854, 29281112, 29281527
29281691, 29281796, 29282090, 29282233, 29282666, 29282898, 29285197
29285453, 29285503, 29285621, 29285788, 29285956, 29286037, 29286220
29286229, 29287130, 29287705, 29290110, 29290235, 29292232, 29292837
29293072, 29293574, 29293806, 29294753, 29296257, 29297863, 29297915
29298220, 29299049, 29299082, 29299830, 29299844, 29301463, 29301566
29302565, 29302614, 29302963, 29303918, 29304314, 29304692, 29304781
29304853, 29305093, 29306226, 29306713, 29307090, 29307109, 29307638
29309698, 29311336, 29311528, 29311588, 29311927, 29312310, 29312672
29312734, 29312753, 29312889, 29313347, 29313417, 29313525, 29314539
29314636, 29317756, 29318410, 29319441, 29320900, 29321489, 29321689
29323946, 29324568, 29324735, 29325087, 29325105, 29325257, 29325765
29325993, 29326233, 29327044, 29327892, 29329042, 29329087, 29329675
29329807, 29329848, 29330361, 29330791, 29331066, 29331209, 29331380
29331493, 29332292, 29332395, 29332763, 29332771, 29333500, 29336843
29336899, 29337294, 29337310, 29337742, 29338315, 29338348, 29338453
29338780, 29338913, 29339101, 29339155, 29339299, 29340333, 29341209
29342099, 29343086, 29343156, 29343861, 29344541, 29345937, 29346057
29346211, 29346943, 29347620, 29348176, 29348358, 29350052, 29350712
29350762, 29350868, 29351044, 29351386, 29351662, 29351716, 29351735
29351749, 29351771, 29352298, 29352724, 29352867, 29352947, 29353271
29353432, 29353718, 29353821, 29353960, 29355654, 29356547, 29356704
29356711, 29356752, 29356782, 29357821, 29358509, 29358828, 29360252
29360285, 29360467, 29360672, 29360775, 29360911, 29360950, 29361319
29361472, 29361801, 29362596, 29363151, 29364171, 29364177, 29366406
29366940, 29367019, 29367561, 29367971, 29368253, 29368310, 29368725
29372069, 29372541, 29372562, 29373418, 29373588, 29374179, 29374604
29375355, 29375941, 29375984, 29376346, 29377804, 29377986, 29378029
29378287, 29378834, 29378913, 29379299, 29379381, 29379750, 29379978
29380527, 29381000, 29382296, 29382641, 29382784, 29382815, 29383695
29384781, 29384854, 29384864, 29385339, 29385429, 29385652, 29386502
29386557, 29386635, 29386660, 29386835, 29387073, 29387274, 29387310
29387337, 29388020, 29388072, 29388094, 29388524, 29388830, 29389408
29389889, 29390011, 29390435, 29390785, 29391030, 29391237, 29391301
29391438, 29391849, 29391925, 29392554, 29392966, 29393291, 29393649
29394014, 29394140, 29394749, 29395657, 29396481, 29397841, 29397954
29397996, 29398488, 29398863, 29399046, 29399100, 29399121, 29399336

29399938, 29402110, 29402131, 29404483, 29405012, 29405462, 29405651
29405996, 29407488, 29407804, 29408853, 29409149, 29409455, 29410311
29410834, 29411037, 29411469, 29411931, 29412066, 29412269, 29413360
29413382, 29413517, 29413544, 29413634, 29413956, 29415493, 29416688
29416700, 29417084, 29417173, 29417719, 29417884, 29418165, 29418341
29420254, 29420834, 29421059, 29423003, 29423016, 29423156, 29423491
29423826, 29424999, 29426241, 29426320, 29428230, 29429017, 29429087
29429264, 29429466, 29429566, 29429895, 29430524, 29430866, 29431192
29431402, 29431485, 29432176, 29434301, 29434869, 29435474, 29435652
29436454, 29436514, 29436522, 29436727, 29437029, 29437379, 29437594
29437712, 29438150, 29438277, 29438736, 29439522, 29440651, 29441196
29442400, 29442936, 29443187, 29443250, 29443559, 29444072, 29444282
29444602, 29445548, 29446319, 29446669, 29448498, 29449477, 29449845
29449852, 29450162, 29450193, 29450273, 29450421, 29450812, 29450936
29451085, 29451386, 29452251, 29452576, 29452936, 29452953, 29454450
29454978, 29455424, 29455773, 29456538, 29456714, 29457312, 29457319
29457370, 29457502, 29457807, 29457978, 29458132, 29460252, 29461420
29461791, 29461971, 29462594, 29462767, 29462957, 29463047, 29463528
29463798, 29464616, 29464779, 29465047, 29465177, 29466674, 29467622
29469563, 29469565, 29470059, 29470291, 29471633, 29471832, 29471857
29471860, 29472618, 29473708, 29476473, 29477015, 29481584, 29482021
29483452, 29483532, 29483626, 29483672, 29483685, 29483712, 29483723
29483771, 29485099, 29485877, 29486181, 29486848, 29487150, 29487189
29487407, 29488894, 29489436, 29489546, 29490256, 29491784, 29492127
29492939, 29493122, 29494245, 29495057, 29495171, 29495684, 29497311
29497588, 29497696, 29498198, 29500257, 29500826, 29500963, 29501218
29502561, 29503543, 29503631, 29503827, 29504103, 29504492, 29504682
29505225, 29505589, 29505668, 29506942, 29507270, 29507616, 29508681
29509777, 29510278, 29511064, 29511611, 29511980, 29512125, 29512890
29514479, 29515134, 29515240, 29515476, 29515766, 29515834, 29516300
29516727, 29516766, 29517168, 29517883, 29518604, 29518767, 29519131
29521187, 29521688, 29521748, 29521862, 29522358, 29522561, 29522662
29523055, 29523216, 29523511, 29524599, 29524985, 29525366, 29525467
29525886, 29526966, 29527595, 29527610, 29528368, 29529147, 29530440
29530515, 29530812, 29530909, 29531654, 29531836, 29532112, 29532532
29536342, 29536445, 29536794, 29537829, 29538631, 29539413, 29540327
29541742, 29541769, 29541973, 29542084, 29542449, 29542580, 29542643
29543034, 29543956, 29544552, 29546817, 29547010, 29547867, 29548413
29548427, 29548592, 29548687, 29548722, 29549040, 29549071, 29549104
29549154, 29549730, 29550530, 29552402, 29552773, 29553141, 29554092
29555105, 29557144, 29557261, 29557336, 29557556, 29558238, 29558452
29558926, 29558975, 29559187, 29559395, 29559446, 29559908, 29559981
29564592, 29564593, 29565611, 29579919, 29580394, 29580983, 29581771
29584261, 29584693, 29586143, 29587299, 29587720, 29587765, 29588732

29589544, 29591343, 29591641, 29592011, 29592215, 29597536, 29597716
29597754, 29598039, 29598046, 29598226, 29598233, 29599008, 29599243
29599300, 29599552, 29601461, 29602831, 29603460, 29603884, 29604002
29604257, 29606261, 29607136, 29607797, 29608000, 29608023, 29610506
29611020, 29611991, 29614206, 29614931, 29614987, 29615824, 29616244
29616414, 29618074, 29618190, 29620042, 29622936, 29623323, 29623592
29624124, 29625065, 29625804, 29625876, 29626154, 29626732, 29628200
29628647, 29629430, 29629650, 29629681, 29629745, 29631749, 29632095
29632265, 29632611, 29633697, 29633753, 29633936, 29634643, 29635427
29635717, 29635990, 29637362, 29637526, 29637560, 29638285, 29641736
29642451, 29643721, 29644426, 29644464, 29645167, 29645349, 29647176
29647770, 29648928, 29649694, 29651183, 29651520, 29652809, 29653132
29653246, 29655164, 29655668, 29656400, 29656819, 29656843, 29657399
29657422, 29657744, 29657960, 29658056, 29661028, 29661065, 29661722
29663191, 29663368, 29663494, 29663601, 29664087, 29664161, 29665168
29665940, 29666451, 29667527, 29667994, 29668005, 29669413, 29670713
29670782, 29671363, 29672507, 29675446, 29676089, 29677051, 29677173
29677733, 29677927, 29679856, 29680700, 29681987, 29683039, 29683211
29684518, 29685137, 29685276, 29687214, 29687220, 29687459, 29687718
29687727, 29687763, 29688867, 29689145, 29689255, 29692694, 29694869
29695425, 29695821, 29695841, 29695964, 29695987, 29696310, 29697928
29700125, 29700460, 29700770, 29701720, 29703932, 29705793, 29706160
29707099, 29707493, 29707896, 29708324, 29708353, 29708876, 29708915
29710188, 29710858, 29713810, 29715220, 29715703, 29716194, 29716227
29716491, 29716602, 29716871, 29717659, 29717901, 29718198, 29719146
29720133, 29720373, 29721418, 29721576, 29722167, 29724658, 29725476
29725781, 29726695, 29737941, 29738374, 29738400, 29739576, 29741319
29741976, 29742223, 29744225, 29744400, 29744637, 29745288, 29746962
29747493, 29747648, 29747653, 29748285, 29748325, 29748336, 29748513
29749471, 29750673, 29751094, 29753244, 29754196, 29754951, 29755821
29756274, 29756444, 29757099, 29757264, 29757651, 29757687, 29758203
29758217, 29758661, 29761678, 29761837, 29761911, 29763158, 29764644
29765035, 29765219, 29765347, 29765393, 29765493, 29766207, 29766435
29766503, 29766679, 29768487, 29768899, 29769901, 29770750, 29771032
29771242, 29772514, 29772761, 29773197, 29773205, 29773842, 29774362
29775393, 29779196, 29780140, 29782211, 29782284, 29782823, 29782866
29783142, 29784106, 29785239, 29785311, 29785831, 29787292, 29787766
29789911, 29791152, 29791880, 29792213, 29792433, 29793318, 29794174
29794462, 29795712, 29795957, 29796335, 29796378, 29796916, 29797209
29797726, 29801164, 29802382, 29802695, 29804875, 29805368, 29805772
29806390, 29806964, 29807964, 29809792, 29809837, 29811616, 29812084
29812489, 29813503, 29813650, 29813671, 29814995, 29815341, 29815713
29816887, 29817278, 29817547, 29817784, 29820341, 29821130, 29821582
29822714, 29825525, 29827647, 29827852, 29828644, 29829339, 29831196

29833984, 29834506, 29836096, 29838337, 29838485, 29838740, 29838773
29839715, 29840619, 29841267, 29841687, 29842369, 29843277, 29843692
29843831, 29844131, 29844226, 29844275, 29845530, 29846126, 29846525
29846645, 29846688, 29848084, 29848849, 29849100, 29850930, 29851733
29853485, 29856420, 29856859, 29856890, 29858121, 29858376, 29858420
29859068, 29860022, 29860994, 29861075, 29864203, 29864261, 29865188
29865590, 29865658, 29869052, 29869086, 29869149, 29869404, 29869887
29869906, 29870065, 29870533, 29871098, 29871312, 29871360, 29872401
29872937, 29872983, 29873665, 29874090, 29874761, 29875200, 29875459
29875565, 29876358, 29876989, 29877608, 29878076, 29881050, 29881478
29881575, 29881643, 29881839, 29882427, 29882454, 29882729, 29884958
29885182, 29885890, 29886809, 29887045, 29887111, 29888621, 29889184
29889358, 29890740, 29891075, 29891853, 29891916, 29892604, 29893132
29894021, 29896510, 29897418, 29897863, 29900203, 29900824, 29901419
29901961, 29902299, 29902327, 29902330, 29902659, 29903190, 29903299
29903357, 29903454, 29904002, 29906678, 29907942, 29908389, 29908777
29909658, 29910218, 29910402, 29912135, 29912286, 29913805, 29913966
29914449, 29914544, 29915217, 29915848, 29916975, 29919789, 29920025
29920376, 29920804, 29921318, 29922225, 29922461, 29923452, 29924181
29926466, 29927756, 29928210, 29928340, 29928427, 29928564, 29930457
29931956, 29932202, 29932310, 29932430, 29932780, 29934048, 29934052
29935685, 29937565, 29937655, 29937956, 29938225, 29939400, 29939795
29940373, 29941062, 29942096, 29942275, 29942554, 29943670, 29943879
29944035, 29944159, 29944660, 29944963, 29945645, 29946388, 29947145
29947428, 29948165, 29950220, 29951620, 29951759, 29952700, 29956016
29956222, 29957412, 29957493, 29958925, 29960884, 29961353, 29961360
29961609, 29961847, 29962160, 29962248, 29962834, 29962927, 29962939
29965052, 29965603, 29965888, 29966768, 29967223, 29968085, 29969557
29970081, 29970261, 29970298, 29970587, 29971027, 29971481, 29971888
29971936, 29971951, 29972134, 29972176, 29973012, 29989783, 29989845
29990779, 29991257, 29993717, 29997326, 29997553, 29997937, 30000664
30001105, 30001331, 30003187, 30004660, 30004856, 30006159, 30006985
30007450, 30007536, 30007797, 30008125, 30008198, 30008214, 30009710
30012181, 30014200, 30015070, 30017836, 30018017, 30018903, 30019864
30021830, 30024618, 30025814, 30026016, 30026596, 30027614, 30027649
30028182, 30028599, 30029519, 30029806, 30031027, 30032233, 30032376
30032484, 30033040, 30033547, 30034456, 30035598, 30036258, 30038392
30039800, 30039959, 30040157, 30041501, 30041514, 30042490, 30043398
30043610, 30043930, 30044108, 30044507, 30045273, 30045389, 30045484
30046497, 30047531, 30047702, 30047765, 30047931, 30048688, 30049966
30051176, 30051783, 30051804, 30052928, 30053036, 30053501, 30053748
30054980, 30056058, 30057718, 30057799, 30058149, 30058453, 30059106
30059109, 30060267, 30060330, 30062364, 30062819, 30064268, 30066352
30067565, 30068384, 30068792, 30068871, 30071446, 30072018, 30072905

30073314, 30073422, 30073744, 30074296, 30074349, 30074469, 30074472
30074820, 30075037, 30076058, 30076197, 30076253, 30076604, 30078675
30078934, 30079949, 30080111, 30080266, 30081546, 30081580, 30082145
30083100, 30083216, 30083488, 30083807, 30084971, 30085897, 30086596
30086992, 30087165, 30087509, 30088229, 30090568, 30092280, 30092859
30094929, 30095591, 30095952, 30097092, 30097115, 30098251, 30099302
30099420, 30099454, 30100354, 30101186, 30102774, 30103551, 30103553
30104348, 30104378, 30104555, 30106748, 30106901, 30108012, 30109365
30110224, 30110370, 30110518, 30114477, 30114489, 30114534, 30116085
30116203, 30116854, 30117209, 30117335, 30117469, 30117593, 30118261
30118279, 30120608, 30122523, 30122583, 30123138, 30125765, 30126145
30126470, 30127145, 30127522, 30127805, 30127904, 30128047, 30130240
30131286, 30131645, 30132708, 30133841, 30134746, 30135396, 30135731
30135942, 30136346, 30137792, 30139392, 30142907, 30143470, 30143593
30146593, 30146969, 30147195, 30147307, 30147473, 30147928, 30148929
30148999, 30149035, 30149658, 30150606, 30150710, 30153552, 30153885
30154633, 30155241, 30155489, 30155814, 30155837, 30155999, 30156569
30157526, 30158313, 30159329, 30159511, 30159536, 30159752, 30159760
30160625, 30161094, 30163243, 30164714, 30165493, 30165503, 30165897
30167787, 30169254, 30170104, 30172925, 30173113, 30173370, 30173556
30174401, 30175291, 30175587, 30177597, 30178250, 30178839, 30178990
30179038, 30179644, 30180208, 30180643, 30181756, 30182498, 30183367
30183696, 30183715, 30183920, 30184102, 30185852, 30186319, 30186476
30186706, 30187627, 30187866, 30189516, 30189535, 30190090, 30191274
30192691, 30192729, 30192853, 30193165, 30193262, 30193505, 30193506
30193584, 30193736, 30194612, 30194710, 30194972, 30195667, 30195668
30195684, 30196195, 30196358, 30196629, 30198239, 30198861, 30198905
30199890, 30200034, 30200132, 30200237, 30200680, 30200758, 30202349
30202388, 30203929, 30204042, 30204542, 30206493, 30206675, 30207473
30208327, 30208690, 30208723, 30209222, 30209736, 30210429, 30210753
30210884, 30213031, 30213540, 30214769, 30214826, 30215130, 30215302
30215351, 30217206, 30217562, 30217982, 30218044, 30218317, 30219222
30221237, 30221298, 30222512, 30222669, 30222975, 30223712, 30223847
30224544, 30224650, 30224725, 30224868, 30224950, 30225265, 30225439
30225443, 30225718, 30225844, 30226244, 30228567, 30229683, 30232638
30233934, 30234132, 30234227, 30235919, 30235979, 30236554, 30236964
30237477, 30238211, 30238715, 30239480, 30240010, 30240547, 30240858
30240930, 30240972, 30241567, 30241807, 30241920, 30242120, 30242724
30243216, 30244340, 30246053, 30246179, 30247305, 30248531, 30249432
30251003, 30252005, 30252098, 30252156, 30252458, 30252977, 30253035
30253090, 30253608, 30253705, 30253835, 30254206, 30254525, 30254576
30254726, 30255143, 30255528, 30256542, 30257412, 30257908, 30259120
30259469, 30260595, 30264405, 30265523, 30265608, 30265615, 30265703
30266791, 30267155, 30269428, 30269748, 30270647, 30270744, 30271114

30272329, 30274090, 30274188, 30274324, 30274662, 30275548, 30275569
30275578, 30276144, 30276243, 30277120, 30277451, 30277589, 30277733
30277887, 30278402, 30281428, 30282501, 30282591, 30282918, 30283296
30283577, 30283579, 30283581, 30283932, 30284219, 30284369, 30285026
30285166, 30285251, 30285457, 30285540, 30285843, 30288343, 30288491
30289074, 30289458, 30292305, 30293345, 30294267, 30294465, 30294671
30295110, 30295137, 30295549, 30295790, 30295808, 30297905, 30299367
30299817, 30299934, 30300030, 30300342, 30300363, 30300523, 30300538
30305264, 30305395, 30305568, 30305880, 30307814, 30307883, 30308368
30308624, 30308772, 30308947, 30309098, 30309798, 30311826, 30312094
30312546, 30313749, 30313848, 30313989, 30314079, 30314198, 30314837
30316667, 30316897, 30317209, 30317397, 30318638, 30318943, 30319080
30319099, 30320029, 30321076, 30321398, 30322980, 30323658, 30323849
30324180, 30324466, 30325407, 30326882, 30327149, 30327810, 30328168
30328690, 30329209, 30329751, 30330123, 30331356, 30331759, 30332505
30334484, 30334563, 30335127, 30335832, 30335987, 30336032, 30336383
30336530, 30336742, 30336996, 30337245, 30338591, 30339103, 30341713
30342371, 30342878, 30344614, 30345201, 30345432, 30345809, 30345926
30346330, 30346867, 30347410, 30349714, 30350177, 30350543, 30352532
30352581, 30352623, 30352715, 30355490, 30357463, 30357698, 30357897
30358416, 30359614, 30360383, 30361635, 30362003, 30362850, 30363088
30363311, 30363716, 30364329, 30364481, 30364613, 30365745, 30367193
30368048, 30368482, 30368534, 30368668, 30368917, 30371264, 30371623
30371909, 30372081, 30373419, 30373550, 30374345, 30374570, 30374739
30375109, 30376986, 30377347, 30377692, 30380907, 30381207, 30381525
30382646, 30382982, 30383286, 30384121, 30384152, 30387628, 30387666
30388853, 30389229, 30389414, 30389507, 30389821, 30390635, 30391272
30392011, 30392870, 30392987, 30393110, 30393653, 30394738, 30394974
30396120, 30396946, 30397100, 30398257, 30398422, 30399906, 30402386
30403412, 30403763, 30403881, 30403902, 30403989, 30404117, 30404153
30404639, 30406709, 30408515, 30408808, 30409207, 30409339, 30409472
30409590, 30412188, 30412772, 30412863, 30412885, 30412921, 30413137
30413294, 30414491, 30414679, 30414714, 30416034, 30416603, 30417648
30417732, 30419024, 30421026, 30421204, 30421439, 30421476, 30421706
30422487, 30423135, 30423218, 30424347, 30430921, 30431274, 30431504
30431698, 30431703, 30431717, 30431867, 30433177, 30436399, 30437003
30437149, 30439985, 30440651, 30441277, 30441687, 30441959, 30442266
30442749, 30442884, 30443393, 30446583, 30446820, 30447060, 30447589
30447994, 30448182, 30448917, 30449194, 30449837, 30450787, 30453442
30454090, 30457633, 30458568, 30458593, 30460095, 30460922, 30461123
30461458, 30463938, 30464250, 30464655, 30466081, 30469777, 30472891
30473634, 30474167, 30474774, 30475115, 30476768, 30477588, 30477685
30477691, 30477767, 30479252, 30479715, 30480872, 30483065, 30483140
30483521, 30484042, 30484801, 30485255, 30486436, 30486896, 30487387

30489582, 30490014, 30490578, 30492380, 30493518, 30494259, 30494900
30495035, 30495078, 30495133, 30495483, 30496957, 30497057, 30497765
30498824, 30500224, 30500297, 30500344, 30500582, 30501574, 30502415
30503943, 30505029, 30505497, 30506794, 30506991, 30507032, 30508100
30509277, 30510347, 30510527, 30512690, 30513285, 30513480, 30513848
30515886, 30516868, 30517214, 30517516, 30517635, 30518349, 30519188
30522285, 30522998, 30523137, 30523538, 30523601, 30523750, 30524736
30528547, 30528687, 30528704, 30528935, 30529790, 30529940, 30530585
30532811, 30533132, 30534351, 30534549, 30534662, 30534827, 30536237
30537405, 30537533, 30537584, 30539519, 30540109, 30540407, 30544247
30544595, 30544629, 30545281, 30545556, 30549255, 30549368, 30549637
30549789, 30549881, 30551000, 30551123, 30554178, 30556326, 30556581
30556807, 30557386, 30558561, 30559252, 30560365, 30560513, 30561404
30561590, 30561737, 30564139, 30564343, 30564898, 30565004, 30565595
30565805, 30566054, 30567372, 30571306, 30573236, 30573703, 30576112
30576393, 30576853, 30577071, 30577591, 30578221, 30579051, 30580813
30581448, 30582221, 30582500, 30588738, 30591028, 30591475, 30592859
30593046, 30593104, 30593863, 30594167, 30595114, 30595408, 30595860
30596488, 30596694, 30598682, 30598746, 30598919, 30599405, 30599407
30600173, 30600184, 30602230, 30602828, 30605215, 30605676, 30606345
30606451, 30608583, 30609799, 30610406, 30610667, 30611603, 30612199
30613937, 30613971, 30614411, 30616406, 30616738, 30619138, 30619525
30619728, 30619787, 30620805, 30621255, 30622528, 30622755, 30623138
30623142, 30624243, 30624792, 30624864, 30624874, 30625121, 30628834
30628899, 30629139, 30629643, 30629799, 30631393, 30631523, 30633259
30633938, 30634548, 30635183, 30635302, 30635326, 30637270, 30637319
30641541, 30641755, 30641900, 30644530, 30644766, 30644889, 30645896
30647133, 30650404, 30651231, 30651570, 30651621, 30651674, 30652515
30652853, 30654558, 30655906, 30657196, 30657365, 30657566, 30657624
30657706, 30657875, 30657906, 30657940, 30658533, 30658555, 30658702
30659940, 30660412, 30661000, 30661939, 30662651, 30662736, 30663646
30665399, 30668407, 30670328, 30670584, 30671720, 30671813, 30671958
30674373, 30674959, 30676209, 30677633, 30679595, 30679771, 30681462
30681516, 30681521, 30684902, 30686017, 30686131, 30687047, 30689557
30690686, 30691604, 30691731, 30691857, 30692462, 30692473, 30693791
30694947, 30696566, 30698289, 30703610, 30704826, 30705448, 30708735
30710807, 30711370, 30712670, 30713133, 30714151, 30714715, 30716863
30718841, 30718862, 30719327, 30719419, 30720736, 30720844, 30722705
30723671, 30724679, 30724881, 30727701, 30727759, 30729278, 30729604
30730026, 30732711, 30734707, 30735153, 30735736, 30739876, 30740669
30740997, 30741263, 30748707, 30749644, 30749722, 30750219, 30750991
30751521, 30751527, 30751639, 30751968, 30753432, 30755348, 30758836
30758854, 30758943, 30761871, 30761878, 30763272, 30763305, 30763639
30763754, 30764405, 30764663, 30765486, 30765995, 30767277, 30768636

30769312, 30770717, 30773164, 30773797, 30776416, 30776929, 30777759
30778855, 30779240, 30781032, 30781041, 30782266, 30782300, 30782414
30783395, 30783551, 30785101, 30786237, 30786641, 30786655, 30788973
30789904, 30790441, 30801296, 30801510, 30803210, 30804646, 30806757
30806984, 30807723, 30807888, 30808869, 30809087, 30810765, 30812574
30814266, 30814285, 30815495, 30815852, 30816760, 30816938, 30819340
30819629, 30821297, 30823744, 30825391, 30825419, 30825656, 30826474
30828350, 30829779, 30830555, 30832775, 30833454, 30834068, 30834110
30835184, 30835853, 30836129, 30838605, 30839451, 30839836, 30841241
30842277, 30843271, 30844839, 30846063, 30846782, 30847442, 30847871
30848028, 30848097, 30848773, 30851448, 30851951, 30852954, 30855101
30856358, 30857501, 30857721, 30858877, 30858919, 30860803, 30861988
30863115, 30864607, 30865805, 30866141, 30866988, 30869131, 30870439
30871716, 30871792, 30873527, 30874270, 30874337, 30874660, 30879169
30879708, 30880774, 30880913, 30881407, 30883715, 30883785, 30883877
30886188, 30887501, 30887777, 30889443, 30889607, 30889723, 30890720
30890971, 30891760, 30891792, 30895426, 30895577, 30896620, 30896685
30898381, 30898748, 30898939, 30902655, 30904672, 30906274, 30906407
30909596, 30909918, 30910264, 30913399, 30914272, 30914674, 30915781
30919587, 30919691, 30919804, 30921136, 30922936, 30922996, 30923514
30923517, 30923597, 30923940, 30925316, 30927821, 30930149, 30930339
30931311, 30931981, 30932674, 30936251, 30936831, 30936942, 30937340
30937391, 30937410, 30938413, 30939307, 30939317, 30939934, 30940259
30940868, 30940869, 30941056, 30944643, 30945005, 30946072, 30946768
30946876, 30952104, 30952191, 30953266, 30953836, 30956571, 30956647
30957739, 30960356, 30960736, 30964194, 30965554, 30965649, 30968737
30968781, 30970518, 30972817, 30972841, 30972887, 30972947, 30972951
30972959, 30972966, 30973085, 30973113, 30973127, 30973137, 30973143
30973197, 30973698, 30973877, 30974813, 30977411, 30978554, 30980115
30980317, 30980733, 30981240, 30985027, 30985906, 30987088, 30988444
30990034, 30992330, 30992597, 30993198, 30993518, 30994996, 30996991
30997375, 30998035, 30998662, 30998759, 30998847, 31001017, 31001455
31001490, 31001859, 31002223, 31002923, 31003137, 31003659, 31004077
31004719, 31004844, 31006792, 31008240, 31008907, 31009545, 31009590
31009680, 31010218, 31010976, 31011361, 31013127, 31014323, 31015330
31016413, 31019249, 31021068, 31021157, 31021324, 31021542, 31022858
31025520, 31025531, 31025859, 31026220, 31026591, 31026860, 31027747
31028986, 31029936, 31030898, 31031955, 31032904, 31034794, 31035287
31035916, 31037421, 31038220, 31038447, 31039627, 31039928, 31042208
31043483, 31043630, 31044145, 31044951, 31045929, 31046188, 31046619
31047022, 31047169, 31048025, 31048741, 31049215, 31051056, 31051075
31052735, 31052809, 31055142, 31056909, 31058548, 31061482, 31061504
31062010, 31063380, 31063769, 31064025, 31065838, 31066082, 31066250
31066265, 31066554, 31067892, 31069059, 31071080, 31073586, 31074032

31075323, 31075960, 31077117, 31077365, 31078391, 31078757, 31079204
31080474, 31081558, 31084921, 31086869, 31087361, 31087679, 31088115
31088341, 31089270, 31090262, 31091868, 31092129, 31092233, 31092581
31092921, 31094183, 31094228, 31094688, 31096846, 31097760, 31097961
31100172, 31101386, 31103065, 31104809, 31106140, 31106577, 31107577
31109506, 31112530, 31112972, 31113089, 31113249, 31114265, 31114671
31115201, 31115502, 31118809, 31119057, 31119846, 31120361, 31122876
31124363, 31124914, 31125773, 31126053, 31126058, 31127043, 31127457
31127969, 31130156, 31132732, 31134430, 31138106, 31139643, 31141792
31142749, 31145403, 31145804, 31153120, 31153485, 31155634, 31156383
31158341, 31158380, 31159382, 31162711, 31162915, 31163379, 31165038
31165577, 31165722, 31168440, 31171096, 31171631, 31172207, 31172642
31175365, 31177193, 31177204, 31177221, 31178103, 31180519, 31181380
31182159, 31182756, 31182793, 31185224, 31188038, 31188398, 31190624
31192039, 31193292, 31193936, 31194264, 31195090, 31195430, 31195838
31200845, 31201001, 31201366, 31202536, 31204412, 31204878, 31208287
31213034, 31214119, 31215422, 31215438, 31216995, 31217946, 31218837
31219047, 31219975, 31220549, 31220881, 31220912, 31221454, 31222780
31223382, 31226448, 31228670, 31230775, 31233170, 31234765, 31234790
31235797, 31240626, 31244968, 31249008, 31249406, 31249696, 31254297
31254535, 31254929, 31255369, 31255869, 31257740, 31258101, 31258995
31260692, 31261641, 31265651, 31265773, 31268557, 31270711, 31271032
31287871, 31289115, 31290300, 31292298, 31293484, 31298871, 31301460
31303032, 31304573, 31305114, 31305624, 31306248, 31306261, 31306867
31306927, 31309379, 31309867, 31310564, 31310624, 31311830, 31312450
31312976, 31313117, 31313444, 31314885, 31315495, 31315876, 31316250
31321092, 31322720, 31325584, 31326608, 31326977, 31326998, 31327259
31327278, 31327349, 31327391, 31327896, 31331354, 31331372, 31333156
31334606, 31334961, 31335037, 31335142, 31336298, 31338249, 31338673
31338769, 31339457, 31339643, 31339744, 31343110, 31344046, 31348711
31350348, 31353610, 31356601, 31357581, 31357737, 31358308, 31359215
31359366, 31360146, 31360323, 31360469, 31360529, 31366716, 31367188
31367364, 31369444, 31372498, 31373825, 31373837, 31373843, 31376708
31377129, 31377487, 31377808, 31380443, 31381701, 31383396, 31383464
31383814, 31386394, 31387426, 31387443, 31388288, 31390936, 31391991
31393600, 31394341, 31394347, 31394365, 31395247, 31396027, 31396695
31398663, 31399131, 31401831, 31402078, 31403177, 31403565, 31404014
31404130, 31404263, 31408636, 31409483, 31411163, 31414023, 31414524
31417192, 31421316, 31422620, 31424838, 31425167, 31425761, 31429501
31429590, 31429770, 31430722, 31431005, 31433092, 31433579, 31434805
31434870, 31437030, 31440426, 31440813, 31442332, 31442714, 31444353
31444516, 31446431, 31447733, 31448680, 31449354, 31450392, 31450653
31454972, 31455597, 31458049, 31466433, 31468060, 31475635, 31476093
31476736, 31477424, 31477695, 31479272, 31479772, 31483949, 31484385

31484603, 31485386, 31485507, 31486557, 31487441, 31487491, 31489137
31490604, 31491634, 31493840, 31494264, 31496174, 31498559, 31499370
31499700, 31500971, 31501139, 31503349, 31507107, 31508712, 31509279
31510891, 31512044, 31513011, 31523548, 31525783, 31526903, 31527103
31527199, 31528962, 31533274, 31533817, 31533833, 31535955, 31536401
31536731, 31537521, 31539566, 31541864, 31544097, 31545477, 31546864
31547220, 31548675, 31549221, 31553674, 31553813, 31555539, 31557663
31559085, 31560592, 31561886, 31567124, 31567441, 31570054, 31570161
31572006, 31572267, 31574244, 31574267, 31576738, 31577569, 31578994
31581627, 31585351, 31585789, 31586381, 31591384, 31591400, 31591409
31591421, 31595632, 31597727, 31600023, 31600894, 31601385, 31603199
31605119, 31607937, 31609974, 31616104, 31620748, 31625579, 31625618
31626572, 31627587, 31628311, 31628753, 31630551, 31633224, 31637607
31637680, 31640240, 31644775, 31648120, 31649819, 31650202, 31652641
31653080, 31655807, 31658464, 31658943, 31661865, 31663189, 31663788
31668061, 31668694, 31668872, 31670014, 31670353, 31672605, 31674380
31675568, 31676941, 31677460, 31682766, 31683044, 31684494, 31686979
31688978, 31691030, 31695062, 31696577, 31697741, 31700234, 31701910
31706595, 31707190, 31708133, 31709647, 31709739, 31709777, 31711889
31711997, 31715935, 31718134, 31718346, 31721863, 31721880, 31722646
31723651, 31727560, 31728160, 31734583, 31735662, 31743771, 31747935
31747989, 31748000, 31748944, 31752502, 31753202, 31753425, 31753692
31754887, 31755245, 31756415, 31757357, 31757775, 31757824, 31758083
31758846, 31760592, 31763707, 31764866, 31765257, 31765296, 31766696
31767237, 31769373, 31770289, 31771370, 31771410, 31771468, 31775101
31776994, 31781897, 31783451, 31783782, 31785445, 31786838, 31787655
31788704, 31788761, 31790500, 31792465, 31792615, 31793713, 31796208
31796277, 31796882, 31798742, 31800757, 31807516, 31815099, 31816158
31816631, 31820632, 31820859, 31823051, 31827605, 31827912, 31829617
31829639, 31833172, 31833948, 31835854, 31836454, 31839779, 31842545
31843462, 31847489, 31849859, 31851383, 31852574, 31854692, 31855526
31860193, 31862359, 31863118, 31866141, 31867037, 31869601, 31871692
31872230, 31876368, 31878314, 31880154, 31881527, 31883124, 31886547
31886695, 31887130, 31888148, 31888731, 31889222, 31895670, 31897786
31897854, 31900585, 31903523, 31904933, 31905033, 31907137, 31907565
31909295, 31913650, 31921267, 31927930, 31935717, 31942144, 31943497
31952052, 31953989, 31958958, 31961940, 31965542, 31974597, 31974693
31986836, 31988079, 31991705, 31996264, 32002411, 32003551, 32005048
32007698, 32008586, 32010707, 32017301, 32032733, 32032887, 32048412
32050048, 32057639, 32061648, 32069696, 32069834, 32079739, 32082098
32089820, 32097882, 32101305, 32113113, 32118727, 32121326, 32129659
32130083, 32130504, 32150818, 32165759, 32169151, 32172777, 32174571
32207088, 32212635, 32221141, 32234161, 32290399, 32296941, 32321765

Version 19.0.0.0.ru-2021-01.rur-2021-01.r1

Important

We recommend that you upgrade your DB instance to 19.0.0.0.ru-2021-01.rur-2021-01.r2 rather than to 19.0.0.0.ru-2021-01.rur-2021-01.r1. The application of the patch for minor engine upgrades to 19.0.0.0.ru-2021-01.rur-2021-01.r1 encountered an issue. Release update 19.10.0.0.210119 (32218454) didn't register correctly in the DBA_REGISTRY_SQLPATCH table.

Version 19.0.0.0.ru-2021-01.rur-2021-01.r1 includes the following:

- Patch [32218454](#): DATABASE RELEASE UPDATE 19.10.0.0.210119
- Patch [32067171](#): OJVM RELEASE UPDATE 19.10.0.0.210119
- Patch [31335037](#): RDBMS - DSTV35 UPDATE - TZDATA2020A
- Patch [31335142](#): DSTV35 UPDATE - TZDATA2020A - NEED OJVM FIX
- Patch [29213893](#): DBMS_STATS FAILING WITH ERROR ORA-01422 WHEN GATHERING STATS FOR USER TABLE
- Patch [29782284](#): ORA-06508:"MDSYS.MDPRVT_IDX" WHILE UPGRADING DATABASE TO 18.3
- Patch [28730253](#): SUPPORT NEW ERA REIWA FOR JAPANESE IMPERIAL CALENDAR
- Patch [29374604](#): IE not starting against 18c Oracle RDBMS Standard Edition
- PreUpgrade Jar: preupgrade_19_cbuild_9_lf.zip
- Support for managing advisor tasks using procedures in the rdsadmin.rdsadmin_util package

For more information, see [Managing advisor tasks](#) in the *Amazon RDS User Guide*.

Combined patches for version 19.0.0.0.ru-2021-01.rur-2021-01.r1, released January 2021

Bugs fixed:

7391838, 8460502, 8476681, 14735102, 16664572, 17428816, 17468475
19080742, 19138896, 19697993, 20313356, 20867658, 21232786, 21374587

21528318, 21629064, 21639146, 21888352, 21965541, 22580355, 22729345
22748979, 23294761, 23296836, 23606241, 23645975, 23734075, 23763462
24596874, 24669730, 24687075, 24833686, 24957575, 24971456, 25030027
25092651, 25093917, 25404117, 25416731, 25560538, 25607406, 25756945
25792962, 25804387, 25806201, 25809128, 25883179, 25905368, 25986062
25997810, 26001677, 26127355, 26173091, 26284288, 26352615, 26440142
26476244, 26499997, 26611353, 26668264, 26716835, 26739322, 26777814
26819036, 26872233, 27004828, 27036163, 27044169, 27101798, 27126122
27126938, 27130348, 27166935, 27195575, 27195935, 27221350, 27222128
27244999, 27254335, 27260704, 27261477, 27359766, 27362994, 27369515
27378053, 27392968, 27406105, 27411022, 27423500, 27439716, 27453490
27458357, 27489107, 27572040, 27582210, 27589260, 27604329, 27622946
27629928, 27661222, 27666312, 27684864, 27692173, 27700413, 27710072
27729678, 27742354, 27745728, 27760043, 27801144, 27828892, 27829722
27846298, 27873364, 27877830, 27880025, 27929509, 27934711, 27935464
27941110, 27957203, 27967484, 27998559, 28007516, 28064977, 28072567
28078186, 28092783, 28104176, 28109326, 28125947, 28127569, 28129791
28133903, 28138847, 28144569, 28145995, 28181021, 28187837, 28189466
28204262, 28205555, 28209985, 28210681, 28263142, 28271258, 28271693
28276054, 28279456, 28294563, 28302580, 28313275, 28319114, 28322973
28326928, 28338211, 28350595, 28370061, 28371123, 28373960, 28375383
28379065, 28381939, 28386259, 28390273, 28395302, 28397317, 28402823
28403019, 28406374, 28410431, 28431445, 28435333, 28436414, 28442896
28454215, 28463226, 28470673, 28475242, 28482048, 28484299, 28489419
28492006, 28498976, 28502773, 28504631, 28513333, 28521330, 28530171
28534475, 28535127, 28537481, 28538439, 28541606, 28542455, 28546290
28547068, 28547926, 28558645, 28561704, 28564479, 28565296, 28567417
28567819, 28569897, 28572407, 28572533, 28572544, 28572667, 28572834
28578945, 28587723, 28589509, 28593682, 28594086, 28597221, 28601957
28602253, 28605066, 28606598, 28608211, 28612239, 28618343, 28620697
28621543, 28622202, 28625580, 28625862, 28627033, 28628592, 28630381
28632796, 28636532, 28639299, 28640772, 28642469, 28642899, 28643583
28643654, 28643718, 28644549, 28645570, 28646200, 28646939, 28649388
28655209, 28661333, 28663289, 28663782, 28672457, 28673945, 28681153
28689483, 28690694, 28692103, 28692275, 28694639, 28694872, 28696373
28697526, 28698087, 28699321, 28700945, 28703812, 28705231, 28707931
28708400, 28709063, 28710385, 28710469, 28710663, 28710734, 28714461
28715655, 28715727, 28718469, 28719348, 28720204, 28720418, 28721497
28722229, 28730079, 28730253, 28734355, 28740708, 28740799, 28742555
28745367, 28749853, 28751498, 28752923, 28755011, 28755084, 28755846
28758722, 28760206, 28763291, 28765983, 28767240, 28769456, 28771947
28772390, 28772816, 28774416, 28776431, 28776811, 28777214, 28778754
28781599, 28781754, 28785273, 28785321, 28785531, 28789531, 28791852
28793062, 28794230, 28795551, 28795734, 28800508, 28802734, 28804517

28805242, 28806517, 28808314, 28808652, 28808656, 28810381, 28811560
28813931, 28815123, 28815355, 28815557, 28816871, 28817449, 28818063
28819640, 28820669, 28821847, 28824482, 28827682, 28831971, 28833912
28835937, 28836716, 28837979, 28838385, 28844738, 28845346, 28846759
28847541, 28847572, 28849776, 28850084, 28852325, 28854004, 28854733
28855520, 28855922, 28857552, 28861861, 28862532, 28863263, 28863432
28863487, 28865569, 28867698, 28867992, 28870496, 28871040, 28872645
28872829, 28873575, 28874416, 28875089, 28876253, 28876639, 28876926
28877252, 28878865, 28881191, 28881848, 28882784, 28884931, 28887305
28888083, 28888327, 28889389, 28889730, 28892794, 28897123, 28897512
28899663, 28900506, 28901126, 28905390, 28905457, 28905615, 28907196
28910498, 28910586, 28911140, 28912691, 28915561, 28917080, 28918429
28919145, 28921844, 28922227, 28922532, 28922608, 28925250, 28925460
28925634, 28925880, 28927452, 28928462, 28932914, 28933158, 28935293
28935956, 28936114, 28937717, 28938422, 28938698, 28940179, 28940281
28940472, 28941901, 28942455, 28942694, 28945421, 28945994, 28946233
28948554, 28949888, 28950868, 28951332, 28951533, 28952168, 28954762
28955606, 28955883, 28956908, 28957260, 28957292, 28957723, 28958088
28959493, 28960863, 28962775, 28963036, 28965084, 28965095, 28965231
28965376, 28966444, 28968779, 28974083, 28974999, 28977322, 28980448
28981871, 28983095, 28983486, 28984313, 28985114, 28985272, 28985362
28985478, 28986207, 28986231, 28986257, 28986326, 28986481, 28986696
28988482, 28988864, 28989306, 28993295, 28993353, 28994307, 28994542
28995287, 28996376, 28999046, 29000000, 29001305, 29001888, 29002488
29002784, 29002927, 29003207, 29003407, 29003617, 29003738, 29006318
29006621, 29007321, 29007353, 29007775, 29008035, 29008669, 29009513
29010126, 29010517, 29011936, 29012609, 29013475, 29013832, 29014076
29015118, 29016294, 29017265, 29018655, 29018680, 29019121, 29020423
29021063, 29021352, 29022986, 29024028, 29024054, 29024448, 29024552
29024732, 29024876, 29026154, 29026582, 29026606, 29027456, 29027694
29027933, 29027940, 29030184, 29030927, 29031575, 29031600, 29032234
29032276, 29032457, 29032607, 29033052, 29033145, 29033200, 29033280
29034587, 29036278, 29037290, 29038528, 29038728, 29039089, 29039510
29040739, 29041739, 29041775, 29043554, 29043651, 29043725, 29044086
29044763, 29044954, 29046482, 29047127, 29047850, 29048178, 29048289
29048498, 29048605, 29048728, 29049673, 29050357, 29050560, 29050765
29050886, 29051263, 29051702, 29051953, 29052726, 29052850, 29053783
29053902, 29055644, 29056024, 29056270, 29056560, 29056767, 29056894
29058476, 29059011, 29060216, 29061016, 29061959, 29062692, 29062848
29062860, 29062868, 29110526, 29110783, 29110790, 29110797, 29110802
29110805, 29111598, 29111631, 29112455, 29113282, 29113305, 29115857
29117337, 29117526, 29117642, 29118543, 29119077, 29120223, 29122224
29122254, 29122367, 29123297, 29123432, 29123444, 29123482, 29124368
29125036, 29125374, 29125380, 29125708, 29125786, 29126345, 29127957

29128693, 29128935, 29129450, 29129476, 29129497, 29129691, 29129712
29130219, 29131539, 29131772, 29132456, 29132869, 29132938, 29133470
29134447, 29135383, 29135649, 29136111, 29138641, 29139070, 29139727
29139761, 29139956, 29141316, 29141341, 29141685, 29141886, 29142609
29142667, 29143516, 29144995, 29145214, 29145730, 29146077, 29146157
29146810, 29147849, 29148799, 29149170, 29149829, 29150338, 29151520
29152357, 29152603, 29152752, 29154631, 29154636, 29154725, 29154829
29155099, 29157051, 29157389, 29158680, 29158899, 29159216, 29159661
29159909, 29159936, 29160174, 29160462, 29161597, 29161923, 29162095
29163073, 29163156, 29163415, 29163437, 29163524, 29163567, 29164376
29165682, 29167111, 29167342, 29167374, 29167940, 29168137, 29168219
29168433, 29169073, 29169215, 29169540, 29169739, 29170232, 29170717
29171683, 29171942, 29172618, 29172826, 29173140, 29173373, 29173618
29173817, 29174004, 29174753, 29175638, 29176318, 29177466, 29177543
29177886, 29178385, 29179097, 29180313, 29180455, 29180559, 29180721
29180893, 29181078, 29181153, 29181231, 29181568, 29181620, 29181743
29181923, 29182019, 29182517, 29182901, 29182920, 29183298, 29183912
29184297, 29184666, 29185193, 29186091, 29186456, 29186605, 29188255
29189302, 29189307, 29189889, 29190235, 29190474, 29190663, 29190740
29191541, 29191827, 29192419, 29192468, 29192685, 29193207, 29194205
29194367, 29194493, 29194827, 29194981, 29195279, 29195337, 29195758
29196725, 29198092, 29198913, 29199163, 29199635, 29199733, 29200316
29200700, 29201143, 29201494, 29201539, 29201695, 29201787, 29202104
29202461, 29202850, 29203041, 29203122, 29203166, 29203227, 29203425
29203443, 29203604, 29205281, 29205323, 29205419, 29205463, 29205767
29205918, 29206109, 29206605, 29207073, 29208260, 29208732, 29209545
29210577, 29210610, 29210624, 29210683, 29211457, 29211724, 29212012
29212433, 29212611, 29213320, 29213351, 29213613, 29213641, 29213775
29213850, 29213879, 29213893, 29214561, 29214960, 29216312, 29216723
29216746, 29216984, 29217294, 29217472, 29217828, 29217848, 29217856
29218570, 29219205, 29219273, 29219627, 29220079, 29221248, 29221891
29221942, 29222031, 29222784, 29223833, 29223859, 29223967, 29224065
29224294, 29224605, 29224710, 29225076, 29225168, 29225758, 29225861
29227602, 29228869, 29229164, 29229754, 29229839, 29229844, 29229955
29230252, 29230565, 29231133, 29232117, 29232154, 29232449, 29232653
29233415, 29233810, 29233953, 29234123, 29235934, 29236573, 29237538
29237575, 29237744, 29240307, 29240668, 29240759, 29241345, 29241651
29242017, 29242884, 29242906, 29243749, 29243958, 29244495, 29244766
29244968, 29245063, 29245137, 29245160, 29246163, 29247183, 29247415
29247712, 29247906, 29248495, 29248552, 29248723, 29248835, 29248858
29249289, 29249412, 29249583, 29249991, 29250059, 29250317, 29251259
29251564, 29253184, 29253871, 29254031, 29254623, 29254930, 29255178
29255273, 29255431, 29255435, 29255616, 29255705, 29255718, 29255973
29256426, 29259119, 29259320, 29260224, 29260452, 29260956, 29261547

29261548, 29261695, 29261906, 29262512, 29262887, 29265448, 29266248
29266899, 29267292, 29268412, 29269171, 29269228, 29269825, 29270585
29271019, 29273168, 29273360, 29273539, 29273570, 29273735, 29273812
29273847, 29274428, 29274564, 29274627, 29275461, 29276272, 29277317
29278218, 29278684, 29279658, 29279751, 29279854, 29281112, 29281527
29281691, 29281796, 29282090, 29282233, 29282666, 29282898, 29285197
29285453, 29285503, 29285621, 29285788, 29285956, 29286037, 29286220
29286229, 29287130, 29287705, 29290110, 29290235, 29292232, 29292837
29293072, 29293574, 29293806, 29294753, 29296257, 29297863, 29297915
29298220, 29299049, 29299082, 29299830, 29299844, 29301463, 29301566
29302565, 29302614, 29302963, 29303918, 29304314, 29304692, 29304781
29304853, 29305093, 29306226, 29306713, 29307090, 29307109, 29307638
29309698, 29311336, 29311528, 29311588, 29311927, 29312310, 29312672
29312734, 29312753, 29312889, 29313347, 29313417, 29313525, 29314539
29314636, 29317756, 29318410, 29319441, 29320900, 29321489, 29321689
29323946, 29324568, 29324735, 29325087, 29325105, 29325257, 29325765
29325993, 29326233, 29327044, 29327892, 29329042, 29329087, 29329675
29329807, 29329848, 29330361, 29330791, 29331066, 29331209, 29331380
29331493, 29332292, 29332395, 29332763, 29332771, 29333500, 29336843
29336899, 29337294, 29337310, 29337742, 29338315, 29338348, 29338453
29338780, 29338913, 29339101, 29339155, 29339299, 29340333, 29341209
29342099, 29343086, 29343156, 29343861, 29344541, 29345937, 29346057
29346211, 29346943, 29347620, 29348176, 29348358, 29350052, 29350712
29350762, 29350868, 29351044, 29351386, 29351662, 29351716, 29351735
29351749, 29351771, 29352298, 29352724, 29352867, 29352947, 29353271
29353432, 29353718, 29353821, 29353960, 29355654, 29356547, 29356704
29356711, 29356752, 29356782, 29357821, 29358509, 29358828, 29360252
29360285, 29360467, 29360672, 29360775, 29360911, 29360950, 29361319
29361472, 29361801, 29362596, 29363151, 29364171, 29364177, 29366406
29366940, 29367019, 29367561, 29367971, 29368253, 29368310, 29368725
29372069, 29372541, 29372562, 29373418, 29373588, 29374179, 29374604
29375355, 29375941, 29375984, 29376346, 29377804, 29377986, 29378029
29378287, 29378834, 29378913, 29379299, 29379381, 29379750, 29379978
29380527, 29381000, 29382296, 29382641, 29382784, 29382815, 29383695
29384781, 29384854, 29384864, 29385339, 29385429, 29385652, 29386502
29386557, 29386635, 29386660, 29386835, 29387073, 29387274, 29387310
29387337, 29388020, 29388072, 29388094, 29388524, 29388830, 29389408
29389889, 29390011, 29390435, 29390785, 29391030, 29391237, 29391301
29391438, 29391849, 29391925, 29392554, 29392966, 29393291, 29393649
29394014, 29394140, 29394749, 29395657, 29396481, 29397841, 29397954
29397996, 29398488, 29398863, 29399046, 29399100, 29399121, 29399336
29399938, 29402110, 29402131, 29404483, 29405012, 29405462, 29405651
29405996, 29407488, 29407804, 29408853, 29409149, 29409455, 29410311
29410834, 29411037, 29411469, 29411931, 29412066, 29412269, 29413360

29413382, 29413517, 29413544, 29413634, 29413956, 29415493, 29416688
29416700, 29417084, 29417173, 29417719, 29417884, 29418165, 29418341
29420254, 29420834, 29421059, 29423003, 29423016, 29423156, 29423491
29423826, 29424999, 29426241, 29426320, 29428230, 29429017, 29429087
29429264, 29429466, 29429566, 29429895, 29430524, 29430866, 29431192
29431402, 29431485, 29432176, 29434301, 29434869, 29435474, 29435652
29436454, 29436514, 29436522, 29436727, 29437029, 29437379, 29437594
29437712, 29438150, 29438277, 29438736, 29439522, 29440651, 29441196
29442400, 29442936, 29443187, 29443250, 29443559, 29444072, 29444282
29444602, 29445548, 29446319, 29446669, 29448498, 29449477, 29449845
29449852, 29450162, 29450193, 29450273, 29450421, 29450812, 29450936
29451085, 29451386, 29452251, 29452576, 29452936, 29452953, 29454450
29454978, 29455424, 29455773, 29456538, 29456714, 29457312, 29457319
29457370, 29457502, 29457807, 29457978, 29458132, 29460252, 29461420
29461791, 29461971, 29462594, 29462767, 29462957, 29463047, 29463528
29463798, 29464616, 29464779, 29465047, 29465177, 29466674, 29467622
29469563, 29469565, 29470059, 29470291, 29471633, 29471832, 29471857
29471860, 29472618, 29473708, 29476473, 29477015, 29481584, 29482021
29483452, 29483532, 29483626, 29483672, 29483685, 29483712, 29483723
29483771, 29485099, 29485877, 29486181, 29486848, 29487150, 29487189
29487407, 29488894, 29489436, 29489546, 29490256, 29491784, 29492127
29492939, 29493122, 29494245, 29495057, 29495171, 29495684, 29497311
29497588, 29497696, 29498198, 29500257, 29500826, 29500963, 29501218
29502561, 29503543, 29503631, 29503827, 29504103, 29504492, 29504682
29505225, 29505589, 29505668, 29506942, 29507270, 29507616, 29508681
29509777, 29510278, 29511064, 29511611, 29511980, 29512125, 29512890
29514479, 29515134, 29515240, 29515476, 29515766, 29515834, 29516300
29516727, 29516766, 29517168, 29517883, 29518604, 29518767, 29519131
29521187, 29521688, 29521748, 29521862, 29522358, 29522561, 29522662
29523055, 29523216, 29523511, 29524599, 29524985, 29525366, 29525467
29525886, 29526966, 29527595, 29527610, 29528368, 29529147, 29530440
29530515, 29530812, 29530909, 29531654, 29531836, 29532112, 29532532
29536342, 29536445, 29536794, 29537829, 29538631, 29539413, 29540327
29541742, 29541769, 29541973, 29542084, 29542449, 29542580, 29542643
29543034, 29543956, 29544552, 29546817, 29547010, 29547867, 29548413
29548427, 29548592, 29548687, 29548722, 29549040, 29549071, 29549104
29549154, 29549730, 29550530, 29552402, 29552773, 29553141, 29554092
29555105, 29557144, 29557261, 29557336, 29557556, 29558238, 29558452
29558926, 29558975, 29559187, 29559395, 29559446, 29559908, 29559981
29564592, 29564593, 29565611, 29579919, 29580394, 29580983, 29581771
29584261, 29584693, 29586143, 29587299, 29587720, 29587765, 29588732
29589544, 29591343, 29591641, 29592011, 29592215, 29597536, 29597716
29597754, 29598039, 29598046, 29598226, 29598233, 29599008, 29599243
29599300, 29599552, 29601461, 29602831, 29603460, 29603884, 29604002

29604257, 29606261, 29607136, 29607797, 29608000, 29608023, 29610506
29611020, 29611991, 29614206, 29614931, 29614987, 29615824, 29616244
29616414, 29618074, 29618190, 29620042, 29622936, 29623323, 29623592
29624124, 29625065, 29625804, 29625876, 29626154, 29626732, 29628200
29628647, 29629430, 29629650, 29629681, 29629745, 29631749, 29632095
29632265, 29632611, 29633697, 29633753, 29633936, 29634643, 29635427
29635717, 29635990, 29637362, 29637526, 29637560, 29638285, 29641736
29642451, 29643721, 29644426, 29644464, 29645167, 29645349, 29647176
29647770, 29648928, 29649694, 29651183, 29651520, 29652809, 29653132
29653246, 29655164, 29655668, 29656400, 29656819, 29656843, 29657399
29657422, 29657744, 29657960, 29658056, 29661028, 29661065, 29661722
29663191, 29663368, 29663494, 29663601, 29664087, 29664161, 29665168
29665940, 29666451, 29667527, 29667994, 29668005, 29669413, 29670713
29670782, 29671363, 29672507, 29675446, 29676089, 29677051, 29677173
29677733, 29677927, 29679856, 29680700, 29681987, 29683039, 29683211
29684518, 29685137, 29685276, 29687214, 29687220, 29687459, 29687718
29687727, 29687763, 29688867, 29689145, 29689255, 29692694, 29694869
29695425, 29695821, 29695841, 29695964, 29695987, 29696310, 29697928
29700125, 29700460, 29700770, 29701720, 29703932, 29705793, 29706160
29707099, 29707493, 29707896, 29708324, 29708353, 29708876, 29708915
29710188, 29710858, 29713810, 29715220, 29715703, 29716194, 29716227
29716491, 29716602, 29716871, 29717659, 29717901, 29718198, 29719146
29720133, 29720373, 29721418, 29721576, 29722167, 29724658, 29725476
29725781, 29726695, 29737941, 29738374, 29738400, 29739576, 29741319
29741976, 29742223, 29744225, 29744400, 29744637, 29745288, 29746962
29747493, 29747648, 29747653, 29748285, 29748325, 29748336, 29748513
29749471, 29750673, 29751094, 29753244, 29754196, 29754951, 29755821
29756274, 29756444, 29757099, 29757264, 29757651, 29757687, 29758203
29758217, 29758661, 29761678, 29761837, 29761911, 29763158, 29764644
29765035, 29765219, 29765347, 29765393, 29765493, 29766207, 29766435
29766503, 29766679, 29768487, 29768899, 29769901, 29770750, 29771032
29771242, 29772514, 29772761, 29773197, 29773205, 29773842, 29774362
29775393, 29779196, 29780140, 29782211, 29782284, 29782823, 29782866
29783142, 29784106, 29785239, 29785311, 29785831, 29787292, 29787766
29789911, 29791152, 29791880, 29792213, 29792433, 29793318, 29794174
29794462, 29795712, 29795957, 29796335, 29796378, 29796916, 29797209
29797726, 29801164, 29802382, 29802695, 29804875, 29805368, 29805772
29806390, 29806964, 29807964, 29809792, 29809837, 29811616, 29812084
29812489, 29813503, 29813650, 29813671, 29814995, 29815341, 29815713
29816887, 29817278, 29817547, 29817784, 29820341, 29821130, 29821582
29822714, 29825525, 29827647, 29827852, 29828644, 29829339, 29831196
29833984, 29834506, 29836096, 29838337, 29838485, 29838740, 29838773
29839715, 29840619, 29841267, 29841687, 29842369, 29843277, 29843692
29843831, 29844131, 29844226, 29844275, 29845530, 29846126, 29846525

29846645, 29846688, 29848084, 29848849, 29849100, 29850930, 29851733
29853485, 29856420, 29856859, 29856890, 29858121, 29858376, 29858420
29859068, 29860022, 29860994, 29861075, 29864203, 29864261, 29865188
29865590, 29865658, 29869052, 29869086, 29869149, 29869404, 29869887
29869906, 29870065, 29870533, 29871098, 29871312, 29871360, 29872401
29872937, 29872983, 29873665, 29874090, 29874761, 29875200, 29875459
29875565, 29876358, 29876989, 29877608, 29878076, 29881050, 29881478
29881575, 29881643, 29881839, 29882427, 29882454, 29882729, 29884958
29885182, 29885890, 29886809, 29887045, 29887111, 29888621, 29889184
29889358, 29890740, 29891075, 29891853, 29891916, 29892604, 29893132
29894021, 29896510, 29897418, 29897863, 29900203, 29900824, 29901419
29901961, 29902299, 29902327, 29902330, 29902659, 29903190, 29903299
29903357, 29903454, 29904002, 29906678, 29907942, 29908389, 29908777
29909658, 29910218, 29910402, 29912135, 29912286, 29913805, 29913966
29914449, 29914544, 29915217, 29915848, 29916975, 29919789, 29920025
29920376, 29920804, 29921318, 29922225, 29922461, 29923452, 29924181
29926466, 29927756, 29928210, 29928340, 29928427, 29928564, 29930457
29931956, 29932202, 29932310, 29932430, 29932780, 29934048, 29934052
29935685, 29937565, 29937655, 29937956, 29938225, 29939400, 29939795
29940373, 29941062, 29942096, 29942275, 29942554, 29943670, 29943879
29944035, 29944159, 29944660, 29944963, 29945645, 29946388, 29947145
29947428, 29948165, 29950220, 29951620, 29951759, 29952700, 29956016
29956222, 29957412, 29957493, 29958925, 29960884, 29961353, 29961360
29961609, 29961847, 29962160, 29962248, 29962834, 29962927, 29962939
29965052, 29965603, 29965888, 29966768, 29967223, 29968085, 29969557
29970081, 29970261, 29970298, 29970587, 29971027, 29971481, 29971888
29971936, 29971951, 29972134, 29972176, 29973012, 29989783, 29989845
29990779, 29991257, 29993717, 29997326, 29997553, 29997937, 30000664
30001105, 30001331, 30003187, 30004660, 30004856, 30006159, 30006985
30007450, 30007536, 30007797, 30008125, 30008198, 30008214, 30009710
30012181, 30014200, 30015070, 30017836, 30018017, 30018903, 30019864
30021830, 30024618, 30025814, 30026016, 30026596, 30027614, 30027649
30028182, 30028599, 30029519, 30029806, 30031027, 30032233, 30032376
30032484, 30033040, 30033547, 30034456, 30035598, 30036258, 30038392
30039800, 30039959, 30040157, 30041501, 30041514, 30042490, 30043398
30043610, 30043930, 30044108, 30044507, 30045273, 30045389, 30045484
30046497, 30047531, 30047702, 30047765, 30047931, 30048688, 30049966
30051176, 30051783, 30051804, 30052928, 30053036, 30053501, 30053748
30054980, 30056058, 30057718, 30057799, 30058149, 30058453, 30059106
30059109, 30060267, 30060330, 30062364, 30062819, 30064268, 30066352
30067565, 30068384, 30068792, 30068871, 30071446, 30072018, 30072905
30073314, 30073422, 30073744, 30074296, 30074349, 30074469, 30074472
30074820, 30075037, 30076058, 30076197, 30076253, 30076604, 30078675
30078934, 30079949, 30080111, 30080266, 30081546, 30081580, 30082145

30083100, 30083216, 30083488, 30083807, 30084971, 30085897, 30086596
30086992, 30087165, 30087509, 30088229, 30090568, 30092280, 30092859
30094929, 30095591, 30095952, 30097092, 30097115, 30098251, 30099302
30099420, 30099454, 30100354, 30101186, 30102774, 30103551, 30103553
30104348, 30104378, 30104555, 30106748, 30106901, 30108012, 30109365
30110224, 30110370, 30110518, 30114477, 30114489, 30114534, 30116085
30116203, 30116854, 30117209, 30117335, 30117469, 30117593, 30118261
30118279, 30120608, 30122523, 30122583, 30123138, 30125765, 30126145
30126470, 30127145, 30127522, 30127805, 30127904, 30128047, 30130240
30131286, 30131645, 30132708, 30133841, 30134746, 30135396, 30135731
30135942, 30136346, 30137792, 30139392, 30142907, 30143470, 30143593
30146593, 30146969, 30147195, 30147307, 30147473, 30147928, 30148929
30148999, 30149035, 30149658, 30150606, 30150710, 30153552, 30153885
30154633, 30155241, 30155489, 30155814, 30155837, 30155999, 30156569
30157526, 30158313, 30159329, 30159511, 30159536, 30159752, 30159760
30160625, 30161094, 30163243, 30164714, 30165493, 30165503, 30165897
30167787, 30169254, 30170104, 30172925, 30173113, 30173370, 30173556
30174401, 30175291, 30175587, 30177597, 30178250, 30178839, 30178990
30179038, 30179644, 30180208, 30180643, 30181756, 30182498, 30183367
30183696, 30183715, 30183920, 30184102, 30185852, 30186319, 30186476
30186706, 30187627, 30187866, 30189516, 30189535, 30190090, 30191274
30192691, 30192729, 30192853, 30193165, 30193262, 30193505, 30193506
30193584, 30193736, 30194612, 30194710, 30194972, 30195667, 30195668
30195684, 30196195, 30196358, 30196629, 30198239, 30198861, 30198905
30199890, 30200034, 30200132, 30200237, 30200680, 30200758, 30202349
30202388, 30203929, 30204042, 30204542, 30206493, 30206675, 30207473
30208327, 30208690, 30208723, 30209222, 30209736, 30210429, 30210753
30210884, 30213031, 30213540, 30214769, 30214826, 30215130, 30215302
30215351, 30217206, 30217562, 30217982, 30218044, 30218317, 30219222
30221237, 30221298, 30222512, 30222669, 30222975, 30223712, 30223847
30224544, 30224650, 30224725, 30224868, 30224950, 30225265, 30225439
30225443, 30225718, 30225844, 30226244, 30228567, 30229683, 30232638
30233934, 30234132, 30234227, 30235919, 30235979, 30236554, 30236964
30237477, 30238211, 30238715, 30239480, 30240010, 30240547, 30240858
30240930, 30240972, 30241567, 30241807, 30241920, 30242120, 30242724
30243216, 30244340, 30246053, 30246179, 30247305, 30248531, 30249432
30251003, 30252005, 30252098, 30252156, 30252458, 30252977, 30253035
30253090, 30253608, 30253705, 30253835, 30254206, 30254525, 30254576
30254726, 30255143, 30255528, 30256542, 30257412, 30257908, 30259120
30259469, 30260595, 30264405, 30265523, 30265608, 30265615, 30265703
30266791, 30267155, 30269428, 30269748, 30270647, 30270744, 30271114
30272329, 30274090, 30274188, 30274324, 30274662, 30275548, 30275569
30275578, 30276144, 30276243, 30277120, 30277451, 30277589, 30277733
30277887, 30278402, 30281428, 30282501, 30282591, 30282918, 30283296

30283577, 30283579, 30283581, 30283932, 30284219, 30284369, 30285026
30285166, 30285251, 30285457, 30285540, 30285843, 30288343, 30288491
30289074, 30289458, 30292305, 30293345, 30294267, 30294465, 30294671
30295110, 30295137, 30295549, 30295790, 30295808, 30297905, 30299367
30299817, 30299934, 30300030, 30300342, 30300363, 30300523, 30300538
30305264, 30305395, 30305568, 30305880, 30307814, 30307883, 30308368
30308624, 30308772, 30308947, 30309098, 30309798, 30311826, 30312094
30312546, 30313749, 30313848, 30313989, 30314079, 30314198, 30314837
30316667, 30316897, 30317209, 30317397, 30318638, 30318943, 30319080
30319099, 30320029, 30321076, 30321398, 30322980, 30323658, 30323849
30324180, 30324466, 30325407, 30326882, 30327149, 30327810, 30328168
30328690, 30329209, 30329751, 30330123, 30331356, 30331759, 30332505
30334484, 30334563, 30335127, 30335832, 30335987, 30336032, 30336383
30336530, 30336742, 30336996, 30337245, 30338591, 30339103, 30341713
30342371, 30342878, 30344614, 30345201, 30345432, 30345809, 30345926
30346330, 30346867, 30347410, 30349714, 30350177, 30350543, 30352532
30352581, 30352623, 30352715, 30355490, 30357463, 30357698, 30357897
30358416, 30359614, 30360383, 30361635, 30362003, 30362850, 30363088
30363311, 30363716, 30364329, 30364481, 30364613, 30365745, 30367193
30368048, 30368482, 30368534, 30368668, 30368917, 30371264, 30371623
30371909, 30372081, 30373419, 30373550, 30374345, 30374570, 30374739
30375109, 30376986, 30377347, 30377692, 30380907, 30381207, 30381525
30382646, 30382982, 30383286, 30384121, 30384152, 30387628, 30387666
30388853, 30389229, 30389414, 30389507, 30389821, 30390635, 30391272
30392011, 30392870, 30392987, 30393110, 30393653, 30394738, 30394974
30396120, 30396946, 30397100, 30398257, 30398422, 30399906, 30402386
30403412, 30403763, 30403881, 30403902, 30403989, 30404117, 30404153
30404639, 30406709, 30408515, 30408808, 30409207, 30409339, 30409472
30409590, 30412188, 30412772, 30412863, 30412885, 30412921, 30413137
30413294, 30414491, 30414679, 30414714, 30416034, 30416603, 30417648
30417732, 30419024, 30421026, 30421204, 30421439, 30421476, 30421706
30422487, 30423135, 30423218, 30424347, 30430921, 30431274, 30431504
30431698, 30431703, 30431717, 30431867, 30433177, 30436399, 30437003
30437149, 30439985, 30440651, 30441277, 30441687, 30441959, 30442266
30442749, 30442884, 30443393, 30446583, 30446820, 30447060, 30447589
30447994, 30448182, 30448917, 30449194, 30449837, 30450787, 30453442
30454090, 30457633, 30458568, 30458593, 30460095, 30460922, 30461123
30461458, 30463938, 30464250, 30464655, 30466081, 30469777, 30472891
30473634, 30474167, 30474774, 30475115, 30476768, 30477588, 30477685
30477691, 30477767, 30479252, 30479715, 30480872, 30483065, 30483140
30483521, 30484042, 30484801, 30485255, 30486436, 30486896, 30487387
30489582, 30490014, 30490578, 30492380, 30493518, 30494259, 30494900
30495035, 30495078, 30495133, 30495483, 30496957, 30497057, 30497765
30498824, 30500224, 30500297, 30500344, 30500582, 30501574, 30502415

30503943, 30505029, 30505497, 30506794, 30506991, 30507032, 30508100
30509277, 30510347, 30510527, 30512690, 30513285, 30513480, 30513848
30515886, 30516868, 30517214, 30517516, 30517635, 30518349, 30519188
30522285, 30522998, 30523137, 30523538, 30523601, 30523750, 30524736
30528547, 30528687, 30528704, 30528935, 30529790, 30529940, 30530585
30532811, 30533132, 30534351, 30534549, 30534662, 30534827, 30536237
30537405, 30537533, 30537584, 30539519, 30540109, 30540407, 30544247
30544595, 30544629, 30545281, 30545556, 30549255, 30549368, 30549637
30549789, 30549881, 30551000, 30551123, 30554178, 30556326, 30556581
30556807, 30557386, 30558561, 30559252, 30560365, 30560513, 30561404
30561590, 30561737, 30564139, 30564343, 30564898, 30565004, 30565595
30565805, 30566054, 30567372, 30571306, 30573236, 30573703, 30576112
30576393, 30576853, 30577071, 30577591, 30578221, 30579051, 30580813
30581448, 30582221, 30582500, 30588738, 30591028, 30591475, 30592859
30593046, 30593104, 30593863, 30594167, 30595114, 30595408, 30595860
30596488, 30596694, 30598682, 30598746, 30598919, 30599405, 30599407
30600173, 30600184, 30602230, 30602828, 30605215, 30605676, 30606345
30606451, 30608583, 30609799, 30610406, 30610667, 30611603, 30612199
30613937, 30613971, 30614411, 30616406, 30616738, 30619138, 30619525
30619728, 30619787, 30620805, 30621255, 30622528, 30622755, 30623138
30623142, 30624243, 30624792, 30624864, 30624874, 30625121, 30628834
30628899, 30629139, 30629643, 30629799, 30631393, 30631523, 30633259
30633938, 30634548, 30635183, 30635302, 30635326, 30637270, 30637319
30641541, 30641755, 30641900, 30644530, 30644766, 30644889, 30645896
30647133, 30650404, 30651231, 30651570, 30651621, 30651674, 30652515
30652853, 30654558, 30655906, 30657196, 30657365, 30657566, 30657624
30657706, 30657875, 30657906, 30657940, 30658533, 30658555, 30658702
30659940, 30660412, 30661000, 30661939, 30662651, 30662736, 30663646
30665399, 30668407, 30670328, 30670584, 30671720, 30671813, 30671958
30674373, 30674959, 30676209, 30677633, 30679595, 30679771, 30681462
30681516, 30681521, 30684902, 30686017, 30686131, 30687047, 30689557
30690686, 30691604, 30691731, 30691857, 30692462, 30692473, 30693791
30694947, 30696566, 30698289, 30703610, 30704826, 30705448, 30708735
30710807, 30711370, 30712670, 30713133, 30714151, 30714715, 30716863
30718841, 30718862, 30719327, 30719419, 30720736, 30720844, 30722705
30723671, 30724679, 30724881, 30727701, 30727759, 30729278, 30729604
30730026, 30732711, 30734707, 30735153, 30735736, 30739876, 30740669
30740997, 30741263, 30748707, 30749644, 30749722, 30750219, 30750991
30751521, 30751527, 30751639, 30751968, 30753432, 30755348, 30758836
30758854, 30758943, 30761871, 30761878, 30763272, 30763305, 30763639
30763754, 30764405, 30764663, 30765486, 30765995, 30767277, 30768636
30769312, 30770717, 30773164, 30773797, 30776416, 30776929, 30777759
30778855, 30779240, 30781032, 30781041, 30782266, 30782300, 30782414
30783395, 30783551, 30785101, 30786237, 30786641, 30786655, 30788973

30789904, 30790441, 30801296, 30801510, 30803210, 30804646, 30806757
30806984, 30807723, 30807888, 30808869, 30809087, 30810765, 30812574
30814266, 30814285, 30815495, 30815852, 30816760, 30816938, 30819340
30819629, 30821297, 30823744, 30825391, 30825419, 30825656, 30826474
30828350, 30829779, 30830555, 30832775, 30833454, 30834068, 30834110
30835184, 30835853, 30836129, 30838605, 30839451, 30839836, 30841241
30842277, 30843271, 30844839, 30846063, 30846782, 30847442, 30847871
30848028, 30848097, 30848773, 30851448, 30851951, 30852954, 30855101
30856358, 30857501, 30857721, 30858877, 30858919, 30860803, 30861988
30863115, 30864607, 30865805, 30866141, 30866988, 30869131, 30870439
30871716, 30871792, 30873527, 30874270, 30874337, 30874660, 30879169
30879708, 30880774, 30880913, 30881407, 30883715, 30883785, 30883877
30886188, 30887501, 30887777, 30889443, 30889607, 30889723, 30890720
30890971, 30891760, 30891792, 30895426, 30895577, 30896620, 30896685
30898381, 30898748, 30898939, 30902655, 30904672, 30906274, 30906407
30909596, 30909918, 30910264, 30913399, 30914272, 30914674, 30915781
30919587, 30919691, 30919804, 30921136, 30922936, 30922996, 30923514
30923517, 30923597, 30923940, 30925316, 30927821, 30930149, 30930339
30931311, 30931981, 30932674, 30936251, 30936831, 30936942, 30937340
30937391, 30937410, 30938413, 30939307, 30939317, 30939934, 30940259
30940868, 30940869, 30941056, 30944643, 30945005, 30946072, 30946768
30946876, 30952104, 30952191, 30953266, 30953836, 30956571, 30956647
30957739, 30960356, 30960736, 30964194, 30965554, 30965649, 30968737
30968781, 30970518, 30972817, 30972841, 30972887, 30972947, 30972951
30972959, 30972966, 30973085, 30973113, 30973127, 30973137, 30973143
30973197, 30973698, 30973877, 30974813, 30977411, 30978554, 30980115
30980317, 30980733, 30981240, 30985027, 30985906, 30987088, 30988444
30990034, 30992330, 30992597, 30993198, 30993518, 30994996, 30996991
30997375, 30998035, 30998662, 30998759, 30998847, 31001017, 31001455
31001490, 31001859, 31002223, 31002923, 31003137, 31003659, 31004077
31004719, 31004844, 31006792, 31008240, 31008907, 31009545, 31009590
31009680, 31010218, 31010976, 31011361, 31013127, 31014323, 31015330
31016413, 31019249, 31021068, 31021157, 31021324, 31021542, 31022858
31025520, 31025531, 31025859, 31026220, 31026591, 31026860, 31027747
31028986, 31029936, 31030898, 31031955, 31032904, 31034794, 31035287
31035916, 31037421, 31038220, 31038447, 31039627, 31039928, 31042208
31043483, 31043630, 31044145, 31044951, 31045929, 31046188, 31046619
31047022, 31047169, 31048025, 31048741, 31049215, 31051056, 31051075
31052735, 31052809, 31055142, 31056909, 31058548, 31061482, 31061504
31062010, 31063380, 31063769, 31064025, 31065838, 31066082, 31066250
31066265, 31066554, 31067892, 31069059, 31071080, 31073586, 31074032
31075323, 31075960, 31077117, 31077365, 31078391, 31078757, 31079204
31080474, 31081558, 31084921, 31086869, 31087361, 31087679, 31088115
31088341, 31089270, 31090262, 31091868, 31092129, 31092233, 31092581

31092921, 31094183, 31094228, 31094688, 31096846, 31097760, 31097961
31100172, 31101386, 31103065, 31104809, 31106140, 31106577, 31107577
31109506, 31112530, 31112972, 31113089, 31113249, 31114265, 31114671
31115201, 31115502, 31118809, 31119057, 31119846, 31120361, 31122876
31124363, 31124914, 31125773, 31126053, 31126058, 31127043, 31127457
31127969, 31130156, 31132732, 31134430, 31138106, 31139643, 31141792
31142749, 31145403, 31145804, 31153120, 31153485, 31155634, 31156383
31158341, 31158380, 31159382, 31162711, 31162915, 31163379, 31165038
31165577, 31165722, 31168440, 31171096, 31171631, 31172207, 31172642
31175365, 31177193, 31177204, 31177221, 31178103, 31180519, 31181380
31182159, 31182756, 31182793, 31185224, 31188038, 31188398, 31190624
31192039, 31193292, 31193936, 31194264, 31195090, 31195430, 31195838
31200845, 31201001, 31201366, 31202536, 31204412, 31204878, 31208287
31213034, 31214119, 31215422, 31215438, 31216995, 31217946, 31218837
31219047, 31219975, 31220549, 31220881, 31220912, 31221454, 31222780
31223382, 31226448, 31228670, 31230775, 31233170, 31234765, 31234790
31235797, 31240626, 31244968, 31249008, 31249406, 31249696, 31254297
31254535, 31254929, 31255369, 31255869, 31257740, 31258101, 31258995
31260692, 31261641, 31265651, 31265773, 31268557, 31270711, 31271032
31287871, 31289115, 31290300, 31292298, 31293484, 31298871, 31301460
31303032, 31304573, 31305114, 31305624, 31306248, 31306261, 31306867
31306927, 31309379, 31309867, 31310564, 31310624, 31311830, 31312450
31312976, 31313117, 31313444, 31314885, 31315495, 31315876, 31316250
31321092, 31322720, 31325584, 31326608, 31326977, 31326998, 31327259
31327278, 31327349, 31327391, 31327896, 31331354, 31331372, 31333156
31334606, 31334961, 31335037, 31335142, 31336298, 31338249, 31338673
31338769, 31339457, 31339643, 31339744, 31343110, 31344046, 31348711
31350348, 31353610, 31356601, 31357581, 31357737, 31358308, 31359215
31359366, 31360146, 31360323, 31360469, 31360529, 31366716, 31367188
31367364, 31369444, 31372498, 31373825, 31373837, 31373843, 31376708
31377129, 31377487, 31377808, 31380443, 31381701, 31383396, 31383464
31383814, 31386394, 31387426, 31387443, 31388288, 31390936, 31391991
31393600, 31394341, 31394347, 31394365, 31395247, 31396027, 31396695
31398663, 31399131, 31401831, 31402078, 31403177, 31403565, 31404014
31404130, 31404263, 31408636, 31409483, 31411163, 31414023, 31414524
31417192, 31421316, 31422620, 31424838, 31425167, 31425761, 31429501
31429590, 31429770, 31430722, 31431005, 31433092, 31433579, 31434805
31434870, 31437030, 31440426, 31440813, 31442332, 31442714, 31444353
31444516, 31446431, 31447733, 31448680, 31449354, 31450392, 31450653
31454972, 31455597, 31458049, 31466433, 31468060, 31475635, 31476093
31476736, 31477424, 31477695, 31479272, 31479772, 31483949, 31484385
31484603, 31485386, 31485507, 31486557, 31487441, 31487491, 31489137
31490604, 31491634, 31493840, 31494264, 31496174, 31498559, 31499370
31499700, 31500971, 31501139, 31503349, 31507107, 31508712, 31509279

31510891, 31512044, 31513011, 31523548, 31525783, 31526903, 31527103
31527199, 31528962, 31533274, 31533817, 31533833, 31535955, 31536401
31536731, 31537521, 31539566, 31541864, 31544097, 31545477, 31546864
31547220, 31548675, 31549221, 31553674, 31553813, 31555539, 31557663
31559085, 31560592, 31561886, 31567124, 31567441, 31570054, 31570161
31572006, 31572267, 31574244, 31574267, 31576738, 31577569, 31578994
31581627, 31585351, 31585789, 31586381, 31591384, 31591400, 31591409
31591421, 31595632, 31597727, 31600023, 31600894, 31601385, 31603199
31605119, 31607937, 31609974, 31616104, 31620748, 31625579, 31625618
31626572, 31627587, 31628311, 31628753, 31630551, 31633224, 31637607
31637680, 31640240, 31644775, 31648120, 31649819, 31650202, 31652641
31653080, 31655807, 31658464, 31658943, 31661865, 31663189, 31663788
31668061, 31668694, 31668872, 31670014, 31670353, 31672605, 31674380
31675568, 31676941, 31677460, 31682766, 31683044, 31684494, 31686979
31688978, 31691030, 31695062, 31696577, 31697741, 31700234, 31701910
31706595, 31707190, 31708133, 31709647, 31709739, 31709777, 31711889
31711997, 31715935, 31718134, 31718346, 31721863, 31721880, 31722646
31723651, 31727560, 31728160, 31734583, 31735662, 31743771, 31747935
31747989, 31748000, 31748944, 31752502, 31753202, 31753425, 31753692
31754887, 31755245, 31756415, 31757357, 31757775, 31757824, 31758083
31758846, 31760592, 31763707, 31764866, 31765257, 31765296, 31766696
31767237, 31769373, 31770289, 31771370, 31771410, 31771468, 31775101
31776994, 31781897, 31783451, 31783782, 31785445, 31786838, 31787655
31788704, 31788761, 31790500, 31792465, 31792615, 31793713, 31796208
31796277, 31796882, 31798742, 31800757, 31807516, 31815099, 31816158
31816631, 31820632, 31820859, 31823051, 31827605, 31827912, 31829617
31829639, 31833172, 31833948, 31835854, 31836454, 31839779, 31842545
31843462, 31847489, 31849859, 31851383, 31852574, 31854692, 31855526
31860193, 31862359, 31863118, 31866141, 31867037, 31869601, 31871692
31872230, 31876368, 31878314, 31880154, 31881527, 31883124, 31886547
31886695, 31887130, 31888148, 31888731, 31889222, 31895670, 31897786
31897854, 31900585, 31903523, 31904933, 31905033, 31907137, 31907565
31909295, 31913650, 31921267, 31927930, 31935717, 31942144, 31943497
31952052, 31953989, 31958958, 31961940, 31965542, 31974597, 31974693
31986836, 31988079, 31991705, 31996264, 32002411, 32003551, 32005048
32007698, 32008586, 32010707, 32017301, 32032733, 32032887, 32048412
32050048, 32057639, 32061648, 32069696, 32069834, 32079739, 32082098
32089820, 32097882, 32101305, 32113113, 32118727, 32121326, 32129659
32130083, 32130504, 32150818, 32165759, 32169151, 32172777, 32174571
32207088, 32212635, 32221141, 32234161, 32290399, 32296941, 32321765

Version 19.0.0.0.ru-2020-10.rur-2020-10.r1

Version 19.0.0.0.ru-2020-10.rur-2020-10.r1 includes the following:

- Patch [31771877](#): Database Release Update: 19.9.0.0.201020 (31771877)
- Patch [31668882](#): OJVM RELEASE UPDATE: 19.9.0.0.201020 (31668882)
- Patch [31335037](#): RDBMS - DSTV35 UPDATE - TZDATA2020A
- Patch [31335142](#): DSTV35 UPDATE - TZDATA2020A - NEED OJVM FIX
- Patch [28730253](#): SUPPORT NEW ERA REIWA FOR JAPANESE IMPERIAL CALENDAR
- Patch [29213893](#): DBMS_STATS FAILING WITH ERROR ORA-01422 WHEN GATHERING STATS FOR USER\$ TABLE
- Patch [29374604](#): IE not starting against 18c Oracle RDBMS Standard Edition.
- PreUpgrade Jar: preupgrade_19_cbuild_8_lf.zip
- Support for setting and unsetting system diagnostic events using procedures in the `rdsadmin.rdsadmin_util` package

For more information, see [Setting and unsetting system diagnostic events](#) in the *Amazon RDS User Guide*.

- Support for the procedure `rdsadmin_util.truncate_apply$_cdr_info` described in [Setting and unsetting system diagnostic events](#) in the *Amazon RDS User Guide*.

Combined patches for version 19.0.0.0.ru-2020-10.rur-2020-10.r1, released October 2020

Bugs fixed:

```
7391838, 8460502, 8476681, 14735102, 17428816, 17468475, 19080742
19697993, 20313356, 21374587, 21639146, 21888352, 21965541, 22580355
22729345, 22748979, 23294761, 23296836, 23606241, 23645975, 23734075
23763462, 24596874, 24669730, 24687075, 24833686, 24971456, 25030027
25092651, 25093917, 25404117, 25416731, 25560538, 25756945, 25804387
25806201, 25809128, 25883179, 25905368, 25986062, 25997810, 26001677
26284288, 26352615, 26440142, 26476244, 26499997, 26611353, 26668264
26716835, 26739322, 26777814, 26819036, 26872233, 27036163, 27044169
27101798, 27126122, 27126938, 27166935, 27195935, 27221350, 27222128
27244999, 27254335, 27260704, 27261477, 27359766, 27369515, 27378053
27392968, 27406105, 27411022, 27423500, 27439716, 27453490, 27458357
```

27489107, 27572040, 27582210, 27589260, 27604329, 27629928, 27666312
27692173, 27700413, 27710072, 27729678, 27745728, 27760043, 27801144
27828892, 27846298, 27873364, 27877830, 27880025, 27929509, 27934711
27935464, 27941110, 27957203, 27967484, 28064977, 28072567, 28078186
28092783, 28104176, 28109326, 28125947, 28129791, 28138847, 28144569
28181021, 28189466, 28204262, 28205555, 28209985, 28210681, 28263142
28271258, 28271693, 28276054, 28279456, 28294563, 28302580, 28313275
28319114, 28322973, 28326928, 28350595, 28371123, 28373960, 28375383
28379065, 28381939, 28386259, 28390273, 28395302, 28397317, 28402823
28406374, 28410431, 28431445, 28435333, 28436414, 28442896, 28454215
28463226, 28470673, 28475242, 28482048, 28484299, 28489419, 28492006
28498976, 28502773, 28504631, 28513333, 28521330, 28530171, 28534475
28535127, 28537481, 28538439, 28541606, 28542455, 28546290, 28547068
28547926, 28558645, 28561704, 28564479, 28565296, 28567417, 28567819
28569897, 28572407, 28572533, 28572544, 28572667, 28572834, 28578945
28587723, 28589509, 28593682, 28594086, 28597221, 28601957, 28602253
28605066, 28606598, 28608211, 28612239, 28618343, 28620697, 28621543
28622202, 28625862, 28627033, 28628592, 28632796, 28636532, 28639299
28642469, 28642899, 28643583, 28643654, 28643718, 28644549, 28645570
28646200, 28646939, 28649388, 28655209, 28661333, 28663289, 28663782
28672457, 28673945, 28681153, 28689483, 28690694, 28692103, 28692275
28694639, 28694872, 28696373, 28697526, 28699321, 28703812, 28705231
28707931, 28708400, 28709063, 28710385, 28710469, 28710663, 28710734
28714461, 28715655, 28715727, 28718469, 28719348, 28720204, 28720418
28721497, 28722229, 28730079, 28730253, 28734355, 28740708, 28740799
28742555, 28745367, 28749853, 28752923, 28755011, 28755846, 28758722
28760206, 28765983, 28767240, 28769456, 28771947, 28772390, 28772816
28774416, 28776431, 28776811, 28777214, 28778754, 28781599, 28781754
28785321, 28785531, 28789531, 28791852, 28793062, 28794230, 28795551
28795734, 28800508, 28802734, 28804517, 28805242, 28808314, 28808652
28808656, 28810381, 28811560, 28813931, 28815123, 28815355, 28815557
28817449, 28819640, 28820669, 28821847, 28824482, 28827682, 28831971
28833912, 28835937, 28836716, 28838385, 28844738, 28845346, 28846759
28847541, 28847572, 28849776, 28850084, 28852325, 28854004, 28854733
28855520, 28855922, 28857552, 28861861, 28862532, 28863263, 28863432
28863487, 28865569, 28867698, 28867992, 28870496, 28871040, 28872645
28873575, 28874416, 28875089, 28876253, 28876639, 28876926, 28877252
28878865, 28881191, 28881848, 28882784, 28884931, 28887305, 28888083
28888327, 28889389, 28889730, 28892794, 28897512, 28899663, 28900506
28901126, 28905390, 28905457, 28905615, 28907196, 28910498, 28910586
28911140, 28912691, 28915561, 28917080, 28918429, 28919145, 28921844
28922227, 28922532, 28922608, 28925250, 28925460, 28925634, 28925880
28927452, 28928462, 28932914, 28933158, 28935293, 28935956, 28936114
28937717, 28938422, 28938698, 28940179, 28940281, 28940472, 28941901

28942455, 28942694, 28945421, 28945994, 28946233, 28948554, 28949888
28950868, 28951332, 28951533, 28952168, 28954762, 28955606, 28955883
28956908, 28957292, 28957723, 28958088, 28959493, 28960863, 28962775
28963036, 28965084, 28965095, 28965231, 28965376, 28966444, 28968779
28974083, 28974999, 28977322, 28980448, 28981871, 28983095, 28983486
28984313, 28985478, 28986207, 28986231, 28986257, 28986326, 28986481
28986696, 28988482, 28988864, 28989306, 28993295, 28993353, 28994307
28994542, 28995287, 28996376, 29000000, 29001305, 29001888, 29002488
29002784, 29002927, 29003207, 29003407, 29003617, 29003738, 29006318
29006621, 29007321, 29007353, 29007775, 29008035, 29008669, 29009513
29010126, 29010517, 29011936, 29012609, 29013475, 29013832, 29014076
29015118, 29016294, 29017265, 29018655, 29018680, 29019121, 29021063
29021352, 29022986, 29024054, 29024448, 29024552, 29024732, 29024876
29026154, 29026582, 29026606, 29027456, 29027694, 29027933, 29027940
29031575, 29031600, 29032234, 29032276, 29032457, 29032607, 29033052
29033145, 29033200, 29033280, 29034587, 29036278, 29037290, 29038528
29038728, 29039089, 29039510, 29040739, 29041739, 29041775, 29043554
29043651, 29043725, 29044086, 29044763, 29044954, 29046482, 29047127
29047850, 29048178, 29048289, 29048498, 29048605, 29048728, 29049673
29050357, 29050560, 29050765, 29050886, 29051263, 29051702, 29051953
29052726, 29052850, 29053783, 29055644, 29056024, 29056270, 29056560
29056767, 29056894, 29058476, 29059011, 29060216, 29061016, 29061959
29062692, 29062848, 29062860, 29062868, 29110526, 29110783, 29110790
29110797, 29110802, 29110805, 29111598, 29111631, 29112455, 29113282
29113305, 29115857, 29117337, 29117526, 29117642, 29118543, 29119077
29120223, 29122224, 29122254, 29122367, 29123297, 29123432, 29123444
29123482, 29124368, 29125036, 29125374, 29125380, 29125708, 29125786
29126345, 29127957, 29128693, 29128935, 29129450, 29129476, 29129497
29129691, 29129712, 29130219, 29131539, 29131772, 29132456, 29132869
29132938, 29133470, 29134447, 29135383, 29135649, 29136111, 29138641
29139070, 29139727, 29139761, 29139956, 29141316, 29141341, 29141685
29141886, 29142609, 29142667, 29143516, 29144995, 29145214, 29145730
29146157, 29146810, 29147849, 29149170, 29149829, 29150338, 29151520
29152357, 29152603, 29152752, 29154631, 29154636, 29154725, 29154829
29155099, 29157051, 29157389, 29158680, 29158899, 29159216, 29159661
29159909, 29159936, 29160174, 29160462, 29161597, 29161923, 29162095
29163073, 29163156, 29163415, 29163437, 29163524, 29163567, 29164376
29165682, 29167111, 29167342, 29167374, 29167940, 29168137, 29168219
29168433, 29169073, 29169215, 29169540, 29169739, 29170232, 29170717
29171683, 29171942, 29172618, 29172826, 29173140, 29173373, 29173618
29173817, 29174004, 29174753, 29175638, 29176318, 29177466, 29177543
29177886, 29178385, 29179097, 29180313, 29180455, 29180559, 29180721
29180893, 29181078, 29181153, 29181231, 29181568, 29181620, 29181743
29181923, 29182019, 29182517, 29182901, 29182920, 29183298, 29183912

29184297, 29184666, 29185193, 29186091, 29186456, 29186605, 29188255
29189302, 29189307, 29189889, 29190235, 29190474, 29190663, 29190740
29191541, 29191827, 29192419, 29192468, 29192685, 29193207, 29194205
29194367, 29194493, 29194827, 29194981, 29195279, 29195337, 29195758
29196725, 29198092, 29198913, 29199635, 29199733, 29200316, 29200700
29201143, 29201494, 29201539, 29201695, 29201787, 29202104, 29202461
29202850, 29203122, 29203166, 29203227, 29203425, 29203443, 29203604
29205281, 29205323, 29205419, 29205463, 29205767, 29205918, 29206109
29206605, 29207073, 29208260, 29208732, 29209545, 29210577, 29210610
29210624, 29210683, 29211457, 29211724, 29212012, 29212433, 29212611
29213320, 29213351, 29213613, 29213641, 29213775, 29213850, 29213879
29213893, 29214561, 29214960, 29216312, 29216723, 29216746, 29216984
29217294, 29217472, 29217828, 29217848, 29218570, 29219205, 29219273
29219627, 29220079, 29221248, 29221891, 29221942, 29222031, 29222784
29223833, 29223859, 29223967, 29224065, 29224294, 29224605, 29224710
29225076, 29225168, 29225758, 29225861, 29227602, 29228869, 29229164
29229754, 29229839, 29229844, 29229955, 29230252, 29230565, 29231133
29232117, 29232154, 29232449, 29232653, 29233415, 29233810, 29233953
29234123, 29235934, 29236573, 29237538, 29237575, 29237744, 29240307
29240668, 29240759, 29241345, 29241651, 29242017, 29242884, 29242906
29243749, 29243958, 29244495, 29244766, 29244968, 29245063, 29245137
29245160, 29246163, 29247415, 29247712, 29247906, 29248495, 29248552
29248723, 29248835, 29248858, 29249289, 29249412, 29249583, 29249991
29250059, 29250317, 29251259, 29251564, 29253184, 29253871, 29254031
29254623, 29254930, 29255178, 29255273, 29255431, 29255435, 29255616
29255718, 29255973, 29256426, 29259119, 29259320, 29260224, 29260452
29260956, 29261547, 29261548, 29261695, 29261906, 29262512, 29262887
29265448, 29266248, 29266899, 29267292, 29268412, 29269171, 29269228
29269825, 29270585, 29271019, 29273360, 29273539, 29273570, 29273735
29273812, 29273847, 29274428, 29274564, 29274627, 29275461, 29276272
29277317, 29278218, 29278684, 29279658, 29279751, 29279854, 29281527
29281691, 29281796, 29282090, 29282233, 29282666, 29282898, 29285197
29285453, 29285503, 29285621, 29285788, 29285956, 29286037, 29286229
29287130, 29287705, 29290110, 29290235, 29292232, 29292837, 29293072
29293574, 29293806, 29294753, 29296257, 29297863, 29297915, 29298220
29299049, 29299082, 29299830, 29299844, 29301463, 29301566, 29302963
29303918, 29304314, 29304692, 29304781, 29304853, 29306226, 29306713
29307090, 29307109, 29307638, 29309698, 29311336, 29311528, 29311588
29311927, 29312310, 29312672, 29312734, 29312753, 29312889, 29313347
29313417, 29313525, 29314539, 29314636, 29317756, 29318410, 29319441
29320900, 29321489, 29323946, 29324568, 29324735, 29325087, 29325105
29325257, 29325765, 29325993, 29327044, 29327892, 29329042, 29329087
29329675, 29329807, 29330361, 29330791, 29331066, 29331209, 29331380
29331493, 29332292, 29332395, 29332763, 29332771, 29333500, 29336843

29336899, 29337294, 29337310, 29337742, 29338315, 29338348, 29338453
29338780, 29338913, 29339101, 29339155, 29339299, 29341209, 29342099
29343086, 29343156, 29343861, 29344541, 29345937, 29346057, 29346211
29346943, 29347620, 29348176, 29348358, 29350052, 29350712, 29350762
29350868, 29351044, 29351386, 29351662, 29351716, 29351735, 29351749
29351771, 29352298, 29352724, 29352867, 29352947, 29353271, 29353432
29353718, 29353821, 29353960, 29355654, 29356547, 29356704, 29356711
29356752, 29356782, 29357821, 29358509, 29358828, 29360252, 29360285
29360467, 29360672, 29360775, 29360911, 29360950, 29361319, 29361472
29361801, 29362596, 29363151, 29364171, 29364177, 29366406, 29366940
29367019, 29367561, 29367971, 29368253, 29368310, 29368725, 29372069
29372541, 29372562, 29373418, 29373588, 29374179, 29374604, 29375355
29375941, 29375984, 29376346, 29377804, 29377986, 29378029, 29378287
29378834, 29378913, 29379299, 29379381, 29379750, 29379978, 29380527
29381000, 29382296, 29382641, 29382784, 29382815, 29383695, 29384781
29384854, 29384864, 29385339, 29385429, 29385652, 29386502, 29386557
29386635, 29386660, 29386835, 29387073, 29387274, 29387310, 29387337
29388020, 29388072, 29388094, 29388524, 29388830, 29389408, 29389889
29390011, 29390435, 29390785, 29391030, 29391237, 29391301, 29391438
29391849, 29391925, 29392554, 29392966, 29393291, 29393649, 29394014
29394140, 29394749, 29395657, 29397954, 29397996, 29398488, 29398863
29399046, 29399100, 29399121, 29399336, 29399938, 29402110, 29402131
29404483, 29405012, 29405462, 29405651, 29405996, 29407488, 29407804
29408853, 29409149, 29409455, 29410311, 29410834, 29411037, 29411469
29411931, 29412066, 29412269, 29413360, 29413382, 29413517, 29413544
29413634, 29413956, 29416688, 29416700, 29417084, 29417173, 29417719
29417884, 29418165, 29420254, 29420834, 29421059, 29423003, 29423016
29423156, 29423491, 29423826, 29424999, 29426241, 29426320, 29428230
29429017, 29429087, 29429264, 29429466, 29429566, 29429895, 29430524
29430866, 29431192, 29431485, 29432176, 29434301, 29434869, 29435474
29435652, 29436454, 29436514, 29436522, 29436727, 29437379, 29437594
29437712, 29438150, 29438277, 29438736, 29439522, 29440651, 29441196
29442936, 29443187, 29443250, 29443559, 29444072, 29444282, 29444602
29445548, 29446319, 29446669, 29448498, 29449477, 29449845, 29449852
29450162, 29450193, 29450421, 29450812, 29450936, 29451386, 29452251
29452576, 29452936, 29452953, 29454450, 29454978, 29455424, 29455773
29456538, 29456714, 29457312, 29457319, 29457370, 29457502, 29457807
29457978, 29460252, 29461420, 29461791, 29461971, 29462594, 29462767
29462957, 29463047, 29463528, 29463798, 29464616, 29464779, 29465047
29465177, 29466674, 29467622, 29469563, 29469565, 29470059, 29470291
29471633, 29471832, 29471860, 29472618, 29473708, 29476473, 29477015
29481584, 29482021, 29483452, 29483532, 29483626, 29483672, 29483685
29483712, 29483723, 29483771, 29485099, 29485877, 29486181, 29486848
29487150, 29487189, 29488894, 29489436, 29489546, 29490256, 29492127

29492939, 29493122, 29494245, 29495057, 29495684, 29497311, 29497588
29497696, 29498198, 29500257, 29500826, 29500963, 29501218, 29502561
29503543, 29503631, 29503827, 29504103, 29504492, 29504682, 29505668
29506942, 29507270, 29507616, 29508681, 29509777, 29510278, 29511064
29511611, 29511980, 29512125, 29512890, 29514479, 29515134, 29515240
29515476, 29515766, 29515834, 29516300, 29516727, 29516766, 29517168
29517883, 29519131, 29521187, 29521688, 29521748, 29521862, 29522358
29522561, 29522662, 29523055, 29523216, 29523511, 29524599, 29524985
29525366, 29525467, 29525886, 29526966, 29527595, 29527610, 29528368
29529147, 29530440, 29530515, 29530812, 29530909, 29531654, 29531836
29532532, 29536342, 29536445, 29537829, 29538631, 29540327, 29541742
29541769, 29541973, 29542084, 29542449, 29542580, 29542643, 29543034
29543956, 29544552, 29546817, 29547010, 29547867, 29548413, 29548427
29548592, 29548687, 29548722, 29549040, 29549071, 29549104, 29549154
29549730, 29552402, 29552773, 29553141, 29554092, 29555105, 29557144
29557261, 29557336, 29557556, 29558238, 29558452, 29558975, 29559187
29559395, 29559446, 29559908, 29559981, 29564592, 29564593, 29565611
29579919, 29580394, 29580983, 29581771, 29584261, 29584693, 29586143
29587299, 29587765, 29588732, 29589544, 29591343, 29592011, 29592215
29597536, 29597754, 29598039, 29598046, 29598226, 29598233, 29599008
29599300, 29601461, 29602831, 29603460, 29603884, 29604002, 29604257
29606261, 29607136, 29607797, 29608000, 29608023, 29610506, 29611020
29611991, 29614206, 29614987, 29615824, 29616244, 29616414, 29618074
29618190, 29620042, 29622936, 29623323, 29623592, 29624124, 29625065
29625804, 29625876, 29626154, 29626732, 29628200, 29629430, 29629650
29629681, 29629745, 29631749, 29632095, 29632265, 29632611, 29633697
29633753, 29633936, 29634643, 29635427, 29635717, 29635990, 29637362
29637526, 29637560, 29638285, 29641736, 29643721, 29644426, 29644464
29645167, 29645349, 29647176, 29647770, 29648928, 29651183, 29651520
29652809, 29653132, 29653246, 29655164, 29655668, 29656400, 29656819
29656843, 29657399, 29657422, 29657744, 29657960, 29658056, 29661028
29661065, 29661722, 29663191, 29663368, 29663494, 29663601, 29664087
29664161, 29665168, 29665940, 29667527, 29667994, 29668005, 29669413
29670782, 29671363, 29672507, 29675446, 29676089, 29677051, 29677173
29677733, 29677927, 29679856, 29681987, 29683039, 29683211, 29684518
29685137, 29685276, 29687214, 29687220, 29687459, 29687718, 29687727
29687763, 29688867, 29689145, 29689255, 29692694, 29694869, 29695425
29695821, 29695841, 29695964, 29696310, 29700125, 29700460, 29700770
29701720, 29703932, 29705793, 29707099, 29707493, 29707896, 29708353
29708876, 29708915, 29710188, 29710858, 29713810, 29715220, 29715703
29716194, 29716227, 29716491, 29716602, 29716871, 29717659, 29717901
29719146, 29720133, 29721418, 29721576, 29722167, 29724658, 29725476
29725781, 29726695, 29738374, 29738400, 29739576, 29741319, 29741976
29742223, 29744225, 29744400, 29745288, 29746962, 29747493, 29747648

29747653, 29748285, 29748336, 29748513, 29749471, 29750673, 29751094
29753244, 29754196, 29754951, 29755821, 29756274, 29756444, 29757099
29757264, 29757651, 29757687, 29758203, 29758217, 29758661, 29761678
29761837, 29761911, 29763158, 29765035, 29765393, 29766207, 29766435
29766503, 29766679, 29768487, 29768899, 29769901, 29770750, 29771032
29771242, 29773197, 29773205, 29773842, 29774362, 29775393, 29779196
29780140, 29782211, 29782823, 29782866, 29784106, 29785239, 29785311
29787292, 29787766, 29789911, 29791152, 29791880, 29792213, 29792433
29793318, 29794174, 29794462, 29795712, 29795957, 29796335, 29796378
29797209, 29797726, 29802382, 29802695, 29804875, 29805368, 29805772
29806390, 29807964, 29809792, 29809837, 29812084, 29812489, 29813503
29813650, 29813671, 29815341, 29815713, 29817278, 29817547, 29817784
29821130, 29821582, 29822714, 29825525, 29827647, 29827852, 29828644
29831196, 29833984, 29834506, 29836096, 29838337, 29838485, 29838773
29839715, 29840619, 29841267, 29841687, 29843277, 29843692, 29843831
29844131, 29844226, 29844275, 29845530, 29846126, 29846645, 29846688
29848084, 29848849, 29849100, 29850930, 29851733, 29853485, 29856859
29858121, 29858376, 29859068, 29860994, 29861075, 29864203, 29864261
29865188, 29865590, 29865658, 29869086, 29869149, 29869404, 29869887
29869906, 29870065, 29871098, 29871312, 29871360, 29872401, 29872937
29872983, 29873665, 29874090, 29874761, 29875459, 29875565, 29876358
29876989, 29877608, 29878076, 29881050, 29881478, 29881575, 29881643
29881839, 29882427, 29882454, 29882729, 29884958, 29885182, 29885890
29886809, 29887045, 29887111, 29888621, 29889184, 29889358, 29890740
29891075, 29891853, 29891916, 29892604, 29893132, 29896510, 29897418
29897863, 29900203, 29900824, 29901419, 29902299, 29902327, 29902330
29902659, 29903190, 29903299, 29903357, 29903454, 29904002, 29906678
29907942, 29908389, 29908777, 29909658, 29910402, 29912286, 29913805
29913966, 29914449, 29914544, 29915217, 29915848, 29916975, 29919789
29920025, 29920376, 29920804, 29921318, 29922225, 29922461, 29923452
29924181, 29926466, 29927756, 29928210, 29928340, 29928427, 29928564
29930457, 29932202, 29932430, 29932780, 29934052, 29935685, 29937565
29937655, 29937956, 29938225, 29939400, 29939795, 29940373, 29941062
29942096, 29942275, 29942554, 29943670, 29943879, 29944035, 29944159
29944660, 29944963, 29945645, 29946388, 29947145, 29948165, 29950220
29951620, 29951759, 29956016, 29956222, 29957412, 29957493, 29958925
29960884, 29961353, 29961609, 29961847, 29962160, 29962248, 29962834
29962927, 29962939, 29965052, 29965603, 29965888, 29966768, 29967223
29968085, 29969557, 29970081, 29970298, 29971027, 29971481, 29971888
29971936, 29971951, 29972176, 29973012, 29989783, 29989845, 29991257
29993717, 29997326, 29997553, 29997937, 30000664, 30001331, 30003187
30006159, 30006985, 30007450, 30007797, 30008125, 30008198, 30008214
30009710, 30012181, 30015070, 30017836, 30018017, 30018903, 30019864
30024618, 30025814, 30026016, 30027614, 30028599, 30029519, 30029806

30031027, 30032376, 30033040, 30033547, 30034456, 30035598, 30036258
30038392, 30039800, 30039959, 30040157, 30041501, 30041514, 30042490
30043398, 30043610, 30043930, 30044108, 30044507, 30045389, 30045484
30046497, 30047531, 30047702, 30047765, 30047931, 30048688, 30049966
30051176, 30051783, 30051804, 30052928, 30053036, 30053501, 30053748
30054980, 30056058, 30057718, 30057799, 30058149, 30058453, 30059106
30059109, 30060267, 30060330, 30062364, 30062819, 30064268, 30066352
30067565, 30068384, 30068871, 30071446, 30072905, 30073314, 30073744
30074296, 30074349, 30074469, 30074472, 30074820, 30075037, 30076058
30076197, 30076253, 30076604, 30078675, 30078934, 30079949, 30080266
30081546, 30081580, 30082145, 30083100, 30083216, 30083488, 30083807
30084971, 30085897, 30086596, 30086992, 30090568, 30092280, 30092859
30095591, 30095952, 30097092, 30097115, 30098251, 30099302, 30099420
30099454, 30100354, 30101186, 30103551, 30103553, 30104378, 30104555
30106748, 30109365, 30110224, 30110370, 30110518, 30114477, 30114489
30114534, 30116085, 30116203, 30116854, 30117209, 30117335, 30117469
30117593, 30118261, 30118279, 30120608, 30122583, 30125765, 30126145
30127145, 30127522, 30127805, 30127904, 30128047, 30130240, 30131286
30131645, 30132708, 30133841, 30134746, 30135396, 30135731, 30135942
30136346, 30139392, 30142907, 30143470, 30143593, 30146593, 30146969
30147473, 30147928, 30148999, 30149035, 30149658, 30150606, 30150710
30153552, 30153885, 30154633, 30155241, 30155814, 30155837, 30159329
30159511, 30159536, 30159752, 30159760, 30160625, 30161094, 30163243
30164714, 30165493, 30165503, 30165897, 30167787, 30169254, 30170104
30172925, 30173113, 30173556, 30174401, 30175291, 30177597, 30178250
30178839, 30178990, 30179644, 30180208, 30180643, 30181756, 30182498
30183696, 30183715, 30183920, 30184102, 30185852, 30186319, 30186476
30186706, 30187866, 30189516, 30190090, 30191274, 30192691, 30193165
30193505, 30193736, 30194612, 30194710, 30194972, 30195667, 30195668
30195684, 30196195, 30196358, 30196629, 30198861, 30198905, 30199890
30200034, 30200132, 30200237, 30200680, 30200758, 30202349, 30202388
30203929, 30204042, 30204542, 30206493, 30206675, 30207473, 30208327
30208723, 30209736, 30210884, 30213031, 30213540, 30215130, 30215302
30215351, 30217206, 30217562, 30217982, 30218044, 30218317, 30219222
30221237, 30221298, 30222512, 30223712, 30223847, 30224650, 30224868
30224950, 30225265, 30225439, 30225443, 30225718, 30225844, 30226244
30228567, 30229683, 30232638, 30235919, 30235979, 30236554, 30237477
30238211, 30238715, 30239480, 30240010, 30240547, 30240930, 30241567
30241807, 30241920, 30242120, 30242724, 30243216, 30244340, 30246053
30246179, 30247305, 30249432, 30251003, 30252005, 30252098, 30252156
30252458, 30252977, 30253035, 30253090, 30253608, 30253705, 30253835
30254206, 30254525, 30254576, 30254726, 30255143, 30255528, 30256542
30257412, 30257908, 30260595, 30264405, 30265523, 30265608, 30265615
30265703, 30266791, 30267155, 30269428, 30269748, 30270647, 30270744

30271114, 30272329, 30274090, 30274188, 30274324, 30274662, 30275548
30275569, 30275578, 30276243, 30277120, 30277451, 30277589, 30277733
30281428, 30282501, 30282591, 30283296, 30283577, 30283579, 30283581
30283932, 30284219, 30284369, 30285457, 30285540, 30285843, 30288343
30288491, 30289074, 30289458, 30293345, 30294267, 30294671, 30295110
30295137, 30295549, 30295790, 30295808, 30297905, 30299367, 30299817
30299934, 30300030, 30300342, 30300363, 30300538, 30305264, 30305395
30305568, 30305880, 30307814, 30307883, 30308368, 30308624, 30308772
30308947, 30309098, 30309798, 30311826, 30312094, 30312546, 30313848
30313989, 30314079, 30314198, 30314837, 30316667, 30316897, 30317209
30318638, 30318943, 30319080, 30319099, 30320029, 30322980, 30323658
30323849, 30324180, 30325407, 30326882, 30327149, 30328168, 30328690
30329209, 30330123, 30331356, 30331759, 30332505, 30334484, 30334563
30335127, 30335832, 30335987, 30336032, 30336742, 30339103, 30341713
30342371, 30342878, 30344614, 30345201, 30345432, 30345809, 30346330
30346867, 30347410, 30349714, 30350543, 30352581, 30352623, 30352715
30355490, 30357463, 30357897, 30360383, 30362003, 30362850, 30363088
30363716, 30364329, 30364613, 30365745, 30367193, 30368048, 30368482
30368534, 30368668, 30371264, 30371623, 30371909, 30372081, 30373419
30373550, 30374345, 30374570, 30374739, 30375109, 30376986, 30377347
30381207, 30381525, 30382982, 30383286, 30384121, 30384152, 30387666
30389229, 30389414, 30389507, 30391272, 30392011, 30392987, 30393110
30393653, 30394738, 30394974, 30396946, 30397100, 30398257, 30398422
30399906, 30402386, 30403763, 30403881, 30403902, 30403989, 30404117
30404153, 30406709, 30408515, 30408808, 30409207, 30409339, 30409590
30412188, 30412863, 30412885, 30412921, 30413137, 30413294, 30414491
30414679, 30414714, 30416034, 30416603, 30417648, 30417732, 30419024
30421204, 30421439, 30421476, 30421706, 30422487, 30423135, 30423218
30424347, 30430921, 30431274, 30431504, 30431698, 30431703, 30431717
30431867, 30433177, 30437149, 30441687, 30441959, 30442266, 30442749
30442884, 30443393, 30446583, 30447060, 30447589, 30448182, 30448917
30449194, 30449837, 30450787, 30453442, 30454090, 30457633, 30458568
30458593, 30460922, 30461458, 30463938, 30464250, 30464655, 30466081
30469777, 30472891, 30473634, 30474167, 30474774, 30475115, 30476768
30477588, 30477685, 30477691, 30477767, 30479252, 30479715, 30480872
30483065, 30483140, 30483521, 30484042, 30484801, 30485255, 30486436
30487387, 30490014, 30490578, 30493518, 30495035, 30495078, 30495133
30495483, 30496957, 30497057, 30497765, 30498824, 30500224, 30500297
30500344, 30500582, 30501574, 30502415, 30503943, 30505497, 30506794
30506991, 30507032, 30509277, 30510347, 30510527, 30513285, 30513848
30515886, 30516868, 30517214, 30517516, 30519188, 30522285, 30522998
30523137, 30523538, 30523601, 30523750, 30528547, 30528704, 30528935
30529940, 30532811, 30533132, 30534351, 30534549, 30534662, 30534827
30537405, 30537533, 30539519, 30540109, 30540407, 30544247, 30544595

30544629, 30545281, 30545556, 30549255, 30549637, 30549789, 30549881
30551000, 30551123, 30554178, 30556581, 30556807, 30557386, 30559252
30560365, 30560513, 30561590, 30561737, 30564139, 30564343, 30565805
30573236, 30573703, 30576112, 30576393, 30576853, 30577071, 30577591
30578221, 30579051, 30580813, 30581448, 30582221, 30582500, 30588738
30591028, 30592859, 30593046, 30595114, 30595860, 30596488, 30598682
30598746, 30598919, 30599405, 30599407, 30600173, 30600184, 30602230
30602828, 30605215, 30606345, 30606451, 30609799, 30610667, 30611603
30612199, 30613937, 30613971, 30614411, 30619525, 30619787, 30620805
30621255, 30622528, 30623138, 30623142, 30624792, 30624864, 30625121
30628899, 30629643, 30629799, 30631393, 30631523, 30633259, 30633938
30635183, 30635302, 30635326, 30637270, 30637319, 30641755, 30641900
30644889, 30647133, 30650404, 30651231, 30651621, 30651674, 30652515
30652853, 30654558, 30655906, 30657365, 30657624, 30657706, 30657875
30658533, 30658555, 30658702, 30660412, 30661939, 30662651, 30662736
30663646, 30668407, 30670584, 30671720, 30671813, 30674959, 30676209
30679595, 30679771, 30681462, 30681516, 30686131, 30687047, 30690686
30691604, 30691731, 30691857, 30692462, 30692473, 30694947, 30696566
30698289, 30703610, 30704826, 30708735, 30710807, 30711370, 30714151
30714715, 30716863, 30718841, 30718862, 30719419, 30720736, 30720844
30722705, 30723671, 30724679, 30724881, 30727701, 30729278, 30729604
30730026, 30732711, 30734707, 30735153, 30735736, 30740669, 30740997
30741263, 30749644, 30749722, 30750991, 30751521, 30751968, 30755348
30758943, 30761878, 30763272, 30763305, 30763639, 30763754, 30764663
30765486, 30769312, 30770717, 30773164, 30773797, 30776416, 30776929
30777759, 30778855, 30779240, 30781032, 30781041, 30782414, 30783551
30785101, 30786655, 30789904, 30790441, 30801296, 30801510, 30803210
30807723, 30808869, 30812574, 30814266, 30814285, 30815852, 30816760
30816938, 30821297, 30823744, 30825391, 30825419, 30825656, 30826474
30828350, 30829779, 30832775, 30833454, 30834110, 30835853, 30838605
30844839, 30847442, 30848097, 30848773, 30851951, 30855101, 30856358
30857501, 30857721, 30858919, 30861988, 30865805, 30866141, 30866988
30869131, 30870439, 30871716, 30871792, 30873527, 30880774, 30880913
30881407, 30883785, 30883877, 30886188, 30887501, 30887777, 30889723
30890720, 30890971, 30895577, 30896620, 30904672, 30906274, 30906407
30909918, 30910264, 30913399, 30914272, 30914674, 30919691, 30919804
30922936, 30922996, 30923517, 30923597, 30923940, 30927821, 30930339
30936831, 30937340, 30937410, 30939307, 30939934, 30940259, 30940868
30941056, 30944643, 30945005, 30946072, 30946876, 30952104, 30952191
30953266, 30953836, 30957739, 30964194, 30965649, 30968737, 30968781
30970518, 30972841, 30972887, 30972966, 30973113, 30973137, 30973143
30973698, 30978554, 30980317, 30980733, 30981240, 30985027, 30987088
30990034, 30992597, 30993198, 30994996, 30996991, 30997375, 30998759
30998847, 31001017, 31001455, 31001859, 31003659, 31004077, 31004719

31004844, 31008240, 31008907, 31009680, 31010976, 31013127, 31015330
31016413, 31019249, 31021157, 31021324, 31021542, 31022858, 31025859
31026220, 31028986, 31029936, 31031955, 31032904, 31034794, 31035916
31038220, 31039627, 31039928, 31042208, 31043483, 31051075, 31056909
31061482, 31061504, 31062010, 31066250, 31066265, 31066554, 31067892
31071080, 31077117, 31077365, 31079204, 31080474, 31084921, 31086869
31092129, 31094688, 31097760, 31100172, 31103065, 31104809, 31106577
31109506, 31113089, 31113249, 31115502, 31118809, 31119057, 31124914
31134430, 31141792, 31153120, 31153485, 31155634, 31156383, 31163379
31172207, 31177193, 31178103, 31180519, 31182159, 31182793, 31188038
31192039, 31193936, 31194264, 31200845, 31201001, 31202536, 31208287
31214119, 31215438, 31217946, 31219975, 31220912, 31221454, 31222780
31223382, 31228670, 31234765, 31249406, 31254297, 31254535, 31258101
31265773, 31292298, 31301460, 31305624, 31306248, 31306261, 31309867
31312976, 31315876, 31321092, 31325584, 31326608, 31331354, 31334606
31335037, 31335142, 31338249, 31338673, 31359215, 31383396, 31386394
31387443, 31393600, 31394365, 31401831, 31414023, 31414524, 31417192
31429770, 31430722, 31431005, 31433092, 31455597, 31475635, 31477424
31486557, 31500971, 31509279, 31513011, 31523548, 31527103, 31536731
31537521, 31544097, 31570161, 31591384, 31591400, 31591409, 31600023
31609974, 31628753, 31658464, 31668061, 31668872, 31672605, 31683044
31718134, 31718346, 31747989, 31758846, 31781897, 31792615, 31796208
31796277, 31820859, 31833172, 31867037, 31876368, 31886547, 31888148
31897786, 31905033, 31935717

Version 19.0.0.0.ru-2020-07.rur-2020-07.r1

Version 19.0.0.0.ru-2020-07.rur-2020-07.r1 includes the following:

- Patch [31281355](#): Database Release Update 19.8.0.0.200714
- Patch [31219897](#): Oracle JVM Release Update 19.8.0.0.200714
- Patch [31335037](#): DSTV35 for RDBMS (TZDATA2020A)
- Patch [31335142](#): DSTV35 for OJVM (TZDATA2020A)
- Patch [28730253](#): SUPPORT NEW ERA REIWA FOR JAPANESE IMPERIAL CALENDAR
- Patch [29213893](#): DBMS_STATS FAILING WITH ERROR ORA-01422 WHEN GATHERING STATS FOR USER\$ TABLE
- Patch [29374604](#): IE not starting against 18c Oracle RDBMS Standard Edition
- PreUpgrade Jar: preupgrade_19_cbuild_7_lf.zip

- Patch [30417732](#): ORA-00600 [KQRHASHTABLEREMOVE: X LOCK] AND INSTANCE CRASH

Combined patches for version 19.0.0.0.ru-2020-07.rur-2020-07.r1, released July 2020

Bugs fixed:

7391838, 8476681, 14735102, 17428816, 19080742, 19697993, 20313356
21374587, 21965541, 22580355, 22729345, 23296836, 23606241, 23645975
23763462, 24596874, 24669730, 24687075, 24971456, 25030027, 25092651
25416731, 25560538, 25756945, 25804387, 25806201, 25883179, 25986062
25997810, 26001677, 26284288, 26440142, 26476244, 26611353, 26668264
26739322, 26777814, 26872233, 27036163, 27044169, 27101798, 27126122
27126938, 27166935, 27195935, 27221350, 27222128, 27244999, 27254335
27359766, 27369515, 27378053, 27392968, 27406105, 27411022, 27423500
27439716, 27453490, 27458357, 27489107, 27572040, 27582210, 27589260
27604329, 27629928, 27666312, 27692173, 27700413, 27710072, 27729678
27760043, 27801144, 27828892, 27846298, 27877830, 27880025, 27929509
27934711, 27935464, 27941110, 27957203, 27967484, 28064977, 28072567
28078186, 28092783, 28104176, 28109326, 28125947, 28129791, 28138847
28144569, 28181021, 28189466, 28204262, 28205555, 28209985, 28210681
28263142, 28271258, 28271693, 28276054, 28279456, 28294563, 28302580
28313275, 28319114, 28322973, 28326928, 28350595, 28371123, 28373960
28375383, 28379065, 28381939, 28386259, 28390273, 28395302, 28397317
28402823, 28410431, 28431445, 28435333, 28442896, 28454215, 28463226
28470673, 28475242, 28484299, 28489419, 28492006, 28498976, 28502773
28504631, 28513333, 28521330, 28530171, 28534475, 28535127, 28538439
28541606, 28542455, 28546290, 28547068, 28547926, 28558645, 28561704
28564479, 28565296, 28567417, 28567819, 28569897, 28572407, 28572533
28572544, 28572667, 28572834, 28578945, 28587723, 28589509, 28593682
28594086, 28597221, 28601957, 28605066, 28606598, 28608211, 28612239
28618343, 28620697, 28621543, 28622202, 28625862, 28627033, 28628592
28632796, 28636532, 28639299, 28642469, 28642899, 28643654, 28643718
28644549, 28645570, 28646200, 28646939, 28649388, 28655209, 28663289
28663782, 28672457, 28673945, 28681153, 28689483, 28692103, 28692275
28694639, 28694872, 28696373, 28699321, 28703812, 28705231, 28707931
28708400, 28709063, 28710385, 28710469, 28710663, 28710734, 28714461
28715655, 28715727, 28718469, 28719348, 28720204, 28720418, 28721497
28722229, 28730079, 28730253, 28734355, 28740708, 28742555, 28745367
28749853, 28752923, 28755011, 28755846, 28758722, 28760206, 28765983
28767240, 28769456, 28771947, 28772390, 28772816, 28774416, 28776431

28776811, 28777214, 28778754, 28781599, 28781754, 28785321, 28785531
28789531, 28791852, 28793062, 28795551, 28795734, 28800508, 28802734
28804517, 28805242, 28808314, 28808652, 28808656, 28810381, 28811560
28813931, 28815123, 28815355, 28815557, 28817449, 28819640, 28820669
28821847, 28824482, 28827682, 28831971, 28833912, 28835937, 28836716
28838385, 28844738, 28845346, 28846759, 28847541, 28847572, 28849776
28850084, 28852325, 28854004, 28855520, 28855922, 28857552, 28861861
28862532, 28863263, 28863432, 28863487, 28865569, 28867992, 28870496
28871040, 28872645, 28873575, 28874416, 28875089, 28876253, 28876639
28876926, 28877252, 28878865, 28881191, 28881848, 28882784, 28884931
28887305, 28888083, 28888327, 28889730, 28892794, 28897512, 28899663
28900506, 28901126, 28905390, 28905457, 28905615, 28907196, 28910498
28911140, 28912691, 28915561, 28917080, 28918429, 28919145, 28922227
28922532, 28922608, 28925250, 28925460, 28925634, 28925880, 28927452
28932914, 28933158, 28935293, 28935956, 28936114, 28937717, 28938422
28938698, 28940179, 28940281, 28940472, 28941901, 28942455, 28942694
28945421, 28945994, 28946233, 28949888, 28950868, 28951332, 28951533
28952168, 28954762, 28955606, 28955883, 28956908, 28957292, 28957723
28958088, 28959493, 28960863, 28962775, 28963036, 28965084, 28965095
28965231, 28965376, 28966444, 28968779, 28974083, 28974999, 28977322
28980448, 28981871, 28983095, 28983486, 28985478, 28986207, 28986231
28986257, 28986326, 28986481, 28988482, 28988864, 28989306, 28993295
28993353, 28994307, 28994542, 28995287, 28996376, 29000000, 29001305
29001888, 29002488, 29002784, 29002927, 29003207, 29003407, 29003617
29003738, 29006318, 29006621, 29007321, 29007353, 29007775, 29008035
29008669, 29009513, 29010126, 29011936, 29012609, 29013475, 29013832
29014076, 29015118, 29016294, 29017265, 29018655, 29018680, 29019121
29021063, 29021352, 29022986, 29024054, 29024448, 29024552, 29024732
29024876, 29026154, 29026582, 29026606, 29027456, 29027694, 29027933
29027940, 29031575, 29031600, 29032234, 29032276, 29032457, 29032607
29033052, 29033145, 29033200, 29033280, 29034587, 29036278, 29037290
29038528, 29038728, 29039089, 29039510, 29040739, 29043554, 29043651
29043725, 29044763, 29044954, 29046482, 29047127, 29047850, 29048178
29048289, 29048498, 29048605, 29048728, 29050357, 29050560, 29050765
29050886, 29051702, 29051953, 29052726, 29052850, 29053783, 29055644
29056024, 29056270, 29056560, 29056767, 29056894, 29058476, 29059011
29060216, 29061016, 29061959, 29062692, 29062848, 29062860, 29062868
29110526, 29110783, 29110790, 29110797, 29110802, 29110805, 29111598
29111631, 29112455, 29113282, 29113305, 29115857, 29117337, 29117526
29117642, 29118543, 29119077, 29120223, 29122224, 29122254, 29123297
29123432, 29123444, 29123482, 29124368, 29125036, 29125374, 29125380
29125708, 29125786, 29126345, 29127957, 29128693, 29128935, 29129450
29129476, 29129497, 29129712, 29130219, 29131539, 29131772, 29132456
29132869, 29132938, 29133470, 29134447, 29135383, 29135649, 29136111

29138641, 29139070, 29139727, 29139761, 29139956, 29141316, 29141341
29141685, 29142609, 29142667, 29143516, 29144995, 29145214, 29145730
29146157, 29146810, 29147849, 29149170, 29149829, 29150338, 29151520
29152357, 29152603, 29152752, 29154631, 29154636, 29154725, 29154829
29155099, 29157051, 29157389, 29158680, 29158899, 29159216, 29159661
29159909, 29159936, 29160174, 29160462, 29161597, 29161923, 29162095
29163073, 29163156, 29163415, 29163437, 29163524, 29163567, 29164376
29165682, 29167111, 29167342, 29167374, 29167940, 29168137, 29168219
29168433, 29169073, 29169215, 29169540, 29169739, 29170232, 29170717
29171683, 29171942, 29172618, 29172826, 29173140, 29173373, 29173618
29173817, 29174004, 29174753, 29176318, 29177466, 29177543, 29177886
29178385, 29179097, 29180313, 29180455, 29180559, 29180893, 29181078
29181153, 29181231, 29181568, 29181620, 29181743, 29181923, 29182019
29182517, 29182901, 29182920, 29183298, 29183912, 29184297, 29184666
29185193, 29186091, 29186456, 29186605, 29188255, 29189302, 29189307
29189889, 29190235, 29190474, 29190663, 29190740, 29191541, 29191827
29192419, 29192468, 29192685, 29193207, 29194205, 29194367, 29194493
29194827, 29194981, 29195279, 29195337, 29195758, 29196725, 29198092
29198913, 29199635, 29199733, 29200316, 29200700, 29201143, 29201494
29201539, 29201695, 29201787, 29202104, 29202461, 29202850, 29203122
29203166, 29203227, 29203425, 29203443, 29203604, 29205281, 29205323
29205419, 29205463, 29205767, 29205918, 29206109, 29206605, 29207073
29208260, 29208732, 29209545, 29210577, 29210610, 29210624, 29210683
29211457, 29211724, 29212012, 29212433, 29212611, 29213320, 29213351
29213613, 29213641, 29213775, 29213850, 29213879, 29213893, 29214561
29214960, 29216312, 29216723, 29216746, 29216984, 29217294, 29217472
29217828, 29217848, 29218570, 29219205, 29219273, 29219627, 29220079
29221248, 29221891, 29221942, 29222031, 29222784, 29223833, 29223859
29223967, 29224065, 29224294, 29224605, 29225076, 29225168, 29225758
29225861, 29227602, 29228869, 29229164, 29229754, 29229839, 29229844
29229955, 29230252, 29230565, 29231133, 29232117, 29232154, 29232449
29233415, 29233810, 29233953, 29234123, 29235934, 29236573, 29237538
29237575, 29237744, 29240307, 29240759, 29241345, 29241651, 29242017
29242884, 29242906, 29243749, 29243958, 29244495, 29244766, 29244968
29245063, 29245137, 29245160, 29246163, 29247415, 29247712, 29247906
29248495, 29248552, 29248723, 29248835, 29248858, 29249289, 29249412
29249583, 29249991, 29250059, 29250317, 29251259, 29251564, 29253184
29253871, 29254031, 29254623, 29254930, 29255178, 29255273, 29255431
29255435, 29255616, 29255718, 29255973, 29256426, 29259119, 29259320
29260224, 29260452, 29260956, 29261547, 29261548, 29261695, 29261906
29262512, 29262887, 29265448, 29266248, 29266899, 29267292, 29268412
29269171, 29269228, 29269825, 29270585, 29271019, 29273360, 29273539
29273570, 29273735, 29273812, 29273847, 29274428, 29274564, 29274627
29275461, 29276272, 29277317, 29278218, 29278684, 29279658, 29279751

29279854, 29281527, 29281691, 29281796, 29282090, 29282233, 29282666
29282898, 29285197, 29285453, 29285503, 29285621, 29285788, 29285956
29286037, 29286229, 29287130, 29287705, 29290110, 29290235, 29292232
29292837, 29293072, 29293574, 29293806, 29294753, 29296257, 29297863
29297915, 29298220, 29299049, 29299082, 29299830, 29299844, 29301463
29301566, 29302963, 29303918, 29304314, 29304781, 29306226, 29306713
29307090, 29307109, 29307638, 29309698, 29311336, 29311528, 29311588
29311927, 29312310, 29312672, 29312734, 29312753, 29312889, 29313347
29313417, 29313525, 29314539, 29314636, 29317756, 29318410, 29319441
29321489, 29323946, 29324568, 29324735, 29325087, 29325105, 29325257
29325765, 29325993, 29327044, 29327892, 29329042, 29329087, 29329675
29329807, 29330361, 29330791, 29331066, 29331209, 29331380, 29331493
29332292, 29332395, 29332763, 29332771, 29333500, 29336843, 29337294
29337310, 29337742, 29338315, 29338348, 29338453, 29338780, 29338913
29339101, 29339155, 29339299, 29341209, 29343086, 29343156, 29343861
29344541, 29345937, 29346057, 29346211, 29346943, 29347620, 29348176
29350052, 29350762, 29350868, 29351044, 29351386, 29351662, 29351716
29351735, 29351749, 29351771, 29352298, 29352724, 29352867, 29352947
29353271, 29353432, 29353718, 29353821, 29353960, 29355654, 29356547
29356704, 29356711, 29356752, 29356782, 29357821, 29358509, 29358828
29360252, 29360285, 29360467, 29360672, 29360775, 29360911, 29360950
29361319, 29361472, 29361801, 29362596, 29363151, 29364171, 29364177
29366406, 29366940, 29367019, 29367561, 29367971, 29368253, 29368310
29368725, 29372069, 29372541, 29373418, 29373588, 29374179, 29374604
29375355, 29375941, 29375984, 29376346, 29377804, 29377986, 29378029
29378287, 29378834, 29378913, 29379299, 29379381, 29379750, 29379978
29380527, 29381000, 29382296, 29382641, 29382784, 29382815, 29383695
29384781, 29384854, 29384864, 29385339, 29385429, 29385652, 29386502
29386557, 29386635, 29386660, 29387073, 29387274, 29387310, 29387337
29388020, 29388072, 29388094, 29388524, 29388830, 29389408, 29389889
29390011, 29390435, 29390785, 29391030, 29391237, 29391301, 29391438
29391849, 29391925, 29392554, 29392966, 29393291, 29393649, 29394014
29394140, 29394749, 29395657, 29397954, 29397996, 29398488, 29398863
29399046, 29399100, 29399121, 29399336, 29399938, 29402110, 29402131
29404483, 29405012, 29405462, 29405651, 29405996, 29407488, 29407804
29408853, 29409149, 29409455, 29410311, 29410834, 29411037, 29411469
29411931, 29412066, 29412269, 29413360, 29413382, 29413517, 29413544
29413634, 29413956, 29416688, 29416700, 29417084, 29417173, 29417719
29417884, 29418165, 29420254, 29420834, 29421059, 29423003, 29423016
29423156, 29423826, 29424999, 29426241, 29426320, 29428230, 29429017
29429087, 29429264, 29429466, 29429566, 29430524, 29430866, 29431192
29431485, 29432176, 29434301, 29434869, 29435474, 29435652, 29436454
29436514, 29436522, 29436727, 29437594, 29437712, 29438150, 29438277
29438736, 29439522, 29441196, 29442936, 29443187, 29443250, 29444072

29444282, 29444602, 29445548, 29446669, 29448498, 29449477, 29449845
29449852, 29450162, 29450193, 29450421, 29450812, 29450936, 29451386
29452251, 29452576, 29452936, 29452953, 29454978, 29455424, 29455773
29456538, 29456714, 29457312, 29457319, 29457370, 29457502, 29457807
29457978, 29460252, 29461420, 29461791, 29461971, 29462594, 29462767
29462957, 29463047, 29463528, 29463798, 29464616, 29464779, 29465047
29465177, 29466674, 29467622, 29469565, 29470291, 29471832, 29471860
29472618, 29473708, 29476473, 29481584, 29483452, 29483532, 29483626
29483672, 29483685, 29483712, 29483723, 29483771, 29485099, 29486181
29486848, 29487150, 29487189, 29488894, 29489436, 29489546, 29490256
29492127, 29492939, 29493122, 29494245, 29495057, 29495684, 29497311
29497588, 29497696, 29498198, 29500257, 29500826, 29500963, 29501218
29502561, 29503543, 29503631, 29503827, 29504492, 29504682, 29505668
29506942, 29507270, 29507616, 29508681, 29509777, 29510278, 29511064
29511611, 29511980, 29512125, 29512890, 29514479, 29515134, 29515240
29515476, 29515766, 29515834, 29516300, 29516727, 29516766, 29517168
29517883, 29519131, 29521187, 29521688, 29521748, 29521862, 29522358
29522561, 29522662, 29523055, 29523216, 29523511, 29524599, 29524985
29525366, 29525467, 29525886, 29526966, 29527595, 29527610, 29528368
29529147, 29530440, 29530515, 29530812, 29530909, 29531654, 29531836
29532532, 29536342, 29536445, 29537829, 29538631, 29540327, 29541742
29541769, 29542084, 29542449, 29542580, 29542643, 29543034, 29543956
29546817, 29547010, 29547867, 29548413, 29548427, 29548592, 29548687
29548722, 29549040, 29549071, 29549104, 29549154, 29549730, 29552773
29553141, 29554092, 29557144, 29557261, 29557336, 29557556, 29558238
29558452, 29558975, 29559187, 29559395, 29559446, 29559908, 29559981
29564592, 29564593, 29565611, 29579919, 29580394, 29580983, 29581771
29584261, 29584693, 29586143, 29587299, 29587765, 29589544, 29591343
29592011, 29592215, 29597536, 29597754, 29598039, 29598046, 29598226
29598233, 29599008, 29599300, 29601461, 29602831, 29603460, 29603884
29604002, 29604257, 29606261, 29607136, 29607797, 29608000, 29608023
29610506, 29611020, 29611991, 29614206, 29614987, 29615824, 29616244
29616414, 29618074, 29618190, 29620042, 29622936, 29623323, 29625065
29625804, 29625876, 29626154, 29626732, 29628200, 29629430, 29629650
29629681, 29629745, 29631749, 29632095, 29632265, 29632611, 29633697
29633753, 29633936, 29634643, 29635427, 29635717, 29635990, 29637362
29637526, 29637560, 29638285, 29641736, 29643721, 29644426, 29644464
29645167, 29645349, 29647176, 29648928, 29651183, 29651520, 29653132
29653246, 29655164, 29655668, 29656400, 29656819, 29656843, 29657399
29657422, 29657744, 29657960, 29658056, 29661028, 29661065, 29661722
29663191, 29663368, 29663494, 29663601, 29664087, 29664161, 29665940
29667527, 29667994, 29668005, 29669413, 29670782, 29671363, 29672507
29675446, 29676089, 29677051, 29677173, 29677733, 29677927, 29679856
29681987, 29683039, 29683211, 29684518, 29685137, 29685276, 29687214

29687220, 29687459, 29687718, 29687727, 29687763, 29688867, 29689145
29689255, 29692694, 29694869, 29695425, 29695821, 29695841, 29696310
29700125, 29700460, 29700770, 29703932, 29705793, 29707099, 29707493
29707896, 29708876, 29708915, 29710188, 29710858, 29713810, 29715220
29715703, 29716194, 29716227, 29716491, 29716602, 29716871, 29717659
29717901, 29719146, 29720133, 29721418, 29721576, 29722167, 29724658
29725476, 29725781, 29726695, 29738400, 29739576, 29741319, 29741976
29742223, 29744225, 29746962, 29747493, 29747648, 29747653, 29748285
29748336, 29748513, 29749471, 29750673, 29751094, 29753244, 29754196
29754951, 29755821, 29756274, 29756444, 29757099, 29757264, 29757651
29757687, 29758203, 29758217, 29758661, 29761678, 29761837, 29761911
29763158, 29765035, 29765393, 29766207, 29766435, 29766503, 29766679
29768899, 29770750, 29771032, 29771242, 29773197, 29773842, 29774362
29775393, 29779196, 29780140, 29782211, 29782823, 29782866, 29784106
29785239, 29785311, 29787292, 29787766, 29789911, 29791152, 29791880
29792213, 29793318, 29794174, 29794462, 29795712, 29795957, 29796378
29797726, 29802695, 29804875, 29805772, 29806390, 29807964, 29809792
29809837, 29812084, 29812489, 29813503, 29813650, 29813671, 29815341
29815713, 29817278, 29817547, 29817784, 29821582, 29822714, 29825525
29827647, 29827852, 29831196, 29834506, 29836096, 29838485, 29838773
29839715, 29840619, 29841267, 29841687, 29843277, 29843692, 29843831
29844226, 29844275, 29845530, 29846126, 29846645, 29846688, 29848084
29848849, 29849100, 29850930, 29851733, 29853485, 29856859, 29858121
29858376, 29859068, 29860994, 29861075, 29864203, 29864261, 29865188
29865590, 29865658, 29869086, 29869404, 29869887, 29869906, 29870065
29871098, 29871312, 29872401, 29872937, 29872983, 29873665, 29874090
29874761, 29875459, 29875565, 29876358, 29876989, 29877608, 29878076
29881050, 29881478, 29881575, 29881643, 29881839, 29882427, 29882454
29882729, 29884958, 29885890, 29886809, 29887111, 29888621, 29889184
29889358, 29890740, 29891075, 29891853, 29891916, 29892604, 29893132
29896510, 29897418, 29897863, 29900203, 29900824, 29901419, 29902299
29902327, 29902330, 29902659, 29903190, 29903299, 29903357, 29903454
29904002, 29906678, 29907942, 29908389, 29908777, 29909658, 29910402
29912286, 29913805, 29913966, 29914449, 29914544, 29915217, 29915848
29916975, 29919789, 29920025, 29920376, 29920804, 29921318, 29922225
29923452, 29924181, 29926466, 29927756, 29928210, 29928427, 29928564
29930457, 29932202, 29932430, 29932780, 29934052, 29937565, 29937956
29938225, 29939400, 29939795, 29940373, 29942096, 29942275, 29942554
29943670, 29943879, 29944035, 29944660, 29944963, 29945645, 29946388
29947145, 29950220, 29951620, 29951759, 29956016, 29956222, 29957412
29957493, 29958925, 29960884, 29961353, 29961609, 29961847, 29962160
29962248, 29962834, 29962927, 29962939, 29965052, 29965603, 29965888
29966768, 29967223, 29968085, 29969557, 29970081, 29970298, 29971027
29971481, 29971888, 29971936, 29971951, 29972176, 29973012, 29989783

29989845, 29991257, 29993717, 29997326, 29997553, 29997937, 30000664
30001331, 30003187, 30006159, 30006985, 30007450, 30007797, 30008125
30008198, 30008214, 30009710, 30012181, 30015070, 30017836, 30018017
30018903, 30019864, 30024618, 30025814, 30026016, 30027614, 30028599
30029519, 30029806, 30031027, 30032376, 30033040, 30033547, 30034456
30035598, 30038392, 30039800, 30039959, 30040157, 30041501, 30042490
30043398, 30043610, 30043930, 30044507, 30045389, 30045484, 30046497
30047531, 30047702, 30047765, 30047931, 30049966, 30051176, 30051783
30051804, 30052928, 30053036, 30053501, 30053748, 30054980, 30056058
30057718, 30057799, 30058149, 30058453, 30059106, 30059109, 30060267
30060330, 30062364, 30062819, 30064268, 30066352, 30067565, 30068871
30071446, 30072905, 30073314, 30073744, 30074296, 30074349, 30074469
30074472, 30074820, 30075037, 30076058, 30076197, 30076253, 30078675
30078934, 30079949, 30080266, 30081546, 30081580, 30082145, 30083100
30083216, 30083488, 30083807, 30084971, 30085897, 30086596, 30086992
30090568, 30092280, 30092859, 30095591, 30095952, 30097092, 30097115
30098251, 30099302, 30099420, 30099454, 30100354, 30101186, 30103551
30103553, 30104378, 30104555, 30106748, 30109365, 30110224, 30110370
30110518, 30114477, 30114489, 30114534, 30116085, 30116203, 30116854
30117209, 30117335, 30117593, 30118261, 30118279, 30120608, 30122583
30125765, 30126145, 30127522, 30127805, 30127904, 30128047, 30131286
30131645, 30132708, 30133841, 30134746, 30135396, 30135731, 30135942
30136346, 30139392, 30142907, 30143470, 30143593, 30146593, 30146969
30147473, 30147928, 30149035, 30149658, 30150606, 30153552, 30153885
30154633, 30155814, 30155837, 30159329, 30159511, 30159536, 30159752
30159760, 30160625, 30163243, 30164714, 30165493, 30165503, 30165897
30169254, 30170104, 30172925, 30173113, 30173556, 30174401, 30175291
30177597, 30178250, 30178839, 30178990, 30179644, 30180208, 30181756
30183696, 30183715, 30183920, 30184102, 30185852, 30186319, 30186476
30186706, 30187866, 30189516, 30190090, 30191274, 30193165, 30193505
30193736, 30194612, 30194710, 30194972, 30195667, 30195668, 30195684
30196195, 30196358, 30196629, 30198861, 30198905, 30200034, 30200132
30200237, 30200680, 30200758, 30202349, 30202388, 30203929, 30204042
30204542, 30206493, 30206675, 30207473, 30208327, 30208723, 30209736
30210884, 30213031, 30213540, 30215130, 30215302, 30215351, 30217206
30217982, 30218044, 30218317, 30219222, 30221237, 30221298, 30222512
30223712, 30223847, 30224650, 30224868, 30224950, 30225265, 30225443
30225718, 30225844, 30226244, 30228567, 30229683, 30232638, 30235919
30235979, 30236554, 30238211, 30238715, 30239480, 30240010, 30240547
30241567, 30241920, 30242120, 30242724, 30243216, 30244340, 30246053
30246179, 30247305, 30249432, 30251003, 30252005, 30252098, 30252156
30252458, 30252977, 30253035, 30253090, 30253608, 30253705, 30253835
30254206, 30254525, 30254726, 30255143, 30255528, 30256542, 30257412
30264405, 30265523, 30265608, 30265615, 30265703, 30266791, 30267155

30269428, 30269748, 30270647, 30270744, 30271114, 30272329, 30274090
30274188, 30274324, 30275548, 30275569, 30275578, 30276243, 30277120
30277451, 30277733, 30281428, 30282501, 30282591, 30283296, 30283577
30283579, 30283581, 30283932, 30284219, 30284369, 30285457, 30285843
30288343, 30288491, 30289458, 30293345, 30294267, 30294671, 30295110
30295549, 30295808, 30297905, 30299367, 30299817, 30299934, 30300030
30300538, 30305264, 30305395, 30305568, 30305880, 30307814, 30307883
30308368, 30308624, 30308772, 30308947, 30309098, 30309798, 30311826
30312094, 30312546, 30313848, 30314079, 30314198, 30314837, 30316667
30316897, 30317209, 30318638, 30318943, 30319080, 30319099, 30322980
30323658, 30323849, 30324180, 30325407, 30326882, 30327149, 30328168
30328690, 30329209, 30330123, 30331759, 30332505, 30334484, 30334563
30335127, 30335832, 30335987, 30336032, 30336742, 30339103, 30341713
30342371, 30342878, 30344614, 30345201, 30345432, 30345809, 30346330
30346867, 30349714, 30352581, 30352623, 30355490, 30357463, 30357897
30360383, 30362003, 30362850, 30363716, 30364329, 30364613, 30365745
30367193, 30368048, 30368482, 30368534, 30368668, 30371264, 30371623
30371909, 30372081, 30373550, 30374345, 30374570, 30374739, 30375109
30376986, 30377347, 30381207, 30381525, 30382982, 30383286, 30384121
30384152, 30389229, 30389414, 30389507, 30391272, 30392011, 30393110
30393653, 30394738, 30394974, 30396946, 30397100, 30398257, 30398422
30399906, 30402386, 30403763, 30403881, 30403902, 30403989, 30404117
30408515, 30408808, 30409207, 30409339, 30409590, 30412188, 30412863
30412885, 30412921, 30413137, 30414679, 30414714, 30416034, 30417648
30417732, 30419024, 30421439, 30421476, 30422487, 30423135, 30423218
30424347, 30430921, 30431274, 30431504, 30431698, 30431703, 30431717
30433177, 30437149, 30441687, 30441959, 30442749, 30442884, 30443393
30446583, 30447060, 30447589, 30448182, 30448917, 30449194, 30450787
30453442, 30454090, 30458568, 30458593, 30460922, 30461458, 30463938
30464250, 30464655, 30466081, 30469777, 30472891, 30474167, 30474774
30475115, 30476768, 30477588, 30477685, 30477691, 30477767, 30479715
30480872, 30483140, 30483521, 30484042, 30484801, 30485255, 30486436
30487387, 30490014, 30493518, 30495035, 30495133, 30495483, 30496957
30497057, 30500224, 30500297, 30500344, 30500582, 30501574, 30502415
30503943, 30505497, 30506794, 30506991, 30507032, 30509277, 30510347
30510527, 30513285, 30513848, 30515886, 30516868, 30517214, 30519188
30522285, 30522998, 30523137, 30523538, 30523601, 30523750, 30528547
30528704, 30529940, 30533132, 30534351, 30534549, 30534662, 30534827
30537405, 30537533, 30539519, 30540109, 30540407, 30544247, 30544595
30545281, 30545556, 30549637, 30549789, 30549881, 30551000, 30551123
30556581, 30556807, 30557386, 30560513, 30561590, 30564139, 30564343
30573703, 30576393, 30577071, 30579051, 30581448, 30582500, 30588738
30591028, 30592859, 30595114, 30595860, 30596488, 30598682, 30598746
30598919, 30599405, 30599407, 30600173, 30600184, 30602230, 30605215

30609799, 30612199, 30613937, 30613971, 30614411, 30619525, 30619787
30622528, 30623138, 30623142, 30624792, 30624864, 30625121, 30628899
30629643, 30629799, 30631393, 30633259, 30633938, 30635183, 30635302
30635326, 30637270, 30637319, 30641755, 30641900, 30644889, 30651231
30651621, 30651674, 30652515, 30652853, 30654558, 30657365, 30657624
30657706, 30657875, 30658702, 30661939, 30662651, 30663646, 30668407
30671813, 30674959, 30676209, 30681462, 30681516, 30686131, 30690686
30691604, 30691731, 30691857, 30692473, 30698289, 30703610, 30704826
30708735, 30710807, 30714151, 30714715, 30718862, 30719419, 30720736
30720844, 30722705, 30724679, 30724881, 30727701, 30729604, 30730026
30732711, 30734707, 30735736, 30740997, 30741263, 30749722, 30750991
30751968, 30758943, 30761878, 30763272, 30763305, 30763639, 30765486
30769312, 30773164, 30776416, 30776929, 30778855, 30781032, 30781041
30783551, 30785101, 30789904, 30790441, 30801296, 30801510, 30803210
30808869, 30812574, 30814285, 30815852, 30816938, 30823744, 30825391
30825419, 30825656, 30826474, 30828350, 30829779, 30833454, 30834110
30838605, 30847442, 30848773, 30851951, 30855101, 30857721, 30858919
30866141, 30866988, 30871716, 30871792, 30880913, 30881407, 30883877
30886188, 30887501, 30890720, 30890971, 30896620, 30904672, 30906274
30909918, 30913399, 30914272, 30914674, 30919691, 30922936, 30922996
30923517, 30923940, 30927821, 30930339, 30936831, 30937410, 30939934
30940259, 30941056, 30944643, 30945005, 30952104, 30953836, 30957739
30964194, 30968737, 30970518, 30972841, 30972966, 30973113, 30973137
30973143, 30980317, 30980733, 30987088, 30990034, 30992597, 30993198
30996991, 30998759, 30998847, 31001017, 31001455, 31001859, 31004077
31004719, 31004844, 31008240, 31010976, 31013127, 31016413, 31019249
31021157, 31022858, 31029936, 31031955, 31032904, 31039627, 31039928
31051075, 31062010, 31066265, 31077365, 31084921, 31094688, 31100172
31106577, 31113089, 31118809, 31119057, 31134430, 31153120, 31156383
31172207, 31177193, 31182793, 31193936, 31200845, 31305624, 31306261
31335037, 31335142, 31338673, 31359215, 31383396, 31393600, 31414023
31414524

Version 19.0.0.0.ru-2020-04.rur-2020-04.r1

Version 19.0.0.0.ru-2020-04.rur-2020-04.r1 includes the following:

- Patch [30869156](#): Database Release Update 19.7.0.0.200414
- Patch [30805684](#): Oracle JVM Release Update 19.7.0.0.200414
- Patch [29997937](#): DSTv34 UPDATE for RDBMS (TZDATA2019B)

- Patch [29997959](#): DSTV34 UPDATE for OJVM (TZDATA2019B)
- PreUpgrade Jar: preupgrade_19_cbuild_5_lf.zip
- Patch [28730253](#): SUPPORT NEW ERA REIWA FOR JAPANESE IMPERIAL CALENDAR
- Patch [29213893](#): DBMS_STATS FAILING WITH ERROR ORA-01422 WHEN GATHERING STATS FOR USER\$ TABLE
- Patch [30528704](#): 19C RMAN RECOVER DATABASE USE REDO LOG INSTEAD OF ARCHIVELOG AFTER APPLYING OCT DATABASE RU
- Support for purging the recycle bin

For more information, see [Purging the recycle bin](#) in the *Amazon RDS User Guide*.

- Support for generating performance reports with Automatic Workload Repository (AWR) using the `rdsadmin.rdsadmin_diagnostic_util` package

For more information, see [Generating performance reports with Automatic Workload Repository \(AWR\)](#) in the *Amazon RDS User Guide*.

Combined patches for version 19.0.0.0.ru-2020-04.rur-2020-04.r1, released April 2020

Bugs fixed:

```
30533132, 30312546, 29924181, 29549154, 30937410, 29970081, 8476681
14735102, 17428816, 19080742, 19697993, 20313356, 21374587, 21965541
23296836, 23606241, 24687075, 24971456, 25756945, 25806201, 25883179
25986062, 25997810, 26284288, 26476244, 26611353, 26668264, 26739322
26777814, 26872233, 27036163, 27044169, 27101798, 27126122, 27126938
27166935, 27195935, 27244999, 27254335, 27359766, 27369515, 27378053
27406105, 27411022, 27423500, 27439716, 27453490, 27458357, 27489107
27582210, 27666312, 27710072, 27729678, 27801144, 27846298, 27880025
27929509, 27934711, 27935464, 27941110, 27957203, 27967484, 28064977
28072567, 28109326, 28125947, 28129791, 28181021, 28189466, 28204262
28205555, 28209985, 28210681, 28263142, 28271258, 28271693, 28276054
28279456, 28294563, 28313275, 28319114, 28326928, 28350595, 28371123
28373960, 28375383, 28379065, 28381939, 28386259, 28390273, 28395302
28397317, 28402823, 28410431, 28431445, 28435333, 28454215, 28463226
28475242, 28484299, 28489419, 28492006, 28498976, 28502773, 28513333
28521330, 28530171, 28534475, 28535127, 28538439, 28542455, 28546290
```


28547068, 28547926, 28558645, 28561704, 28564479, 28565296, 28567417
28567819, 28569897, 28572407, 28572533, 28572544, 28572667, 28572834
28578945, 28587723, 28589509, 28593682, 28594086, 28597221, 28601957
28605066, 28606598, 28608211, 28612239, 28620697, 28622202, 28625862
28627033, 28628592, 28632796, 28636532, 28639299, 28643654, 28643718
28644549, 28645570, 28646200, 28646939, 28649388, 28655209, 28663782
28672457, 28673945, 28681153, 28692103, 28692275, 28694639, 28694872
28696373, 28705231, 28707931, 28708400, 28709063, 28710385, 28710469
28710734, 28714461, 28715727, 28718469, 28719348, 28720204, 28720418
28721497, 28722229, 28730079, 28734355, 28740708, 28742555, 28749853
28752923, 28755011, 28758722, 28760206, 28765983, 28767240, 28769456
28771947, 28772390, 28774416, 28776811, 28777214, 28781754, 28785531
28789531, 28791852, 28795551, 28795734, 28802734, 28804517, 28808656
28810381, 28811560, 28815123, 28815355, 28817449, 28819640, 28820669
28821847, 28824482, 28827682, 28831971, 28833912, 28835937, 28836716
28838385, 28844738, 28845346, 28846759, 28849776, 28854004, 28855520
28855922, 28857552, 28862532, 28863263, 28863432, 28863487, 28865569
28867992, 28872645, 28873575, 28875089, 28876253, 28876639, 28876926
28878865, 28882784, 28884931, 28887305, 28888327, 28889730, 28892794
28897512, 28899663, 28901126, 28905457, 28905615, 28907196, 28912691
28915561, 28917080, 28918429, 28919145, 28922227, 28922532, 28922608
28925634, 28925880, 28927452, 28932914, 28933158, 28935293, 28936114
28937717, 28938422, 28938698, 28940179, 28940281, 28941901, 28942455
28945421, 28945994, 28946233, 28949888, 28950868, 28951533, 28952168
28954762, 28955606, 28955883, 28956908, 28957292, 28957723, 28958088
28959493, 28960863, 28962775, 28965084, 28965095, 28965231, 28965376
28966444, 28974083, 28977322, 28981871, 28983095, 28983486, 28985478
28986207, 28986231, 28986257, 28986326, 28986481, 28988482, 28989306
28993295, 28993353, 28994307, 28994542, 28996376, 29000000, 29001305
29001888, 29002488, 29002784, 29002927, 29003407, 29003738, 29006318
29006621, 29007321, 29007353, 29007775, 29008035, 29008669, 29009513
29010126, 29011936, 29012609, 29013475, 29013832, 29014076, 29015118
29017265, 29018655, 29019121, 29021063, 29021352, 29022986, 29024054
29024552, 29024732, 29026582, 29026606, 29027456, 29027694, 29027940
29031575, 29031600, 29032234, 29032276, 29032457, 29032607, 29033052
29033145, 29033200, 29033280, 29034587, 29037290, 29038528, 29038728
29039089, 29039510, 29040739, 29043554, 29043651, 29043725, 29044763
29044954, 29046482, 29047850, 29048178, 29048289, 29048498, 29048605
29050357, 29050560, 29050765, 29050886, 29051702, 29051953, 29052726
29053783, 29056024, 29056270, 29056560, 29056767, 29056894, 29059011
29060216, 29061016, 29061959, 29062692, 29062848, 29062860, 29062868
29110526, 29110783, 29110790, 29110797, 29110802, 29110805, 29111598
29113282, 29113305, 29115857, 29117526, 29117642, 29118543, 29119077
29120223, 29122224, 29122254, 29123297, 29123432, 29123482, 29124368

29125036, 29125374, 29125380, 29126345, 29127957, 29128693, 29128935
29129450, 29129497, 29129712, 29130219, 29131539, 29132869, 29132938
29133470, 29134447, 29135383, 29135649, 29136111, 29138641, 29139761
29139956, 29141316, 29141341, 29141685, 29142609, 29142667, 29143516
29144995, 29145214, 29145730, 29149829, 29150338, 29151520, 29152357
29154725, 29155099, 29157051, 29157389, 29158680, 29158899, 29159909
29159936, 29160174, 29161597, 29162095, 29163073, 29163156, 29163415
29163437, 29163524, 29163567, 29164376, 29167111, 29167342, 29167374
29167940, 29168137, 29168219, 29168433, 29169073, 29169215, 29170232
29171683, 29171942, 29172618, 29172826, 29173140, 29173373, 29173817
29174004, 29174753, 29176318, 29177466, 29177543, 29177886, 29178385
29179097, 29180313, 29180455, 29180559, 29180893, 29181153, 29181231
29181620, 29181743, 29181923, 29182019, 29182517, 29182901, 29183912
29184297, 29184666, 29185193, 29186456, 29189302, 29189307, 29189889
29190235, 29190474, 29190663, 29190740, 29191541, 29192419, 29192468
29192685, 29193207, 29194205, 29194367, 29194493, 29194827, 29194981
29195279, 29195337, 29195758, 29196725, 29198092, 29198913, 29199635
29199733, 29200316, 29200700, 29201494, 29201539, 29201787, 29202104
29202461, 29202850, 29203122, 29203166, 29203227, 29203425, 29203443
29203604, 29205281, 29205323, 29205419, 29205463, 29205767, 29205918
29206109, 29206605, 29207073, 29208260, 29208732, 29211457, 29211724
29212012, 29212433, 29212611, 29213320, 29213351, 29213613, 29213775
29213850, 29213879, 29214561, 29214960, 29216312, 29216723, 29216746
29216984, 29217294, 29217472, 29217828, 29217848, 29218570, 29219205
29219273, 29220079, 29221248, 29221891, 29221942, 29222031, 29222784
29223833, 29223859, 29223967, 29224065, 29224605, 29225076, 29225168
29225758, 29227602, 29228869, 29229164, 29229754, 29229844, 29229955
29230252, 29230565, 29231133, 29232117, 29232154, 29232449, 29233415
29233810, 29233953, 29234123, 29236573, 29237538, 29237575, 29237744
29240307, 29240759, 29241345, 29241651, 29242017, 29242884, 29243958
29245137, 29245160, 29246163, 29247415, 29247712, 29247906, 29248495
29248552, 29248835, 29248858, 29249289, 29249412, 29249991, 29250059
29250317, 29251259, 29253184, 29253871, 29254031, 29254930, 29255178
29255273, 29255431, 29255435, 29255973, 29256426, 29259119, 29259320
29260452, 29260956, 29261547, 29261548, 29261906, 29262512, 29262887
29265448, 29266248, 29266899, 29267292, 29268412, 29269171, 29269228
29269825, 29270585, 29273539, 29273570, 29273735, 29273812, 29273847
29274428, 29274564, 29274627, 29275461, 29276272, 29277317, 29278218
29278684, 29279658, 29279751, 29279854, 29281527, 29281691, 29281796
29282233, 29282898, 29285197, 29285503, 29285788, 29285956, 29286037
29286229, 29287130, 29287705, 29292837, 29293072, 29293574, 29297863
29297915, 29298220, 29299049, 29299082, 29299844, 29301463, 29301566
29302963, 29303918, 29304781, 29306226, 29306713, 29307638, 29311528
29311588, 29312310, 29312672, 29312734, 29312753, 29312889, 29313347

29313417, 29313525, 29314539, 29314636, 29317756, 29318410, 29319441
29321489, 29323946, 29324568, 29324735, 29325087, 29325105, 29325257
29325765, 29325993, 29327044, 29327892, 29329042, 29329087, 29329807
29330361, 29331066, 29331209, 29331380, 29331493, 29332292, 29332395
29332763, 29332771, 29333500, 29336843, 29337310, 29337742, 29338315
29338348, 29338453, 29338780, 29338913, 29339101, 29339155, 29341209
29343086, 29343156, 29343861, 29345937, 29346057, 29346211, 29346943
29347620, 29348176, 29350052, 29350762, 29351044, 29351386, 29351662
29351716, 29351735, 29351749, 29351771, 29352298, 29352724, 29352867
29352947, 29353271, 29353432, 29353821, 29353960, 29355654, 29356547
29356704, 29356711, 29356752, 29356782, 29358509, 29358828, 29360252
29360285, 29360672, 29360911, 29360950, 29361319, 29361472, 29361801
29363151, 29364171, 29364177, 29366940, 29367019, 29367561, 29368253
29368310, 29372541, 29373418, 29373588, 29374179, 29375355, 29375941
29375984, 29376346, 29377804, 29377986, 29378029, 29378287, 29378834
29378913, 29379750, 29379978, 29382641, 29382784, 29382815, 29383695
29384781, 29384854, 29384864, 29385339, 29385429, 29385652, 29386502
29386635, 29386660, 29387073, 29387274, 29387310, 29388020, 29388072
29388094, 29388524, 29388830, 29389889, 29390011, 29390435, 29390785
29391030, 29391237, 29391438, 29391849, 29391925, 29392966, 29393291
29394014, 29394140, 29394749, 29395657, 29397954, 29397996, 29398488
29398863, 29399046, 29399100, 29399121, 29399336, 29399938, 29402131
29404483, 29405012, 29405462, 29405651, 29405996, 29407488, 29407804
29408853, 29409149, 29409455, 29410311, 29410834, 29411037, 29411469
29412066, 29412269, 29413382, 29413517, 29413544, 29413634, 29416688
29416700, 29417084, 29417173, 29417719, 29417884, 29418165, 29420834
29421059, 29423003, 29423016, 29423156, 29423826, 29424999, 29426241
29426320, 29429017, 29429087, 29429264, 29429466, 29429566, 29430524
29430866, 29431192, 29431485, 29432176, 29434301, 29435474, 29435652
29436454, 29436514, 29436522, 29436727, 29437594, 29437712, 29438150
29438277, 29438736, 29439522, 29441196, 29443187, 29443250, 29444072
29444282, 29444602, 29446669, 29448498, 29449477, 29449845, 29449852
29450162, 29450193, 29450421, 29450812, 29450936, 29451386, 29452251
29452576, 29452936, 29452953, 29454978, 29455424, 29456538, 29456714
29457312, 29457370, 29457502, 29457807, 29457978, 29460252, 29461420
29461791, 29462594, 29462767, 29462957, 29463047, 29463528, 29463798
29464616, 29464779, 29465177, 29466674, 29467622, 29469565, 29470291
29471832, 29471860, 29472618, 29473708, 29476473, 29481584, 29483452
29483532, 29483626, 29483672, 29483685, 29483712, 29483723, 29483771
29485099, 29486181, 29486848, 29487189, 29488894, 29489436, 29489546
29490256, 29492127, 29492939, 29493122, 29494245, 29495057, 29495684
29497311, 29497588, 29497696, 29498198, 29500257, 29500826, 29500963
29502561, 29503543, 29503631, 29503827, 29504492, 29504682, 29505668
29507270, 29507616, 29508681, 29509777, 29510278, 29511611, 29511980

29512890, 29514479, 29515134, 29515240, 29515476, 29515766, 29515834
29516300, 29516727, 29516766, 29517168, 29517883, 29519131, 29521187
29521688, 29521748, 29521862, 29522358, 29522561, 29522662, 29523055
29523216, 29523511, 29524599, 29524985, 29525467, 29525886, 29526966
29527595, 29527610, 29528368, 29529147, 29530440, 29530515, 29530812
29530909, 29531654, 29531836, 29532532, 29536342, 29536445, 29538631
29541742, 29541769, 29542084, 29542449, 29542580, 29542643, 29543034
29543956, 29546817, 29547010, 29547867, 29548427, 29548592, 29548687
29548722, 29549040, 29549071, 29549104, 29549730, 29552773, 29553141
29554092, 29557144, 29557261, 29557336, 29557556, 29558238, 29558452
29558975, 29559187, 29559446, 29559908, 29559981, 29564592, 29564593
29565611, 29580394, 29580983, 29581771, 29584261, 29584693, 29586143
29587765, 29589544, 29591343, 29592215, 29597536, 29597754, 29598039
29598046, 29598233, 29599008, 29599300, 29601461, 29602831, 29603460
29603884, 29604002, 29604257, 29607136, 29607797, 29608000, 29610506
29611020, 29611991, 29615824, 29616244, 29616414, 29618074, 29618190
29620042, 29622936, 29625065, 29625804, 29625876, 29626154, 29626732
29628200, 29629430, 29629650, 29629681, 29629745, 29631749, 29632095
29632265, 29632611, 29633697, 29633753, 29633936, 29634643, 29635427
29635717, 29635990, 29637362, 29637526, 29638285, 29641736, 29643721
29644464, 29645349, 29647176, 29648928, 29651183, 29651520, 29653132
29653246, 29655668, 29656400, 29656819, 29656843, 29657399, 29657422
29657744, 29657960, 29661028, 29661065, 29661722, 29663191, 29663368
29663494, 29663601, 29664087, 29664161, 29665940, 29667527, 29667994
29668005, 29669413, 29670782, 29671363, 29672507, 29675446, 29676089
29677051, 29677173, 29677733, 29677927, 29679856, 29681987, 29683039
29683211, 29684518, 29685137, 29685276, 29687214, 29687220, 29687459
29687718, 29687763, 29689145, 29689255, 29692694, 29694869, 29695425
29695841, 29696310, 29700125, 29700460, 29700770, 29703932, 29707099
29707493, 29707896, 29708915, 29710188, 29710858, 29713810, 29715220
29716194, 29716227, 29716491, 29716871, 29717659, 29719146, 29720133
29721418, 29721576, 29724658, 29725476, 29725781, 29726695, 29738400
29739576, 29741976, 29742223, 29744225, 29746962, 29747493, 29747648
29747653, 29748285, 29748336, 29748513, 29749471, 29750673, 29751094
29753244, 29754196, 29754951, 29755821, 29756274, 29756444, 29757099
29757264, 29757651, 29758203, 29758217, 29758661, 29761678, 29761837
29761911, 29763158, 29765035, 29765393, 29766207, 29766503, 29766679
29768899, 29770750, 29771032, 29771242, 29773197, 29773842, 29775393
29779196, 29780140, 29782211, 29782823, 29782866, 29784106, 29785239
29787292, 29787766, 29791152, 29791880, 29792213, 29793318, 29794174
29794462, 29795712, 29795957, 29796378, 29797726, 29802695, 29804875
29805772, 29807964, 29809792, 29809837, 29812489, 29813503, 29813650
29813671, 29815713, 29817278, 29817784, 29821582, 29825525, 29827647
29827852, 29831196, 29834506, 29836096, 29838485, 29838773, 29839715

29840619, 29841267, 29841687, 29843277, 29843692, 29843831, 29844226
29845530, 29846126, 29846645, 29846688, 29848084, 29848849, 29849100
29850930, 29851733, 29853485, 29856859, 29858121, 29858376, 29859068
29860994, 29861075, 29864203, 29864261, 29865188, 29865590, 29865658
29869086, 29869404, 29869887, 29870065, 29871098, 29872401, 29872937
29872983, 29873665, 29875459, 29875565, 29876358, 29876989, 29877608
29878076, 29881050, 29881478, 29881643, 29881839, 29882427, 29882729
29884958, 29885890, 29887111, 29888621, 29889184, 29890740, 29891075
29891853, 29891916, 29892604, 29893132, 29896510, 29897418, 29897863
29900203, 29900824, 29902299, 29902327, 29902330, 29902659, 29903190
29903299, 29903454, 29904002, 29906678, 29907942, 29908389, 29908777
29909658, 29910402, 29912286, 29913966, 29914449, 29914544, 29915217
29915848, 29916975, 29919789, 29920025, 29920376, 29920804, 29921318
29923452, 29926466, 29927756, 29928210, 29928427, 29928564, 29932202
29932430, 29932780, 29934052, 29937565, 29938225, 29939400, 29939795
29940373, 29942096, 29942554, 29943670, 29944035, 29944660, 29944963
29945645, 29946388, 29947145, 29950220, 29951620, 29956016, 29956222
29957412, 29957493, 29961353, 29961609, 29962160, 29962248, 29962834
29962927, 29962939, 29965052, 29965603, 29965888, 29966768, 29967223
29968085, 29969557, 29970298, 29971027, 29971481, 29971888, 29971951
29972176, 29973012, 29989783, 29989845, 29991257, 29993717, 29997326
29997553, 30000664, 30001331, 30003187, 30006159, 30006985, 30007450
30007797, 30008125, 30008198, 30008214, 30009710, 30012181, 30015070
30017836, 30018017, 30019864, 30024618, 30025814, 30026016, 30028599
30029519, 30029806, 30031027, 30032376, 30033547, 30034456, 30035598
30038392, 30039800, 30039959, 30040157, 30041501, 30042490, 30043398
30043610, 30043930, 30044507, 30046497, 30047531, 30047702, 30047765
30047931, 30049966, 30051176, 30051783, 30051804, 30052928, 30053036
30053501, 30053748, 30054980, 30056058, 30057718, 30057799, 30058149
30058453, 30059106, 30059109, 30062364, 30064268, 30066352, 30067565
30071446, 30072905, 30073314, 30073744, 30074296, 30074349, 30074469
30074472, 30075037, 30076058, 30076197, 30076253, 30078675, 30078934
30079949, 30080266, 30081546, 30081580, 30082145, 30083100, 30083216
30083488, 30083807, 30084971, 30085897, 30086596, 30086992, 30090568
30092859, 30095591, 30095952, 30097092, 30097115, 30098251, 30099302
30099420, 30099454, 30100354, 30101186, 30103551, 30103553, 30104378
30104555, 30106748, 30109365, 30110224, 30110370, 30110518, 30114477
30114489, 30114534, 30116085, 30116854, 30117335, 30117593, 30118261
30118279, 30120608, 30122583, 30127522, 30127904, 30128047, 30131286
30131645, 30135396, 30135731, 30135942, 30136346, 30139392, 30142907
30143470, 30143593, 30147473, 30147928, 30149035, 30149658, 30150606
30153885, 30154633, 30155814, 30155837, 30159329, 30159511, 30159536
30159752, 30159760, 30163243, 30164714, 30165493, 30165503, 30165897
30169254, 30170104, 30172925, 30173113, 30173556, 30174401, 30175291

30177597, 30178250, 30178839, 30178990, 30179644, 30180208, 30181756
30183920, 30184102, 30185852, 30186319, 30186476, 30186706, 30187866
30189516, 30190090, 30191274, 30193165, 30193505, 30194612, 30194710
30194972, 30195667, 30195668, 30195684, 30196195, 30196358, 30198861
30198905, 30200034, 30200237, 30200758, 30202349, 30202388, 30204542
30206493, 30206675, 30207473, 30208327, 30209736, 30210884, 30213031
30213540, 30215130, 30215302, 30215351, 30217206, 30217982, 30218044
30218317, 30221237, 30222512, 30223712, 30223847, 30224650, 30224868
30224950, 30225265, 30225718, 30225844, 30228567, 30229683, 30232638
30235919, 30235979, 30236554, 30238211, 30239480, 30240010, 30241567
30242120, 30242724, 30244340, 30246053, 30246179, 30247305, 30249432
30252005, 30252098, 30252156, 30252458, 30252977, 30253035, 30253090
30253608, 30253835, 30254525, 30254726, 30255143, 30255528, 30256542
30257412, 30264405, 30265523, 30265608, 30265703, 30266791, 30267155
30269428, 30269748, 30270647, 30270744, 30271114, 30272329, 30274090
30274188, 30274324, 30275578, 30276243, 30277120, 30277451, 30282501
30282591, 30283296, 30283577, 30283579, 30283581, 30283932, 30284219
30284369, 30285457, 30285843, 30288343, 30288491, 30289458, 30294267
30294671, 30295110, 30295549, 30299367, 30299817, 30299934, 30300030
30300538, 30305264, 30305395, 30305568, 30305880, 30307814, 30307883
30308368, 30308624, 30308772, 30309098, 30309798, 30312094, 30313848
30314079, 30314837, 30316667, 30317209, 30318638, 30318943, 30319080
30322980, 30323658, 30323849, 30324180, 30327149, 30328168, 30330123
30334484, 30334563, 30335127, 30335832, 30335987, 30336032, 30336742
30339103, 30341713, 30342371, 30342878, 30345201, 30352581, 30352623
30355490, 30357463, 30362003, 30362850, 30363716, 30364329, 30364613
30365745, 30367193, 30368048, 30368534, 30371909, 30374345, 30374570
30374739, 30375109, 30381525, 30383286, 30384121, 30384152, 30389229
30389414, 30389507, 30392011, 30394738, 30394974, 30398257, 30398422
30399906, 30402386, 30403763, 30403902, 30403989, 30404117, 30408515
30408808, 30409207, 30409339, 30409590, 30412188, 30412921, 30413137
30414714, 30416034, 30421476, 30422487, 30424347, 30430921, 30431274
30431504, 30431698, 30431703, 30431717, 30441687, 30441959, 30442749
30442884, 30447060, 30448917, 30449194, 30453442, 30454090, 30458568
30458593, 30460922, 30463938, 30464250, 30469777, 30474167, 30474774
30475115, 30477588, 30477767, 30479715, 30485255, 30490014, 30493518
30495133, 30495483, 30496957, 30497057, 30500344, 30501574, 30503943
30505497, 30506794, 30507032, 30509277, 30510347, 30510527, 30513285
30513848, 30516868, 30517214, 30522285, 30523750, 30534351, 30534549
30534827, 30537405, 30537533, 30540109, 30544247, 30545281, 30549637
30549789, 30549881, 30564139, 30573703, 30576393, 30577071, 30579051
30582500, 30592859, 30598682, 30598746, 30599405, 30600184, 30602230
30609799, 30612199, 30613937, 30613971, 30619787, 30623142, 30629799
30633259, 30635302, 30641755, 30654558, 30657875, 30661939, 30662651

30671813, 30676209, 30708735, 30720736, 30730026, 30732711, 30741263
30761878, 30776416, 30783551, 30785101, 30790441, 30803210, 30808869
30815852, 30825391, 30825419, 30881407, 30886188, 30890971, 30919691
30922996, 30993198, 31016413, 29997959, 29997937, 28852325, 28730253
29213893, 30528704, 29540327, 29254623, 29445548, 29774362, 30134746
30160625, 29942275, 30534662, 29512125, 30855101, 27222128, 27572040
27604329, 27760043, 27877830, 28302580, 28470673, 28621543, 28642469
28699321, 28710663, 28755846, 28772816, 28785321, 28800508, 28808652
28815557, 28847541, 28847572, 28870496, 28871040, 28874416, 28877252
28881191, 28881848, 28888083, 28911140, 28925250, 28925460, 28935956
28940472, 3, 28942694, 28951332, 28963036, 28968779, 28980448, 28995287
29003207, 29003617, 29016294, 29018680, 29024876, 29026154, 29027933
29047127, 29052850, 29058476, 29111631, 29112455, 29117337, 29123444
29125708, 29125786, 29129476, 29131772, 29132456, 29139727, 29146157
29147849, 29149170, 29152603, 29152752, 29154631, 29154636, 29154829
29159216, 29159661, 29160462, 29161923, 29169540, 29169739, 29170717
29173618, 29181568, 29182920, 29183298, 29186091, 29191827, 29201143
29201695, 29209545, 29210577, 29210610, 29210624, 29210683, 29213641
29219627, 29224294, 29225861, 29229839, 29235934, 29242906, 29243749
29244495, 29244766, 29244968, 29248723, 29249583, 29251564, 29255616
29260224, 29261695, 29271019, 29273360, 29282090, 29282666, 29285453
29285621, 29290235, 29292232, 29293806, 29294753, 29299830, 29307090
29307109, 29311336, 29329675, 29330791, 29339299, 29357821, 29360467
29360775, 29367971, 29368725, 29379299, 29379381, 29380527, 29381000
29382296, 29391301, 29393649, 29402110, 29411931, 29413360, 29457319
29465047

Version 19.0.0.0.ru-2020-01.rur-2020-01.r1

Version 19.0.0.0.ru-2020-01.rur-2020-01.r1 includes the following:

- Patch [30557433](#): Database Release Update: 19.6.0.0.200114
- Patch [30484981](#): OJVM RELEASE UPDATE: 19.6.0.0.200114
- Patch [29997937](#): DSTv34 UPDATE for RDBMS (TZDATA2019B)
- Patch [29997959](#): DSTV34 UPDATE for OJVM (TZDATA2019B)
- PreUpgrade Jar: preupgrade_19_cbuild_5_lf.zip
- Patch [28730253](#): SUPPORT NEW ERA REIWA FOR JAPANESE IMPERIAL CALENDAR
- Patch [29213893](#): DBMS_STATS FAILING WITH ERROR ORA-01422 WHEN GATHERING STATS FOR USER\$ TABLE

- Patch [30528704](#): 19C RMAN RECOVER DATABASE USE REDO LOG INSTEAD OF ARCHIVELOG AFTER APPLYING OCT DATABASE RU

Oracle release update 19.6.0.0.200114, released January 2020

Bugs fixed:

30545281, 8476681, 14735102, 17428816, 19080742, 19697993, 20313356
21374587, 21965541, 23296836, 23606241, 24687075, 25756945, 25806201
25883179, 25986062, 25997810, 26476244, 26611353, 26739322, 26777814
26872233, 27036163, 27044169, 27101798, 27126938, 27195935, 27244999
27254335, 27359766, 27369515, 27406105, 27411022, 27423500, 27439716
27453490, 27458357, 27489107, 27666312, 27710072, 27729678, 27846298
27880025, 27934711, 27935464, 27941110, 27957203, 27967484, 28064977
28072567, 28109326, 28125947, 28129791, 28181021, 28189466, 28204262
28205555, 28209985, 28210681, 28271258, 28271693, 28279456, 28294563
28313275, 28319114, 28326928, 28350595, 28371123, 28373960, 28375383
28379065, 28381939, 28386259, 28390273, 28395302, 28397317, 28402823
28410431, 28431445, 28435333, 28454215, 28463226, 28475242, 28484299
28489419, 28492006, 28498976, 28502773, 28513333, 28521330, 28530171
28534475, 28538439, 28542455, 28546290, 28547068, 28547926, 28558645
28561704, 28567417, 28567819, 28569897, 28572407, 28572533, 28572544
28572667, 28572834, 28578945, 28587723, 28589509, 28593682, 28594086
28597221, 28601957, 28605066, 28606598, 28612239, 28620697, 28625862
28627033, 28636532, 28639299, 28643718, 28644549, 28645570, 28646200
28646939, 28649388, 28655209, 28663782, 28672457, 28673945, 28692103
28692275, 28694872, 28696373, 28705231, 28710385, 28710734, 28714461
28715727, 28718469, 28719348, 28720204, 28720418, 28721497, 28722229
28730079, 28734355, 28740708, 28742555, 28749853, 28752923, 28755011
28758722, 28760206, 28765983, 28767240, 28769456, 28772390, 28774416
28776811, 28777214, 28781754, 28785531, 28789531, 28791852, 28795551
28795734, 28802734, 28804517, 28810381, 28811560, 28815123, 28815355
28817449, 28819640, 28820669, 28821847, 28824482, 28827682, 28831971
28833912, 28835937, 28836716, 28844738, 28849776, 28854004, 28855520
28855922, 28857552, 28862532, 28863432, 28863487, 28867992, 28873575
28875089, 28876253, 28876639, 28878865, 28882784, 28884931, 28887305
28888327, 28889730, 28892794, 28897512, 28899663, 28901126, 28905457
28905615, 28907196, 28912691, 28915561, 28917080, 28918429, 28919145
28922227, 28922532, 28922608, 28925634, 28925880, 28927452, 28932914
28933158, 28935293, 28936114, 28937717, 28938698, 28940179, 28940281
28941901, 28942455, 28945421, 28945994, 28949888, 28950868, 28951533

28952168, 28954762, 28955606, 28955883, 28956908, 28957292, 28957723
28958088, 28959493, 28960863, 28962775, 28965084, 28965095, 28965231
28965376, 28966444, 28974083, 28977322, 28983095, 28983486, 28985478
28986207, 28986231, 28986257, 28986326, 28986481, 28988482, 28989306
28993295, 28993353, 28994307, 28996376, 29000000, 29001305, 29001888
29002488, 29002784, 29002927, 29003407, 29003738, 29006318, 29006621
29007321, 29007353, 29007775, 29008035, 29008669, 29009513, 29010126
29011936, 29012609, 29013475, 29013832, 29014076, 29015118, 29017265
29018655, 29019121, 29021063, 29021352, 29022986, 29024054, 29024552
29024732, 29026582, 29026606, 29027456, 29027694, 29027940, 29031575
29031600, 29032234, 29032276, 29032457, 29032607, 29033052, 29033145
29033200, 29033280, 29034587, 29037290, 29038528, 29038728, 29039089
29039510, 29040739, 29043554, 29043651, 29043725, 29044763, 29044954
29046482, 29047850, 29048178, 29048289, 29048498, 29048605, 29050357
29050560, 29050765, 29050886, 29051702, 29051953, 29052726, 29053783
29056024, 29056270, 29056560, 29056767, 29056894, 29059011, 29060216
29061016, 29061959, 29062692, 29062848, 29062860, 29062868, 29110526
29110783, 29110790, 29110797, 29110802, 29110805, 29111598, 29113282
29113305, 29115857, 29117526, 29117642, 29118543, 29119077, 29120223
29122224, 29122254, 29123297, 29123432, 29123482, 29124368, 29125036
29125374, 29125380, 29126345, 29127957, 29128693, 29128935, 29129450
29129497, 29129712, 29130219, 29131539, 29132869, 29132938, 29133470
29134447, 29135383, 29135649, 29136111, 29138641, 29139956, 29141316
29141341, 29141685, 29142609, 29142667, 29143516, 29144995, 29145214
29145730, 29149829, 29150338, 29151520, 29152357, 29155099, 29157051
29157389, 29158680, 29158899, 29159909, 29159936, 29160174, 29162095
29163156, 29163415, 29163437, 29163524, 29163567, 29167111, 29167342
29167374, 29167940, 29168137, 29168219, 29168433, 29169073, 29169215
29170232, 29171683, 29171942, 29172618, 29172826, 29173140, 29173373
29173817, 29174004, 29176318, 29177466, 29177543, 29177886, 29178385
29180313, 29180455, 29180559, 29180893, 29181153, 29181231, 29181620
29181743, 29181923, 29182019, 29182517, 29182901, 29183912, 29184297
29184666, 29185193, 29186456, 29189302, 29189307, 29189889, 29190235
29190474, 29190663, 29190740, 29191541, 29192419, 29192468, 29192685
29193207, 29194205, 29194367, 29194493, 29194827, 29194981, 29195279
29195337, 29195758, 29196725, 29198092, 29198913, 29199635, 29199733
29200316, 29200700, 29201494, 29201539, 29201787, 29202104, 29202461
29202850, 29203122, 29203166, 29203425, 29203443, 29203604, 29205281
29205323, 29205419, 29205463, 29205767, 29205918, 29206109, 29206605
29207073, 29208260, 29208732, 29211457, 29211724, 29212012, 29212433
29212611, 29213320, 29213351, 29213613, 29213775, 29213850, 29213879
29214561, 29214960, 29216312, 29216723, 29216746, 29216984, 29217294
29217472, 29217828, 29217848, 29218570, 29219205, 29219273, 29220079
29221248, 29221891, 29221942, 29222031, 29222784, 29223833, 29223859

29223967, 29224065, 29224605, 29225076, 29225168, 29225758, 29227602
29228869, 29229164, 29229754, 29229844, 29229955, 29230252, 29230565
29231133, 29232117, 29232154, 29232449, 29233415, 29233810, 29233953
29234123, 29236573, 29237538, 29237575, 29237744, 29240307, 29240759
29241345, 29241651, 29242017, 29242884, 29243958, 29245137, 29245160
29246163, 29247415, 29247712, 29247906, 29248495, 29248552, 29248835
29248858, 29249412, 29249991, 29250059, 29250317, 29251259, 29253184
29253871, 29254031, 29254930, 29255178, 29255273, 29255431, 29255435
29256426, 29259119, 29259320, 29260452, 29260956, 29261547, 29261548
29261906, 29262512, 29262887, 29265448, 29266248, 29266899, 29267292
29268412, 29269171, 29269228, 29269825, 29270585, 29273539, 29273570
29273735, 29273812, 29273847, 29274428, 29274564, 29274627, 29275461
29276272, 29277317, 29278218, 29278684, 29279658, 29279751, 29279854
29281527, 29281691, 29281796, 29282233, 29282898, 29285197, 29285503
29285788, 29285956, 29286037, 29286229, 29287130, 29287705, 29292837
29293072, 29293574, 29297863, 29297915, 29298220, 29299049, 29299082
29299844, 29301463, 29301566, 29302963, 29303918, 29304781, 29306226
29306713, 29307638, 29311528, 29311588, 29312310, 29312672, 29312734
29312753, 29312889, 29313347, 29313417, 29313525, 29314539, 29314636
29317756, 29318410, 29319441, 29321489, 29323946, 29324568, 29324735
29325087, 29325105, 29325257, 29325765, 29325993, 29327044, 29329042
29329087, 29329807, 29330361, 29331066, 29331209, 29331380, 29331493
29332292, 29332395, 29332763, 29332771, 29333500, 29336843, 29337310
29337742, 29338315, 29338348, 29338453, 29338780, 29338913, 29339101
29339155, 29341209, 29343086, 29343861, 29345937, 29346057, 29346211
29346943, 29347620, 29348176, 29350052, 29350762, 29351386, 29351662
29351716, 29351735, 29351749, 29352298, 29352724, 29352867, 29352947
29353271, 29353432, 29353821, 29353960, 29355654, 29356547, 29356704
29356711, 29356752, 29358509, 29358828, 29360252, 29360285, 29360672
29360911, 29360950, 29361319, 29361472, 29361801, 29363151, 29364171
29364177, 29366940, 29367019, 29367561, 29368253, 29368310, 29372541
29373418, 29373588, 29374179, 29375355, 29375941, 29375984, 29376346
29377804, 29377986, 29378029, 29378834, 29378913, 29379978, 29382641
29382784, 29382815, 29383695, 29384781, 29384854, 29384864, 29385429
29385652, 29386502, 29386635, 29386660, 29387073, 29387274, 29388020
29388072, 29388094, 29388524, 29388830, 29389889, 29390011, 29390435
29390785, 29391030, 29391237, 29391849, 29391925, 29392966, 29393291
29394014, 29394140, 29394749, 29395657, 29397954, 29397996, 29398488
29398863, 29399046, 29399100, 29399121, 29399336, 29399938, 29402131
29404483, 29405012, 29405462, 29405651, 29405996, 29407804, 29408853
29409149, 29409455, 29410311, 29410834, 29411037, 29411469, 29412066
29412269, 29416688, 29417173, 29417719, 29417884, 29418165, 29420834
29421059, 29423003, 29423016, 29423156, 29423826, 29424999, 29426241
29429017, 29429264, 29429466, 29429566, 29430524, 29430866, 29431192

29431485, 29432176, 29434301, 29435474, 29435652, 29436454, 29436514
29436727, 29437594, 29437712, 29438277, 29438736, 29439522, 29441196
29443187, 29443250, 29444072, 29444282, 29444602, 29446669, 29448498
29449477, 29449845, 29449852, 29450193, 29450421, 29450812, 29450936
29451386, 29452251, 29452576, 29452936, 29452953, 29454978, 29455424
29456714, 29457312, 29457370, 29457502, 29457807, 29457978, 29460252
29461420, 29461791, 29462594, 29462767, 29462957, 29463047, 29463528
29464616, 29464779, 29465177, 29467622, 29469565, 29470291, 29471860
29472618, 29476473, 29481584, 29483452, 29483532, 29483626, 29483672
29483685, 29483712, 29483723, 29483771, 29485099, 29486181, 29488894
29489436, 29489546, 29490256, 29492127, 29492939, 29493122, 29494245
29495057, 29495684, 29497311, 29497588, 29497696, 29498198, 29500257
29500826, 29502561, 29503543, 29503631, 29503827, 29504492, 29504682
29505668, 29507270, 29507616, 29508681, 29509777, 29510278, 29511611
29514479, 29515134, 29515240, 29515476, 29515766, 29515834, 29516300
29516727, 29516766, 29517168, 29517883, 29521187, 29521688, 29521748
29521862, 29522358, 29522561, 29522662, 29523055, 29523511, 29524599
29525467, 29525886, 29526966, 29527595, 29527610, 29528368, 29529147
29530440, 29530515, 29530812, 29530909, 29531654, 29531836, 29532532
29536342, 29536445, 29538631, 29541742, 29541769, 29542084, 29542449
29542643, 29543034, 29543956, 29546817, 29547010, 29547867, 29548427
29548687, 29548722, 29549071, 29549104, 29549154, 29549730, 29552773
29553141, 29557144, 29557261, 29557336, 29557556, 29558238, 29558975
29559187, 29559446, 29559908, 29559981, 29564592, 29564593, 29565611
29580394, 29580983, 29581771, 29584261, 29584693, 29586143, 29587765
29597536, 29597754, 29598039, 29598046, 29598233, 29599008, 29599300
29601461, 29602831, 29603460, 29603884, 29604002, 29604257, 29607136
29607797, 29608000, 29610506, 29611020, 29611991, 29615824, 29616244
29616414, 29618074, 29618190, 29620042, 29622936, 29625065, 29625804
29625876, 29626154, 29626732, 29628200, 29629430, 29629650, 29629681
29629745, 29631749, 29632095, 29632265, 29632611, 29633697, 29633753
29633936, 29634643, 29635427, 29635717, 29635990, 29637362, 29637526
29638285, 29641736, 29643721, 29645349, 29648928, 29651183, 29651520
29653132, 29653246, 29655668, 29656819, 29657422, 29657960, 29661028
29661065, 29661722, 29663368, 29664087, 29664161, 29665940, 29667994
29668005, 29669413, 29670782, 29671363, 29672507, 29676089, 29677051
29677173, 29677733, 29677927, 29679856, 29681987, 29683039, 29687214
29687459, 29687718, 29687763, 29689145, 29689255, 29692694, 29694869
29695425, 29695841, 29696310, 29700125, 29700460, 29700770, 29703932
29707099, 29707896, 29708915, 29710188, 29710858, 29713810, 29715220
29716194, 29716491, 29717659, 29719146, 29720133, 29721418, 29725476
29725781, 29726695, 29739576, 29741976, 29742223, 29746962, 29747493
29747648, 29747653, 29748285, 29748336, 29748513, 29749471, 29750673
29751094, 29753244, 29754951, 29755821, 29756274, 29756444, 29757099

29757264, 29757651, 29758217, 29758661, 29761678, 29761837, 29761911
29765393, 29766207, 29766503, 29766679, 29768899, 29770750, 29771032
29771242, 29773197, 29773842, 29775393, 29779196, 29782211, 29782823
29782866, 29784106, 29785239, 29787292, 29787766, 29791152, 29791880
29793318, 29794462, 29795712, 29795957, 29796378, 29797726, 29802695
29804875, 29805772, 29809837, 29812489, 29813503, 29815713, 29817278
29821582, 29825525, 29827852, 29831196, 29834506, 29836096, 29838485
29838773, 29839715, 29840619, 29841267, 29841687, 29843277, 29843692
29844226, 29845530, 29846126, 29846645, 29848084, 29848849, 29849100
29850930, 29851733, 29853485, 29858121, 29858376, 29865188, 29865658
29869086, 29869404, 29869887, 29870065, 29871098, 29873665, 29875459
29875565, 29877608, 29878076, 29881478, 29881839, 29882729, 29884958
29887111, 29888621, 29890740, 29891916, 29893132, 29897418, 29897863
29900203, 29902327, 29902330, 29903299, 29903454, 29906678, 29907942
29909658, 29912286, 29914449, 29915217, 29915848, 29916975, 29920025
29921318, 29926466, 29927756, 29928210, 29937565, 29938225, 29940373
29942096, 29942554, 29943670, 29944035, 29944660, 29945645, 29946388
29951620, 29956016, 29957493, 29961609, 29962248, 29962927, 29962939
29966768, 29967223, 29968085, 29970298, 29971027, 29971888, 29989783
29989845, 29991257, 29997326, 30003187, 30006159, 30006985, 30007797
30008125, 30008214, 30009710, 30015070, 30019864, 30024618, 30029806
30032376, 30033547, 30034456, 30035598, 30038392, 30040157, 30042490
30043610, 30044507, 30047702, 30047765, 30051176, 30051783, 30053036
30058149, 30058453, 30059106, 30059109, 30066352, 30074349, 30074472
30075037, 30076197, 30078675, 30079949, 30080266, 30081580, 30083488
30084971, 30085897, 30086992, 30090568, 30092859, 30095591, 30095952
30097092, 30098251, 30099454, 30101186, 30104555, 30106748, 30110224
30110370, 30110518, 30114489, 30114534, 30127522, 30127904, 30131645
30135396, 30142907, 30149658, 30150606, 30154633, 30155837, 30159329
30164714, 30165493, 30165503, 30170104, 30174401, 30175291, 30177597
30178250, 30187866, 30189516, 30191274, 30193165, 30206493, 30218044
30223712, 30223847, 30224950, 30235919, 30246179, 30247305, 30252098
30252156, 30253608, 30255143, 30264405, 30266791, 30269428, 30274188
30282591, 30299817, 30312094, 30318638, 30324180, 30342878, 30365745
30389229, 30402386, 30408515, 30412188, 30453442, 30458593, 30474167
30474774, 30485255, 30534827, 30641755

Version 19.0.0.0.ru-2019-10.rur-2019-10.r1

Version 19.0.0.0.ru-2019-10.rur-2019-10.r1 includes the following:

- Patch [30125133](#): DATABASE RELEASE UPDATE 19.5.0.0.0

- Patch [30128191](#): OJVM RELEASE UPDATE 19.5.0.0.0
- Patch [29997937](#): DSTv34 UPDATE for RDBMS (TZDATA2019B)
- Patch [29997959](#): DSTV34 UPDATE for OJVM (TZDATA2019B)
- PreUpgrade Jar: preupgrade_19_cbuild_4_lf.zip
- Patch [28730253](#): SUPPORT NEW ERA REIWA FOR JAPANESE IMPERIAL CALENDAR
- Patch [29213893](#): DBMS_STATS FAILING WITH ERROR ORA-01422 WHEN GATHERING STATS FOR USER\$ TABLE
- Patch [30528704](#): 19C RMAN RECOVER DATABASE USE REDO LOG INSTEAD OF ARCHIVELOG AFTER APPLYING OCT DATABASE RU
- Support for resizing the temporary tablespace in a read replica

For more information, see [Resizing the temporary tablespace in a read replica](#) in the *Amazon RDS User Guide*.

Oracle release update 19.5.0.0.0, released October 2019

Bugs fixed:

14735102, 17428816, 19080742, 19697993, 20313356, 21374587, 21965541 23296836,
23606241, 24687075, 25756945,
25806201, 25883179, 25986062 25997810, 26476244, 26611353, 26739322, 26872233,
27126938, 27244999 27359766,
27369515, 27406105, 27411022, 27423500, 27453490, 27458357 27489107, 27666312,
27710072, 27846298, 27880025,
27934711, 27935464 27941110, 27957203, 27967484, 28064977, 28072567, 28125947, 28129791
28181021, 28210681,
28271693, 28279456, 28294563, 28313275, 28319114 28326928, 28350595, 28371123,
28379065, 28381939, 28386259,
28390273 28395302, 28410431, 28431445, 28435333, 28463226, 28475242, 28484299 28489419,
28498976, 28502773,
28513333, 28521330, 28534475, 28542455 28547068, 28558645, 28561704, 28567417,
28567819, 28569897, 28572533,
28572544, 28572667, 28572834, 28587723, 28593682, 28594086, 28597221 28601957,
28605066, 28606598, 28612239,
28625862, 28627033, 28636532 28643718, 28644549, 28645570, 28646200, 28646939,
28649388, 28655209 28663782,
28672457, 28673945, 28692103, 28692275, 28694872, 28696373 28705231, 28710385,
28710734, 28714461, 28715727,

28718469, 28719348 28720418, 28721497, 28722229, 28730079, 28740708, 28742555, 28749853
28752923, 28755011,
28758722, 28760206, 28765983, 28767240, 28769456 28772390, 28774416, 28776811,
28777214, 28781754, 28785531,
28789531 28791852, 28795551, 28802734, 28804517, 28810381, 28811560, 28815123 28815355,
28817449, 28819640,
28820669, 28824482, 28827682, 28831971 28833912, 28835937, 28836716, 28849776,
28854004, 28855922, 28862532
28863432, 28863487, 28867992, 28873575, 28875089, 28876253, 28876639 28878865,
28884931, 28888327, 28889730,
28892794, 28897512, 28899663 28901126, 28905457, 28907196, 28912691, 28915561,
28917080, 28918429 28919145,
28922227, 28922532, 28922608, 28925634, 28925880, 28933158 28936114, 28937717,
28938698, 28940179, 28940281,
28941901, 28942455 28945421, 28945994, 28950868, 28951533, 28952168, 28954762, 28955606
28956908, 28957292,
28957723, 28958088, 28960863, 28962775, 28965084 28965231, 28966444, 28974083,
28977322, 28983095, 28983486,
28985478 28986207, 28986231, 28986326, 28986481, 28988482, 28989306, 28993295 28993353,
28994307, 28996376,
29000000, 29001305, 29001888, 29002488 29002784, 29002927, 29003738, 29006318,
29006621, 29007321, 29007353,
29007775, 29008035, 29008669, 29009513, 29010126, 29011936, 29012609 29013475,
29014076, 29015118, 29017265,
29018655, 29019121, 29021063 29021352, 29024054, 29024552, 29024732, 29026582,
29026606, 29027456 29027694,
29027940, 29031575, 29031600, 29032234, 29032276, 29032457 29032607, 29033052,
29033145, 29033200, 29033280,
29034587, 29037290 29038528, 29039089, 29039510, 29040739, 29043554, 29043651, 29043725
29044763, 29044954,
29047850, 29048178, 29048289, 29048498, 29048605 29050357, 29050560, 29050765,
29050886, 29051702, 29051953,
29052726 29053783, 29056024, 29056270, 29056560, 29056767, 29059011, 29060216 29061959,
29062692, 29062848,
29062860, 29062868, 29110526, 29110783 29110790, 29110797, 29110802, 29110805,
29111598, 29113282, 29113305
29117526, 29117642, 29119077, 29120223, 29122224, 29122254, 29123297 29123432,
29123482, 29124368, 29125036,
29125374, 29125380, 29126345 29127957, 29128693, 29128935, 29129450, 29129497,
29129712, 29130219 29131539,
29132869, 29132938, 29134447, 29135383, 29135649, 29136111 29138641, 29139956,
29141316, 29141341, 29141685,
29142609, 29142667 29143516, 29144995, 29145214, 29145730, 29149829, 29150338, 29151520
29152357, 29155099,

29157051, 29157389, 29158680, 29158899, 29159909 29159936, 29160174, 29162095,
29163156, 29163415, 29163437,
29163524 29163567, 29167111, 29167342, 29167374, 29167940, 29168137, 29168219 29168433,
29169073, 29169215,
29170232, 29171683, 29171942, 29172618 29172826, 29173140, 29173373, 29173817,
29174004, 29176318, 29177466,
29177543, 29177886, 29178385, 29180313, 29180455, 29180559, 29180893 29181153,
29181231, 29181620, 29181743,
29181923, 29182019, 29183912 29184297, 29184666, 29185193, 29186456, 29189302,
29189307, 29189889 29190235,
29190474, 29190740, 29191541, 29192419, 29192468, 29192685 29193207, 29194205,
29194367, 29194493, 29194827,
29194981, 29195279 29195337, 29195758, 29196725, 29198092, 29199635, 29199733, 29200316
29200700, 29201494,
29201539, 29202104, 29202850, 29203122, 29203166 29203425, 29203443, 29203604,
29205281, 29205323, 29205419,
29205463 29205767, 29205918, 29206109, 29206605, 29207073, 29208260, 29208732 29211457,
29211724, 29212012,
29212433, 29212611, 29213320, 29213351 29213613, 29213775, 29213850, 29213879,
29214561, 29214960, 29216746,
29216984, 29217294, 29217472, 29217828, 29217848, 29218570, 29219205 29219273,
29220079, 29221248, 29221891,
29222031, 29222784, 29223833 29223859, 29223967, 29224065, 29224605, 29225076,
29225168, 29225758 29227602,
29228869, 29229164, 29229754, 29229844, 29229955, 29230252 29230565, 29231133,
29232117, 29232154, 29232449,
29233415, 29234123 29236573, 29237538, 29237744, 29240307, 29241345, 29241651, 29242017
29242884, 29243958,
29245137, 29245160, 29246163, 29247415, 29247712 29247906, 29248495, 29248552,
29248835, 29248858, 29249991,
29250059 29250317, 29251259, 29253184, 29253871, 29254031, 29254930, 29255178 29255273,
29255431, 29255435,
29256426, 29259119, 29259320, 29260452 29261547, 29261906, 29262512, 29262887,
29265448, 29266248, 29266899,
29267292, 29268412, 29269171, 29269228, 29269825, 29270585, 29273539 29273570,
29273735, 29273812, 29273847,
29274428, 29274564, 29274627 29275461, 29276272, 29277317, 29278218, 29279658,
29279751, 29279854 29281527,
29281691, 29281796, 29282233, 29282898, 29285503, 29285788 29285956, 29286037,
29287130, 29287705, 29292837,
29293072, 29293574 29297863, 29297915, 29298220, 29299049, 29299082, 29299844, 29301463
29301566, 29302963,
29303918, 29304781, 29306226, 29306713, 29311528 29311588, 29312310, 29312672,
29312734, 29312753, 29313347,

29313417 29313525, 29314539, 29317756, 29318410, 29319441, 29321489, 29323946 29324568,
29324735, 29325087,
29325105, 29325257, 29325765, 29325993 29327044, 29329042, 29329087, 29329807,
29330361, 29331066, 29331209
29331380, 29331493, 29332292, 29332395, 29332771, 29333500, 29336843 29337310,
29337742, 29338315, 29338453,
29338780, 29338913, 29339101 29339155, 29341209, 29343086, 29345937, 29346057,
29346211, 29346943 29347620,
29348176, 29350052, 29350762, 29351386, 29351662, 29351716 29351735, 29351749,
29352298, 29352724, 29352867,
29352947, 29353271 29353432, 29353821, 29353960, 29355654, 29356547, 29356704, 29356711
29356752, 29358509,
29358828, 29360252, 29360285, 29360672, 29360911 29360950, 29361319, 29361472,
29361801, 29363151, 29364171,
29364177 29366940, 29367019, 29367561, 29368253, 29368310, 29372541, 29373418 29373588,
29374179, 29375941,
29376346, 29377986, 29378029, 29378834 29378913, 29379978, 29382784, 29382815,
29384781, 29384854, 29384864,
29385429, 29385652, 29386502, 29386635, 29386660, 29387073, 29387274 29388020,
29388072, 29388094, 29388524,
29388830, 29389889, 29390011 29390435, 29390785, 29391030, 29391237, 29391849,
29393291, 29394014 29394140,
29394749, 29395657, 29397954, 29397996, 29398488, 29398863 29399100, 29399121,
29399336, 29399938, 29402131,
29404483, 29405012 29405462, 29405651, 29405996, 29407804, 29408853, 29409149, 29409455
29410311, 29410834,
29411037, 29411469, 29412066, 29412269, 29417173 29417719, 29417884, 29420834,
29421059, 29423016, 29423156,
29423826 29424999, 29426241, 29429017, 29429264, 29429466, 29429566, 29430524 29430866,
29431192, 29431485,
29434301, 29435474, 29435652, 29436454 29436514, 29436727, 29437594, 29437712,
29438277, 29438736, 29439522,
29441196, 29443187, 29443250, 29444072, 29444282, 29444602, 29446669 29449477,
29449845, 29450193, 29450421,
29450812, 29450936, 29451386 29452576, 29452936, 29452953, 29454978, 29455424,
29457312, 29457370 29457807,
29460252, 29461420, 29461791, 29462594, 29462767, 29462957 29463047, 29463528,
29464616, 29464779, 29465177,
29467622, 29469565 29470291, 29471860, 29476473, 29481584, 29483532, 29483672, 29483685
29483712, 29483723,
29485099, 29486181, 29488894, 29489546, 29490256 29492127, 29492939, 29493122,
29494245, 29495057, 29495684,
29497311 29497696, 29498198, 29500257, 29500826, 29502561, 29503543, 29503631 29503827,
29504492, 29504682,

29505668, 29507270, 29507616, 29510278 29511611, 29514479, 29515134, 29515240,
29515476, 29515766, 29515834,
29516300, 29516766, 29517168, 29517883, 29521187, 29521748, 29521862 29522358,
29522561, 29522662, 29523511,
29524599, 29525467, 29525886 29527595, 29527610, 29529147, 29530440, 29530515,
29530812, 29531654 29532532,
29541742, 29541769, 29542449, 29542643, 29543034, 29543956 29546817, 29547867,
29548427, 29548687, 29548722,
29549071, 29549104 29549154, 29549730, 29552773, 29553141, 29557144, 29557261, 29557336
29558238, 29558975,
29559187, 29559446, 29559908, 29559981, 29565611 29580394, 29580983, 29581771,
29584261, 29584693, 29586143,
29587765 29597536, 29597754, 29598039, 29598046, 29598233, 29599008, 29599300 29601461,
29603460, 29604002,
29604257, 29607136, 29608000, 29611020 29611991, 29616244, 29616414, 29618074,
29618190, 29620042, 29622936,
29625065, 29625804, 29625876, 29626154, 29626732, 29628200, 29629430 29629650,
29629681, 29631749, 29632095,
29632265, 29633697, 29633753 29633936, 29634643, 29635427, 29635717, 29635990,
29637362, 29637526 29638285,
29641736, 29645349, 29651183, 29651520, 29653132, 29653246 29655668, 29656819,
29657422, 29657960, 29661028,
29661065, 29661722 29663368, 29664087, 29664161, 29667994, 29668005, 29669413, 29670782
29671363, 29672507,
29676089, 29677051, 29677733, 29677927, 29679856 29683039, 29687214, 29687459,
29687718, 29687763, 29689145,
29692694 29695425, 29695841, 29696310, 29700125, 29700460, 29703932, 29707099 29707896,
29708915, 29715220,
29720133, 29721418, 29725781, 29741976 29742223, 29747493, 29747648, 29749471,
29750673, 29751094, 29753244,
29754951, 29755821, 29756274, 29756444, 29757264, 29757651, 29758661 29761911,
29766207, 29766503, 29766679,
29771032, 29773842, 29775393 29779196, 29782211, 29782823, 29782866, 29785239,
29787766, 29791880 29795712,
29795957, 29802695, 29809837, 29815713, 29836096, 29838773 29845530, 29848849,
29850930, 29851733, 29858376,
29869086, 29869404 29869887, 29875459, 29875565, 29881478, 29881839, 29887111, 29888621
29893132, 29900203,
29902327, 29903299, 29903454, 29921318, 29926466 29943670, 29997326, 30006159,
30015070, 30019864, 30024618,
30033547 30034456, 30053036, 30075037, 30076197, 30092859, 30095591, 30114534 30142907,
30155837, 30174401

Version 19.0.0.0.ru-2019-07.rur-2019-07.r1

Version 19.0.0.0.ru-2019-07.rur-2019-07.r1 includes the following:

- Patch [29834717](#): Database Release Update: 19.4.0.0.190716
- Patch [29774421](#): OJVM RELEASE UPDATE: 19.4.0.0.190716
- Patch [28852325](#): RDBMS - DSTV33 UPDATE - TZDATA2018G
- Patch [28852334](#): DSTV33 UPDATE - TZDATA2018G - NEED OJVM FIX
- Patch [28730253](#): SUPPORT NEW ERA REIWA FOR JAPANESE IMPERIAL CALENDAR
- Patch [29213893](#): DBMS_STATS FAILING WITH ERROR ORA-01422 WHEN GATHERING STATS FOR USER\$ TABLE
- PreUpgrade Jar: preupgrade_19_cbuild_4_lf.zip

Oracle release update 19.4.0.0.190716, released July 2019

Bugs fixed:

```
29850930, 29225758, 29276272, 14735102, 17428816, 19080742, 19697993
20313356, 21374587, 21965541, 23296836, 23606241, 25756945, 25806201
25883179, 25986062, 25997810, 26476244, 26611353, 26739322, 26872233
27126938, 27244999, 27359766, 27369515, 27423500, 27453490, 27666312
27710072, 27846298, 27957203, 28064977, 28072567, 28125947, 28129791
28181021, 28210681, 28271693, 28279456, 28313275, 28326928, 28350595
28371123, 28379065, 28381939, 28390273, 28431445, 28463226, 28475242
28489419, 28502773, 28513333, 28534475, 28547068, 28561704, 28569897
28572533, 28572544, 28572667, 28572834, 28587723, 28593682, 28594086
28597221, 28601957, 28605066, 28606598, 28612239, 28625862, 28627033
28636532, 28643718, 28644549, 28645570, 28646200, 28646939, 28649388
28655209, 28663782, 28673945, 28692275, 28694872, 28696373, 28705231
28710385, 28710734, 28714461, 28715727, 28718469, 28719348, 28720418
28722229, 28730079, 28740708, 28742555, 28749853, 28755011, 28758722
28760206, 28767240, 28772390, 28774416, 28777214, 28781754, 28785531
28789531, 28791852, 28795551, 28802734, 28804517, 28810381, 28811560
28815123, 28815355, 28819640, 28824482, 28827682, 28833912, 28835937
28849776, 28854004, 28862532, 28863432, 28867992, 28873575, 28876253
28876639, 28884931, 28888327, 28889730, 28892794, 28897512, 28899663
28901126, 28905457, 28907196, 28912691, 28915561, 28917080, 28918429
28919145, 28922227, 28922532, 28922608, 28925634, 28925880, 28933158
```

28936114, 28937717, 28938698, 28940179, 28940281, 28941901, 28942455
28945421, 28945994, 28950868, 28951533, 28952168, 28954762, 28955606
28956908, 28957292, 28957723, 28962775, 28965231, 28966444, 28974083
28977322, 28983095, 28983486, 28986207, 28986231, 28986326, 28986481
28988482, 28989306, 28993295, 28993353, 28994307, 28996376, 29000000
29001305, 29001888, 29002784, 29002927, 29003738, 29006318, 29006621
29007321, 29007775, 29008035, 29008669, 29009513, 29011936, 29012609
29013475, 29014076, 29015118, 29017265, 29018655, 29019121, 29021063
29021352, 29024054, 29024552, 29024732, 29026582, 29026606, 29027456
29027694, 29027940, 29031575, 29031600, 29032234, 29032276, 29032457
29032607, 29033052, 29033145, 29033200, 29033280, 29034587, 29037290
29038528, 29039089, 29039510, 29040739, 29043554, 29043651, 29043725
29044763, 29044954, 29047850, 29048178, 29048289, 29048498, 29048605
29050357, 29050560, 29050765, 29051702, 29051953, 29052726, 29053783
29056024, 29056270, 29056560, 29056767, 29059011, 29061959, 29062692
29062848, 29062860, 29062868, 29110526, 29110783, 29110790, 29110797
29110802, 29110805, 29111598, 29113282, 29113305, 29117526, 29117642
29119077, 29120223, 29122224, 29122254, 29123297, 29123432, 29123482
29124368, 29125036, 29125374, 29125380, 29126345, 29127957, 29128693
29128935, 29129450, 29129497, 29129712, 29130219, 29131539, 29132938
29134447, 29135383, 29135649, 29136111, 29138641, 29141316, 29141341
29141685, 29142609, 29142667, 29144995, 29145214, 29145730, 29149829
29150338, 29151520, 29152357, 29155099, 29157389, 29158680, 29158899
29159909, 29159936, 29160174, 29162095, 29163156, 29163415, 29163437
29163524, 29163567, 29167111, 29167342, 29167374, 29167940, 29168219
29168433, 29169073, 29169215, 29171683, 29171942, 29172618, 29172826
29173140, 29173373, 29173817, 29174004, 29176318, 29177466, 29177543
29177886, 29178385, 29180313, 29180455, 29180559, 29180893, 29181153
29181231, 29181620, 29181743, 29181923, 29182019, 29183912, 29184297
29184666, 29185193, 29186456, 29189302, 29189307, 29189889, 29190235
29190474, 29190740, 29191541, 29192419, 29192468, 29192685, 29193207
29194205, 29194367, 29194493, 29194827, 29194981, 29195279, 29195337
29195758, 29196725, 29199635, 29199733, 29200316, 29200700, 29201494
29201539, 29202104, 29202850, 29203122, 29203166, 29203425, 29203443
29203604, 29205281, 29205323, 29205419, 29205463, 29205767, 29205918
29206109, 29206605, 29207073, 29208260, 29208732, 29211457, 29211724
29212012, 29212433, 29212611, 29213351, 29213775, 29213850, 29213879
29214561, 29214960, 29216746, 29216984, 29217294, 29217472, 29217828
29217848, 29218570, 29219205, 29219273, 29220079, 29221248, 29221891
29222031, 29222784, 29223833, 29223859, 29223967, 29224065, 29224605
29225076, 29225168, 29227602, 29228869, 29229164, 29229754, 29229844
29229955, 29230252, 29230565, 29231133, 29232117, 29232154, 29233415
29234123, 29237538, 29240307, 29241345, 29241651, 29242017, 29242884
29243958, 29245137, 29245160, 29246163, 29247415, 29247712, 29247906

29248495, 29248552, 29248835, 29248858, 29249991, 29250059, 29250317
29251259, 29253184, 29253871, 29254031, 29254930, 29255178, 29255273
29255431, 29255435, 29256426, 29259119, 29259320, 29260452, 29261547
29261906, 29262512, 29262887, 29265448, 29266248, 29266899, 29267292
29268412, 29269171, 29269228, 29270585, 29273539, 29273570, 29273735
29273812, 29273847, 29274428, 29274564, 29274627, 29275461, 29277317
29278218, 29279658, 29279751, 29279854, 29281527, 29281691, 29281796
29282233, 29282898, 29285503, 29285788, 29285956, 29286037, 29287130
29287705, 29292837, 29293072, 29293574, 29297863, 29297915, 29298220
29299049, 29299082, 29299844, 29301463, 29301566, 29302963, 29303918
29304781, 29306226, 29306713, 29311588, 29312310, 29312672, 29312734
29312753, 29313347, 29313417, 29313525, 29314539, 29317756, 29318410
29319441, 29321489, 29323946, 29324568, 29324735, 29325087, 29325105
29325257, 29325765, 29325993, 29327044, 29329042, 29329087, 29329807
29330361, 29331066, 29331209, 29331380, 29331493, 29332292, 29332395
29332771, 29333500, 29336843, 29337310, 29338315, 29338453, 29338780
29338913, 29339101, 29339155, 29341209, 29343086, 29345937, 29346057
29346211, 29346943, 29347620, 29348176, 29350052, 29351386, 29351716
29351735, 29351749, 29352298, 29352724, 29352867, 29352947, 29353271
29353432, 29353960, 29355654, 29356547, 29356704, 29356711, 29356752
29358509, 29358828, 29360285, 29360672, 29360911, 29360950, 29361472
29361801, 29363151, 29364171, 29364177, 29366940, 29367019, 29367561
29368253, 29372541, 29373418, 29373588, 29374179, 29375941, 29376346
29377986, 29378029, 29378834, 29378913, 29379978, 29382784, 29382815
29384781, 29384854, 29384864, 29385429, 29385652, 29386502, 29386635
29386660, 29387073, 29387274, 29388020, 29388072, 29388094, 29388524
29388830, 29389889, 29390011, 29390435, 29390785, 29391030, 29394014
29394140, 29394749, 29395657, 29397954, 29397996, 29398488, 29398863
29399100, 29399121, 29399938, 29402131, 29404483, 29405012, 29405462
29405651, 29405996, 29407804, 29409149, 29410311, 29410834, 29411037
29412066, 29412269, 29417719, 29417884, 29420834, 29421059, 29423826
29424999, 29426241, 29429017, 29429264, 29429566, 29430524, 29431192
29431485, 29434301, 29435474, 29435652, 29436454, 29436514, 29437594
29437712, 29438277, 29438736, 29439522, 29441196, 29443187, 29443250
29444072, 29444282, 29444602, 29446669, 29449477, 29450421, 29451386
29452576, 29452936, 29452953, 29455424, 29457312, 29457370, 29457807
29460252, 29461791, 29462594, 29462767, 29462957, 29464779, 29465177
29467622, 29476473, 29483532, 29483672, 29483685, 29483712, 29486181
29488894, 29489546, 29490256, 29492127, 29492939, 29494245, 29495057
29495684, 29497311, 29500826, 29502561, 29503543, 29503631, 29503827
29504492, 29504682, 29505668, 29507616, 29510278, 29511611, 29514479
29515134, 29515240, 29515766, 29515834, 29516300, 29517168, 29521187
29521748, 29522358, 29522561, 29522662, 29523511, 29525467, 29525886
29527595, 29529147, 29530440, 29530515, 29530812, 29531654, 29541769

29542449, 29543034, 29546817, 29547867, 29548687, 29548722, 29549154
29549730, 29557336, 29558975, 29559187, 29559446, 29559908, 29559981
29565611, 29580983, 29581771, 29584261, 29586143, 29597536, 29597754
29598039, 29598233, 29599300, 29601461, 29604002, 29608000, 29611020
29611991, 29616244, 29616414, 29618074, 29618190, 29622936, 29626732
29628200, 29629650, 29629681, 29631749, 29632095, 29633697, 29635427
29635717, 29637362, 29638285, 29641736, 29653246, 29656819, 29657422
29664087, 29664161, 29670782, 29676089, 29677051, 29677733, 29679856
29687459, 29687763, 29692694, 29695841, 29703932, 29707099, 29742223
29747648, 29751094, 29753244, 29754951, 29756274, 29757651, 29766207
29766503, 29766679, 29775393, 29779196, 29795957, 29838773

Amazon RDS for Oracle Database 18c (18.0.0.0)

Amazon RDS for Oracle Database 18c (18.0.0.0) incorporates bug fixes from Oracle by using Release Updates (RUs). The naming format for an RU is as follows: release.ru-date.rur-date.rnumber. The release is the five-digit number, for example, 18.0.0.0. The date is the year and month when the update was made available by Oracle. The number is the revision. The Oracle Database 18c update released by Oracle in April 2021 is named 18.0.0.0.ru-2021-04.rur-2021-04.r1.

An upgrade to an RU is called a minor version upgrade. Even though the string "rur" appears in the name of the patch, it is an RU rather than an RUR. Amazon RDS upgrades from one RU to another RU. RDS doesn't support RURs as part of its minor version upgrade mechanism. We don't support applying one-off patches to individual DB instances.

Note

Oracle Database 18c (18.0.0.0) is no longer supported. This information is only useful if you want to upgrade an Oracle Database 18c snapshot.

To find what RUs are applied to Amazon RDS for Oracle Database 18c (18.0.0.0), see the following table.

Date	RU
2021 April	18.0.0.0.ru-2021-04.rur-2021-04.r1
2021 January	18.0.0.0.ru-2021-01.rur-2021-01.r1
2020 October	18.0.0.0.ru-2020-10.rur-2020-10.r1
2020 July	18.0.0.0.ru-2020-07.rur-2020-07.r1
2020 April	18.0.0.0.ru-2020-04.rur-2020-04.r1
2020 January	18.0.0.0.ru-2020-01.rur-2020-01.r1
2019 October	18.0.0.0.ru-2019-10.rur-2019-10.r1

Date	RU
2019 July	18.0.0.0.ru-2019-07.rur-2019-07.r1

Version 18.0.0.0.ru-2021-04.rur-2021-04.r1

Version 18.0.0.0.ru-2021-04.rur-2021-04.r1 includes the following:

- Patch [32524155](#): DATABASE RELEASE UPDATE 18.14.0.0.0
- Patch [32552752](#): OJVM RELEASE UPDATE 18.14.0.0.0
- Patch [32327201](#): RDBMS - DSTV36 UPDATE - TZDATA2020E
- Patch [28730253](#): SUPPORT NEW ERA REIWA FOR JAPANESE IMPERIAL CALENDAR
- Patch [27539475](#): ORA-3816 - MISSING MESSAGE INFORMATION FOR 3816 ERROR
- Patch [29213893](#): DBMS_STATS FAILING WITH ERROR ORA-01422 WHEN GATHERING STATS FOR USER TABLE
- Patch [29374604](#): Golden Gate Integrated Extract not starting 18c/19c Standard Edition
- Patch [26352615](#): SPILLOVER AUDIT FILES CANNOT BE FOUND ORA-46372
- PreUpgrade Jar: preupgrade_181_cbuild_10_lf.zip

Combined patches for version 18.0.0.0.ru-2021-04.rur-2021-04.r1, released April 2021

Bugs fixed:

```
7391838, 8932139, 9062315, 12816839, 13554903, 14221306, 17468475
17958365, 18701017, 18986501, 20436508, 20549013, 20917487, 21095391
21223848, 21374587, 21547051, 21744603, 21766220, 21806121, 21935698
22174392, 22282748, 22363790, 22645496, 22729345, 22734786, 22820798
23003564, 23061453, 23109325, 23310101, 23698980, 23761724, 23763462
23840305, 24480567, 24489904, 24596874, 24669730, 24687075, 24689376
24737581, 24763196, 24798481, 24841671, 24844841, 24903291, 24925863
24971597, 25031502, 25035594, 25035599, 25060506, 25092651, 25210690
25287072, 25288078, 25293659, 25303284, 25309116, 25348956, 25404117
25405687, 25416731, 25487146, 25560538, 25573623, 25576115, 25591292
25607397, 25634405, 25644811, 25663488, 25686739, 25696520, 25709124
```

25724089, 25726981, 25736428, 25740844, 25743479, 25756945, 25809524
25824236, 25882883, 25890002, 25908728, 25911069, 25929650, 25943740
25958554, 25986062, 25997810, 26001677, 26083489, 26115103, 26164661
26226953, 26237338, 26280704, 26281476, 26284722, 26297826, 26299684
26313403, 26336101, 26352615, 26362155, 26375330, 26399691, 26399839
26405036, 26410240, 26422277, 26423085, 26427905, 26433972, 26440142
26440169, 26441345, 26450454, 26476244, 26521043, 26527054, 26536320
26586174, 26587652, 26595088, 26598422, 26615291, 26617804, 26646549
26647619, 26654411, 26694735, 26716835, 26724511, 26731697, 26745002
26785169, 26790514, 26790923, 26792891, 26798411, 26818960, 26822620
26827699, 26843558, 26843664, 26846077, 26860285, 26871815, 26882126
26882316, 26883456, 26894737, 26895149, 26898279, 26910716, 26914402
26927998, 26928317, 26933599, 26943004, 26943660, 26956033, 26960097
26961415, 26966120, 26966916, 26970175, 26976568, 26985002, 26986173
26992964, 26996813, 27000158, 27005278, 27006120, 27006664, 27012915
27013566, 27016033, 27018734, 27026401, 27028251, 27030974, 27032726
27033520, 27034318, 27034688, 27035653, 27036163, 27036408, 27037839
27038986, 27040560, 27041253, 27044169, 27044575, 27047831, 27053044
27054231, 27058530, 27060167, 27060859, 27061736, 27066451, 27066519
27072923, 27073066, 27075854, 27080748, 27080874, 27086406, 27086821
27090765, 27092991, 27093423, 27098733, 27100800, 27101105, 27101527
27101652, 27105900, 27106301, 27106915, 27110878, 27111780, 27112686
27114112, 27115422, 27119621, 27119861, 27121566, 27122162, 27125872
27126666, 27128580, 27133637, 27135647, 27142120, 27142529, 27143756
27143882, 27144533, 27144928, 27147979, 27150500, 27151826, 27152892
27153641, 27153755, 27155549, 27156355, 27160360, 27160922, 27163928
27164352, 27165231, 27166354, 27166715, 27169796, 27169888, 27170305
27174938, 27174948, 27177551, 27177852, 27179264, 27181521, 27181537
27181897, 27182006, 27182064, 27184253, 27185188, 27187440, 27189611
27190851, 27193810, 27195935, 27197334, 27199245, 27200959, 27202015
27203055, 27204476, 27207634, 27208795, 27208953, 27210038, 27210263
27210872, 27212837, 27213140, 27214085, 27214204, 27215007, 27216046
27216224, 27217412, 27220610, 27220937, 27221900, 27222121, 27222423
27222626, 27222938, 27223075, 27224987, 27226913, 27228786, 27229389
27231051, 27232983, 27233563, 27234962, 27236052, 27236110, 27236722
27238077, 27238258, 27240246, 27240570, 27241221, 27241247, 27242226
27242616, 27244337, 27244785, 27244999, 27249215, 27249531, 27249544
27250547, 27251690, 27252023, 27254335, 27254851, 27255377, 27256000
27256488, 27256534, 27256584, 27257509, 27258578, 27259307, 27259386
27259983, 27260704, 27262601, 27262650, 27262798, 27262945, 27262991
27263276, 27263677, 27263996, 27264464, 27265816, 27266245, 27267992
27270197, 27271876, 27274143, 27274456, 27274536, 27275136, 27275533
27275776, 27276231, 27282707, 27283029, 27283960, 27284375, 27284499
27285244, 27285557, 27288230, 27288638, 27288894, 27292213, 27293599

27294480, 27299455, 27300007, 27301308, 27301568, 27302415, 27302594
27302632, 27302681, 27302695, 27302711, 27302714, 27302730, 27302777
27302800, 27302960, 27303287, 27303785, 27303938, 27304131, 27304410
27304906, 27304936, 27305318, 27307868, 27308088, 27309182, 27310092
27313687, 27314206, 27314390, 27314512, 27314697, 27315159, 27318117
27318869, 27320576, 27320985, 27321179, 27321834, 27326204, 27329812
27330158, 27330161, 27333536, 27333658, 27333664, 27333693, 27333731
27334316, 27334353, 27334648, 27335682, 27338838, 27338912, 27338946
27339115, 27339396, 27339483, 27339495, 27341036, 27343844, 27345190
27345231, 27345450, 27345498, 27346329, 27346644, 27346709, 27346949
27346984, 27347126, 27348081, 27348707, 27349393, 27350267, 27351628
27352600, 27354783, 27356373, 27357773, 27358232, 27358241, 27359178
27359368, 27360126, 27362190, 27364854, 27364891, 27364916, 27364947
27365014, 27365139, 27365702, 27365993, 27367194, 27368850, 27369515
27370933, 27372756, 27375260, 27375542, 27376871, 27377219, 27378103
27378959, 27379233, 27379846, 27379956, 27381383, 27381417, 27381498
27381656, 27383281, 27384222, 27386467, 27389352, 27392187, 27392968
27393421, 27393570, 27394086, 27395404, 27395416, 27395794, 27396357
27396365, 27396377, 27396624, 27396666, 27396672, 27396720, 27396794
27396813, 27397048, 27398080, 27398223, 27398660, 27398742, 27399499
27399762, 27399985, 27400416, 27400598, 27401618, 27401637, 27403244
27404017, 27404573, 27404599, 27404668, 27405242, 27405645, 27405696
27406105, 27410279, 27410300, 27410595, 27412805, 27416327, 27416997
27417186, 27420715, 27421101, 27421733, 27422874, 27423251, 27424405
27425507, 27425622, 27426277, 27426363, 27427805, 27428790, 27430219
27430254, 27430802, 27432062, 27432338, 27432355, 27432826, 27433163
27433385, 27433870, 27434050, 27434193, 27434486, 27434974, 27435537
27439835, 27441326, 27441980, 27442041, 27443406, 27444727, 27445330
27445452, 27445462, 27445727, 27447452, 27447687, 27448162, 27449814
27450355, 27450400, 27450783, 27451049, 27451182, 27451187, 27451531
27452046, 27452760, 27452897, 27453225, 27454722, 27457666, 27457891
27458164, 27458829, 27459593, 27459909, 27459948, 27460675, 27461740
27462994, 27465480, 27466597, 27467543, 27468303, 27469245, 27469329
27471876, 27472969, 27473800, 27475272, 27479358, 27480784, 27481406
27481765, 27483974, 27484556, 27486253, 27486805, 27487309, 27487795
27487919, 27489107, 27489719, 27492916, 27493674, 27494663, 27496224
27496308, 27496424, 27496806, 27497950, 27498477, 27501327, 27501413
27501465, 27502420, 27503318, 27503413, 27504190, 27504770, 27505229
27505603, 27506774, 27507968, 27508936, 27508984, 27508985, 27510959
27511196, 27512439, 27513114, 27517818, 27518227, 27518310, 27519708
27520070, 27520900, 27522245, 27523368, 27523800, 27525909, 27526362
27526744, 27528204, 27529661, 27532009, 27532375, 27533780, 27533819
27534289, 27534509, 27537472, 27539475, 27539757, 27539876, 27540613
27541286, 27541468, 27542824, 27544030, 27544973, 27545630, 27547732

27550341, 27551855, 27554074, 27555481, 27558557, 27558559, 27558861
27560562, 27560602, 27560702, 27560735, 27562488, 27563629, 27563767
27565906, 27567477, 27570318, 27573154, 27573408, 27574335, 27576342
27576354, 27577122, 27577758, 27578007, 27579353, 27579969, 27580996
27581484, 27585755, 27585800, 27586810, 27586895, 27587672, 27587905
27588271, 27589260, 27591842, 27592466, 27593389, 27593501, 27593585
27593587, 27595096, 27595801, 27595973, 27599689, 27599927, 27600706
27601118, 27601441, 27602091, 27602488, 27603841, 27604293, 27605482
27607563, 27607805, 27608669, 27609819, 27610269, 27613080, 27613247
27613530, 27613554, 27615608, 27615649, 27616657, 27617522, 27617978
27620808, 27623159, 27623844, 27625010, 27625050, 27625274, 27625620
27627992, 27629756, 27629928, 27631506, 27632114, 27634676, 27634991
27635508, 27636900, 27642235, 27644757, 27645231, 27645940, 27649707
27652302, 27654039, 27654521, 27655217, 27657467, 27657712, 27657920
27658186, 27658205, 27662528, 27663370, 27664702, 27666312, 27668379
27671633, 27679488, 27679664, 27679793, 27679806, 27679961, 27680162
27680509, 27680669, 27682151, 27682288, 27686599, 27688036, 27688099
27688692, 27690513, 27690578, 27691717, 27691809, 27691920, 27691939
27692215, 27693416, 27693713, 27694261, 27695063, 27697092, 27698953
27700466, 27701795, 27702244, 27703242, 27704237, 27705761, 27707544
27708711, 27709046, 27710072, 27714373, 27717210, 27718914, 27719187
27723002, 27723151, 27725967, 27726269, 27726780, 27729678, 27731346
27732323, 27733415, 27734470, 27735534, 27739006, 27739957, 27740424
27740844, 27740854, 27744211, 27745220, 27745728, 27747407, 27747869
27748321, 27748954, 27751006, 27751755, 27753336, 27756900, 27757567
27757794, 27757888, 27757979, 27758544, 27758653, 27758972, 27759077
27759457, 27761402, 27766324, 27766679, 27767081, 27768034, 27769361
27772093, 27772815, 27773602, 27774320, 27774539, 27778433, 27779886
27780562, 27780683, 27782339, 27782464, 27783059, 27783289, 27786669
27786699, 27786772, 27791223, 27793533, 27797290, 27801337, 27801774
27803665, 27804209, 27807441, 27810967, 27811439, 27812560, 27812593
27813267, 27815347, 27818389, 27818871, 27819881, 27824540, 27824543
27825241, 27828794, 27828892, 27829295, 27832643, 27833369, 27833672
27834551, 27834569, 27834984, 27835925, 27837219, 27839353, 27839616
27839732, 27840386, 27843646, 27846298, 27846499, 27847259, 27849825
27850112, 27850736, 27851757, 27856471, 27861226, 27861452, 27861909
27862636, 27864737, 27865439, 27869075, 27869339, 27873364, 27873412
27873643, 27876671, 27882176, 27882764, 27886087, 27889841, 27892488
27896388, 27896443, 27896458, 27897639, 27897759, 27898015, 27900663
27902561, 27906509, 27908396, 27908644, 27909478, 27912301, 27917669
27918819, 27918832, 27920184, 27924147, 27926113, 27927431, 27929287
27929509, 27930478, 27931299, 27931506, 27934468, 27935348, 27935464
27935493, 27935826, 27936676, 27938736, 27940876, 27941110, 27941514
27941896, 27945870, 27948050, 27948153, 27950708, 27952586, 27952762

27957892, 27959594, 27960021, 27961746, 27964051, 27964513, 27965400
27965830, 27966472, 27967484, 27970265, 27971503, 27971575, 27972265
27975778, 27977039, 27978668, 27983174, 27984028, 27984314, 27986817
27989556, 27989849, 27991970, 27993289, 27993298, 27994325, 27994333
27995215, 27995248, 27997875, 27998003, 27999073, 27999597, 27999638
28000269, 28004853, 28006704, 28007516, 28018962, 28019283, 28019592
28021205, 28022101, 28022847, 28023081, 28023399, 28023410, 28023482
28024347, 28024793, 28025398, 28025414, 28026866, 28032758, 28033429
28036487, 28039471, 28039953, 28043157, 28045209, 28045903, 28057267
28058612, 28059199, 28066655, 28067846, 28071549, 28072130, 28072383
28072464, 28072567, 28073470, 28074713, 28079127, 28085865, 28088762
28089440, 28090453, 28091981, 28092783, 28098040, 28098160, 28098865
28099592, 28103600, 28103869, 28104176, 28104361, 28104409, 28106402
28108003, 28108898, 28109326, 28109698, 28111583, 28120036, 28120951
28124631, 28125601, 28125947, 28127569, 28129791, 28131767, 28132287
28135648, 28156781, 28157786, 28164480, 28165439, 28165545, 28169711
28174827, 28174926, 28174951, 28175445, 28180464, 28181021, 28182503
28184554, 28184800, 28187706, 28188330, 28189466, 28194173, 28199085
28201419, 28204262, 28204423, 28204443, 28209341, 28209985, 28210192
28211734, 28214943, 28215510, 28218832, 28220398, 28223871, 28226179
28227512, 28229360, 28236305, 28238264, 28240153, 28242712, 28250929
28256164, 28257335, 28258608, 28264172, 28271107, 28271119, 28271693
28276054, 28278547, 28278640, 28279837, 28281094, 28282606, 28285766
28290434, 28294563, 28302049, 28304709, 28305001, 28305362, 28305607
28309182, 28309406, 28312508, 28315031, 28315995, 28319114, 28319623
28320117, 28320399, 28321446, 28323201, 28328895, 28329450, 28330714
28330971, 28333072, 28338399, 28338999, 28344964, 28350595, 28354603
28355454, 28357401, 28361083, 28361221, 28361787, 28365111, 28369092
28370061, 28371123, 28373960, 28375383, 28378446, 28379065, 28384353
28385102, 28386259, 28388910, 28389153, 28390273, 28391210, 28391582
28392168, 28392251, 28393678, 28394726, 28396445, 28397317, 28401116
28402823, 28403295, 28413955, 28420042, 28420457, 28423598, 28432129
28434028, 28435825, 28437849, 28439086, 28445741, 28448314, 28454215
28455212, 28468312, 28468493, 28475164, 28478676, 28481149, 28481679
28483184, 28489150, 28492362, 28493478, 28498976, 28501075, 28502098
28502403, 28502773, 28503038, 28503484, 28504545, 28507324, 28508053
28508296, 28508557, 28512336, 28512761, 28513333, 28514693, 28521330
28527416, 28528349, 28530171, 28535127, 28535272, 28537481, 28538439
28542455, 28544633, 28545134, 28545687, 28546290, 28547068, 28547478
28553468, 28558645, 28564479, 28565296, 28571483, 28572407, 28572834
28578164, 28578945, 28580528, 28584193, 28584217, 28584444, 28585411
28587723, 28589509, 28600233, 28601874, 28602253, 28606598, 28608211
28611037, 28612674, 28614072, 28617631, 28617959, 28621470, 28622202
28627255, 28627686, 28632559, 28636676, 28639299, 28642273, 28642899

28644549, 28646200, 28670445, 28673203, 28678804, 28679454, 28680029
28685371, 28689483, 28690694, 28692103, 28692275, 28695694, 28697526
28697806, 28702188, 28703812, 28708023, 28709063, 28710469, 28710734
28710827, 28713840, 28714058, 28714988, 28715655, 28722229, 28728040
28728272, 28730044, 28730076, 28730253, 28734355, 28740708, 28742555
28745367, 28747182, 28749289, 28752599, 28755011, 28757758, 28758090
28758722, 28761812, 28767240, 28770146, 28774416, 28776431, 28776811
28777174, 28777214, 28777332, 28781754, 28785022, 28785531, 28791725
28793062, 28794230, 28797711, 28803345, 28805612, 28805695, 28808314
28809909, 28817449, 28819640, 28820669, 28821847, 28827682, 28830691
28831971, 28835937, 28836716, 28838066, 28844866, 28847136, 28849751
28852325, 28852691, 28854733, 28855922, 28856060, 28856172, 28863263
28863487, 28865569, 28867992, 28876639, 28878525, 28881723, 28887305
28887509, 28889389, 28889730, 28891984, 28900506, 28905390, 28905457
28910498, 28910586, 28915870, 28919145, 28922485, 28925880, 28927452
28938924, 28940179, 28945922, 28948554, 28949888, 28950868, 28951014
28951382, 28956908, 28959493, 28960211, 28965084, 28965095, 28973650
28986231, 28986257, 28987454, 28987746, 28993295, 28993353, 28993590
28994890, 29000190, 29002488, 29006527, 29007321, 29007353, 29009513
29013832, 29015118, 29015706, 29024054, 29026309, 29026582, 29027694
29027940, 29032276, 29033896, 29036278, 29037290, 29039510, 29040739
29044086, 29044954, 29048498, 29048728, 29050886, 29051702, 29055644
29056270, 29056767, 29060216, 29061016, 29115857, 29123482, 29125374
29129691, 29136111, 29139070, 29139591, 29154725, 29158680, 29163567
29165682, 29170232, 29171683, 29173817, 29177886, 29179097, 29181078
29182517, 29182901, 29189889, 29190663, 29198092, 29200700, 29202461
29203604, 29205918, 29212433, 29213320, 29213351, 29213893, 29224605
29224710, 29225076, 29230252, 29230565, 29233415, 29237575, 29241345
29242017, 29246337, 29247712, 29247906, 29249289, 29250317, 29254623
29255273, 29260956, 29261548, 29278684, 29281112, 29285503, 29296257
29301463, 29302565, 29307638, 29311927, 29312672, 29312889, 29314539
29331209, 29331493, 29332763, 29337294, 29338348, 29339155, 29342099
29343086, 29343156, 29343861, 29344541, 29346057, 29347981, 29350868
29351662, 29351771, 29353821, 29356634, 29356752, 29361472, 29362596
29364171, 29366406, 29372069, 29372460, 29374604, 29375355, 29375984
29376346, 29378913, 29379978, 29382784, 29383695, 29386635, 29388020
29388952, 29391849, 29394749, 29395657, 29396481, 29398488, 29399046
29399336, 29404483, 29405462, 29407804, 29408853, 29409149, 29409455
29412269, 29415774, 29417719, 29418165, 29420254, 29426241, 29428230
29429264, 29430524, 29431424, 29434301, 29436454, 29437712, 29439522
29442936, 29445548, 29448498, 29450273, 29450812, 29452251, 29454978
29457978, 29463047, 29464779, 29465177, 29472618, 29477015, 29483626
29483672, 29483723, 29483771, 29489436, 29493122, 29500257, 29500963
29501218, 29504682, 29506942, 29511611, 29515766, 29521862, 29524599

29524985, 29525886, 29530515, 29531541, 29536342, 29538631, 29541742
29542449, 29542580, 29548413, 29548592, 29549071, 29555239, 29557261
29558238, 29559395, 29564592, 29579919, 29580394, 29591343, 29604257
29607136, 29608023, 29614098, 29614987, 29616244, 29625065, 29626154
29628647, 29629430, 29629745, 29632265, 29633753, 29637526, 29637560
29643721, 29645167, 29645349, 29651520, 29656843, 29667994, 29668005
29670713, 29676089, 29685137, 29687220, 29687459, 29688867, 29689697
29701937, 29703195, 29705793, 29707896, 29715220, 29717901, 29719146
29720133, 29722167, 29724041, 29726695, 29739576, 29741319, 29744637
29766435, 29769901, 29773197, 29773459, 29774362, 29780140, 29782211
29782284, 29785544, 29789911, 29791152, 29794174, 29794462, 29796916
29807964, 29809792, 29813494, 29814995, 29815341, 29817278, 29822714
29825525, 29827852, 29841687, 29843238, 29844131, 29846645, 29850930
29853485, 29865188, 29867728, 29869404, 29869906, 29875459, 29876358
29881050, 29881575, 29884958, 29891075, 29891916, 29893132, 29894021
29896510, 29902299, 29903357, 29914449, 29922225, 29924147, 29930457
29932310, 29933718, 29941062, 29942554, 29944035, 29944159, 29944660
29951620, 29951759, 29961353, 29962927, 29962939, 29965888, 29991257
29997326, 29997937, 30008125, 30014200, 30018017, 30018903, 30031027
30034456, 30039800, 30039959, 30064268, 30068871, 30073422, 30073744
30074349, 30076253, 30078675, 30078934, 30085980, 30088912, 30092280
30098251, 30099302, 30114477, 30116203, 30117469, 30120608, 30125944
30128047, 30131286, 30139392, 30147928, 30149035, 30160625, 30163243
30164714, 30173113, 30177597, 30179644, 30186706, 30189023, 30193165
30193505, 30193736, 30194710, 30196358, 30200680, 30200758, 30215130
30218044, 30218317, 30223712, 30225443, 30232638, 30239480, 30240547
30241567, 30246179, 30247305, 30252098, 30252156, 30253255, 30259008
30265523, 30265615, 30272329, 30282501, 30283932, 30292305, 30293345
30295549, 30305880, 30312094, 30312559, 30316897, 30320029, 30325407
30331356, 30342878, 30345926, 30350543, 30352623, 30355490, 30357897
30361635, 30364613, 30364835, 30365745, 30368482, 30368668, 30372081
30374739, 30376986, 30377692, 30381207, 30384121, 30384152, 30387666
30391272, 30396120, 30397100, 30402386, 30403763, 30404639, 30408515
30409339, 30412188, 30413137, 30416034, 30419450, 30421204, 30431274
30441687, 30443393, 30450787, 30453442, 30458593, 30460922, 30461123
30464250, 30464655, 30473634, 30474774, 30475115, 30476768, 30480872
30485255, 30489582, 30496957, 30497057, 30498824, 30501574, 30503943
30509277, 30510527, 30517516, 30522998, 30528547, 30528704, 30532811
30533172, 30534662, 30544595, 30559218, 30571306, 30576112, 30578221
30581448, 30582500, 30595408, 30599407, 30602230, 30606345, 30613937
30616406, 30619525, 30623138, 30624864, 30635302, 30651570, 30652853
30654454, 30657365, 30662736, 30664266, 30668407, 30671813, 30679595
30679771, 30681462, 30691604, 30696566, 30698289, 30735736, 30741263
30749644, 30751639, 30755348, 30758943, 30764405, 30773164, 30783551

30786641, 30803210, 30809087, 30814266, 30814285, 30815852, 30816938
30822919, 30826474, 30829779, 30841241, 30855101, 30856358, 30860803
30861988, 30866988, 30870439, 30881588, 30887501, 30891760, 30896620
30901889, 30904672, 30910264, 30914674, 30919804, 30922819, 30930149
30931311, 30937340, 30939307, 30957739, 30964194, 30968737, 30978554
30985027, 30987088, 30994996, 30998759, 31001455, 31001490, 31004719
31013127, 31019767, 31022858, 31028986, 31029936, 31046619, 31058548
31061482, 31089270, 31100172, 31104809, 31106577, 31109506, 31115502
31156383, 31172207, 31182793, 31192039, 31194264, 31195430, 31200845
31201001, 31204878, 31215438, 31228670, 31233170, 31254535, 31257826
31258101, 31290017, 31290300, 31298871, 31302462, 31306248, 31306261
31309867, 31313214, 31315876, 31326608, 31331354, 31335037, 31335142
31343752, 31348018, 31362692, 31377487, 31393600, 31408636, 31430722
31454972, 31476736, 31479075, 31479106, 31494095, 31501139, 31525783
31527103, 31544097, 31570161, 31574244, 31600023, 31628311, 31637680
31658464, 31658943, 31663788, 31668061, 31668872, 31674731, 31696577
31711889, 31718134, 31726483, 31748000, 31749759, 31758083, 31758344
31769373, 31783451, 31786838, 31799775, 31816631, 31836113, 31862611
31867037, 31883124, 31886547, 31886745, 31897786, 31903786, 31905033
31909295, 31921267, 31927930, 31945038, 31965542, 31986836, 31997805
32028269, 32032887, 32035536, 32047226, 32079739, 32089820, 32097882
32105135, 32138782, 32162724, 32165759, 32222473, 32234161, 32246090
32290399, 32296941, 32305792, 32327201, 32436757, 32442404, 32478406
32505009, 32523206

Version 18.0.0.0.ru-2021-01.rur-2021-01.r1

Version 18.0.0.0.ru-2021-01.rur-2021-01.r1 includes the following:

- Patch [32204699](#): DATABASE RELEASE UPDATE 18.13.0.0.210119
- Patch [32119939](#): OJVM RELEASE UPDATE 18.13.0.0.210119
- Patch [31335037](#): RDBMS - DSTV35 UPDATE - TZDATA2020A
- Patch [31335142](#): DSTV35 UPDATE - TZDATA2020A - NEED OJVM FIX
- Patch [28730253](#): SUPPORT NEW ERA REIWA FOR JAPANESE IMPERIAL CALENDAR
- Patch [27539475](#): ORA-3816 - MISSING MESSAGE INFORMATION FOR 3816 ERROR
- Patch [29213893](#): DBMS_STATS FAILING WITH ERROR ORA-01422 WHEN GATHERING STATS FOR USER TABLE
- Patch [29374604](#): Golden Gate Integrated Extract not starting 18c/19c Standard Edition

- Patch [29782284](#): ORA-06508:"MDSYS.MDPRVT_IDX" WHILE UPGRADING DATABASE TO 18.3
- PreUpgrade Jar: preupgrade_181_cbuild_10_lf.zip
- Java Cryptography Extension (JCE): Unlimited Strength Jurisdiction Policy Files for JVM version 8
- Support for setting parameters for advisor tasks using procedures in the `rdsadmin.rdsadmin_util` package

For more information, see [Setting parameters for advisor tasks](#) in the *Amazon RDS User Guide*.

Combined patches for version 18.0.0.0.ru-2021-01.rur-2021-01.r1, released January 2021

Bugs fixed:

7391838, 8932139, 9062315, 12816839, 13554903, 14221306, 17468475
17958365, 18701017, 18986501, 20436508, 20549013, 20917487, 21095391
21223848, 21374587, 21547051, 21744603, 21766220, 21806121, 21935698
22174392, 22282748, 22363790, 22645496, 22729345, 22734786, 22820798
23003564, 23061453, 23109325, 23310101, 23698980, 23761724, 23763462
23840305, 24489904, 24596874, 24669730, 24687075, 24689376, 24737581
24763196, 24798481, 24841671, 24844841, 24903291, 24925863, 24971597
25031502, 25035594, 25035599, 25060506, 25092651, 25210690, 25287072
25293659, 25303284, 25309116, 25348956, 25404117, 25405687, 25416731
25487146, 25560538, 25573623, 25576115, 25591292, 25607397, 25634405
25644811, 25663488, 25686739, 25696520, 25709124, 25724089, 25726981
25736428, 25740844, 25743479, 25756945, 25809524, 25824236, 25882883
25890002, 25908728, 25911069, 25929650, 25943740, 25958554, 25986062
25997810, 26001677, 26083489, 26115103, 26164661, 26226953, 26237338
26281476, 26284722, 26297826, 26299684, 26313403, 26336101, 26362155
26375330, 26399691, 26399839, 26405036, 26410240, 26422277, 26423085
26427905, 26433972, 26440142, 26440169, 26441345, 26450454, 26476244
26521043, 26527054, 26536320, 26586174, 26587652, 26595088, 26598422
26615291, 26617804, 26646549, 26647619, 26654411, 26694735, 26716835
26724511, 26731697, 26745002, 26785169, 26790514, 26790923, 26792891
26798411, 26818960, 26822620, 26827699, 26843558, 26843664, 26846077
26860285, 26871815, 26882126, 26882316, 26883456, 26894737, 26895149
26898279, 26910716, 26914402, 26927998, 26928317, 26933599, 26943004
26943660, 26956033, 26960097, 26961415, 26966120, 26966916, 26970175
26976568, 26985002, 26986173, 26992964, 26996813, 27000158, 27005278
27006120, 27006664, 27012915, 27013566, 27016033, 27018734, 27026401

27028251, 27030974, 27032726, 27033520, 27034318, 27034688, 27035653
27036163, 27036408, 27037839, 27038986, 27040560, 27041253, 27044169
27044575, 27047831, 27053044, 27054231, 27058530, 27060167, 27060859
27061736, 27066451, 27066519, 27072923, 27073066, 27075854, 27080748
27080874, 27086406, 27086821, 27090765, 27092991, 27093423, 27098733
27100800, 27101105, 27101527, 27101652, 27105900, 27106301, 27106915
27110878, 27111780, 27112686, 27114112, 27115422, 27119621, 27119861
27121566, 27122162, 27125872, 27126666, 27128580, 27133637, 27135647
27142120, 27142529, 27143756, 27143882, 27144533, 27144928, 27147979
27150500, 27151826, 27152892, 27153641, 27153755, 27155549, 27156355
27160360, 27160922, 27163928, 27164352, 27165231, 27166354, 27166715
27169796, 27169888, 27170305, 27174938, 27174948, 27177551, 27177852
27179264, 27181521, 27181537, 27181897, 27182006, 27182064, 27184253
27185188, 27187440, 27189611, 27190851, 27193810, 27195935, 27197334
27199245, 27200959, 27202015, 27203055, 27204476, 27207634, 27208795
27208953, 27210038, 27210263, 27210872, 27212837, 27213140, 27214085
27214204, 27215007, 27216046, 27216224, 27217412, 27220610, 27220937
27221900, 27222121, 27222423, 27222626, 27222938, 27223075, 27224987
27226913, 27228786, 27229389, 27231051, 27232983, 27233563, 27234962
27236052, 27236110, 27236722, 27238077, 27238258, 27240246, 27240570
27241221, 27241247, 27242226, 27242616, 27244337, 27244785, 27244999
27249215, 27249531, 27249544, 27250547, 27251690, 27252023, 27254335
27254851, 27255377, 27256000, 27256488, 27256534, 27256584, 27257509
27258578, 27259307, 27259386, 27259983, 27260704, 27262601, 27262650
27262798, 27262945, 27262991, 27263276, 27263677, 27263996, 27264464
27265816, 27266245, 27267992, 27270197, 27271876, 27274143, 27274456
27274536, 27275136, 27275533, 27275776, 27276231, 27282707, 27283029
27283960, 27284375, 27284499, 27285244, 27285557, 27288230, 27288638
27288894, 27292213, 27293599, 27294480, 27299455, 27300007, 27301308
27301568, 27302415, 27302594, 27302632, 27302681, 27302695, 27302711
27302714, 27302730, 27302777, 27302800, 27302960, 27303287, 27303785
27303938, 27304131, 27304410, 27304906, 27304936, 27305318, 27307868
27308088, 27309182, 27310092, 27313687, 27314206, 27314390, 27314512
27314697, 27315159, 27318117, 27318869, 27320576, 27320985, 27321179
27321834, 27326204, 27329812, 27330158, 27330161, 27333658, 27333664
27333693, 27333731, 27334316, 27334353, 27334648, 27335682, 27338838
27338912, 27338946, 27339115, 27339396, 27339483, 27339495, 27341036
27343844, 27345190, 27345231, 27345450, 27345498, 27346329, 27346644
27346709, 27346949, 27346984, 27347126, 27348081, 27348707, 27349393
27350267, 27351628, 27352600, 27354783, 27356373, 27357773, 27358232
27358241, 27359178, 27359368, 27360126, 27362190, 27364854, 27364891
27364916, 27364947, 27365014, 27365139, 27365702, 27365993, 27367194
27368850, 27369515, 27370933, 27372756, 27375260, 27375542, 27376871
27377219, 27378103, 27378959, 27379233, 27379846, 27379956, 27381383

27381417, 27381498, 27381656, 27383281, 27384222, 27386467, 27389352
27392187, 27392968, 27393421, 27393570, 27394086, 27395404, 27395416
27395794, 27396357, 27396365, 27396377, 27396624, 27396666, 27396672
27396720, 27396794, 27396813, 27397048, 27398080, 27398223, 27398660
27399499, 27399762, 27399985, 27400416, 27400598, 27401618, 27401637
27403244, 27404017, 27404573, 27404599, 27404668, 27405242, 27405645
27405696, 27406105, 27410279, 27410300, 27410595, 27412805, 27416327
27416997, 27417186, 27420715, 27421101, 27421733, 27422874, 27423251
27424405, 27425507, 27425622, 27426277, 27426363, 27427805, 27428790
27430219, 27430254, 27430802, 27432062, 27432338, 27432355, 27432826
27433163, 27433385, 27433870, 27434050, 27434193, 27434486, 27434974
27435537, 27439835, 27441326, 27441980, 27442041, 27444727, 27445330
27445452, 27445462, 27445727, 27447452, 27447687, 27448162, 27449814
27450355, 27450400, 27450783, 27451049, 27451182, 27451187, 27451531
27452046, 27452760, 27452897, 27453225, 27454722, 27457666, 27457891
27458164, 27458829, 27459593, 27459909, 27459948, 27460675, 27461740
27462994, 27465480, 27466597, 27467543, 27468303, 27469245, 27469329
27471876, 27472969, 27473800, 27475272, 27479358, 27480784, 27481406
27481765, 27483974, 27484556, 27486253, 27486805, 27487309, 27487795
27487919, 27489107, 27489719, 27492916, 27493674, 27494663, 27496224
27496308, 27496424, 27496806, 27497950, 27498477, 27501327, 27501413
27501465, 27502420, 27503318, 27503413, 27504190, 27504770, 27505229
27505603, 27506774, 27507968, 27508936, 27508984, 27508985, 27510959
27511196, 27512439, 27513114, 27517818, 27518227, 27518310, 27519708
27520070, 27520900, 27522245, 27523368, 27523800, 27525909, 27526362
27526744, 27528204, 27529661, 27532009, 27532375, 27533780, 27533819
27534289, 27534509, 27537472, 27539475, 27539757, 27539876, 27540613
27541286, 27541468, 27542824, 27544030, 27544973, 27545630, 27547732
27550341, 27551855, 27554074, 27555481, 27558557, 27558559, 27558861
27560562, 27560602, 27560702, 27560735, 27562488, 27563629, 27563767
27565906, 27567477, 27570318, 27573154, 27573408, 27574335, 27576342
27576354, 27577122, 27577758, 27578007, 27579353, 27579969, 27580996
27581484, 27585755, 27585800, 27586810, 27586895, 27587672, 27587905
27588271, 27589260, 27591842, 27592466, 27593389, 27593501, 27593585
27593587, 27595096, 27595801, 27595973, 27599689, 27599927, 27600706
27601118, 27601441, 27602091, 27602488, 27603841, 27604293, 27605482
27607563, 27607805, 27608669, 27609819, 27610269, 27613080, 27613247
27613530, 27613554, 27615608, 27615649, 27616657, 27617522, 27617978
27620808, 27623159, 27623844, 27625010, 27625050, 27625274, 27625620
27627992, 27629756, 27629928, 27631506, 27632114, 27634676, 27634991
27635508, 27636900, 27642235, 27644757, 27645231, 27645940, 27649707
27652302, 27654039, 27654521, 27655217, 27657467, 27657712, 27657920
27658186, 27658205, 27662528, 27663370, 27664702, 27666312, 27668379
27671633, 27679488, 27679664, 27679793, 27679806, 27679961, 27680162

27680509, 27680669, 27682151, 27682288, 27686599, 27688036, 27688099
27688692, 27690513, 27690578, 27691717, 27691809, 27691920, 27691939
27692215, 27693416, 27693713, 27694261, 27695063, 27697092, 27698953
27700466, 27701795, 27702244, 27703242, 27704237, 27705761, 27707544
27708711, 27709046, 27710072, 27714373, 27717210, 27718914, 27719187
27723002, 27723151, 27725967, 27726269, 27726780, 27729678, 27731346
27732323, 27733415, 27734470, 27735534, 27739006, 27739957, 27740424
27740844, 27740854, 27744211, 27745220, 27745728, 27747407, 27747869
27748321, 27748954, 27751006, 27751755, 27753336, 27756900, 27757567
27757794, 27757888, 27757979, 27758544, 27758653, 27758972, 27759077
27759457, 27761402, 27766324, 27766679, 27767081, 27768034, 27769361
27772093, 27772815, 27773602, 27774320, 27774539, 27778433, 27779886
27780562, 27780683, 27782339, 27782464, 27783059, 27783289, 27786669
27786699, 27786772, 27791223, 27793533, 27797290, 27801337, 27801774
27803665, 27807441, 27810967, 27811439, 27812560, 27812593, 27813267
27815347, 27818389, 27818871, 27819881, 27824540, 27824543, 27825241
27828794, 27828892, 27829295, 27832643, 27833369, 27833672, 27834551
27834569, 27834984, 27835925, 27837219, 27839353, 27839616, 27839732
27840386, 27843646, 27846298, 27846499, 27847259, 27849825, 27850112
27850736, 27851757, 27856471, 27861226, 27861452, 27861909, 27862636
27864737, 27865439, 27869075, 27869339, 27873364, 27873412, 27873643
27876671, 27882176, 27886087, 27889841, 27892488, 27896388, 27896443
27896458, 27897639, 27897759, 27898015, 27900663, 27902561, 27906509
27908396, 27908644, 27909478, 27912301, 27917669, 27918832, 27920184
27924147, 27926113, 27927431, 27929287, 27929509, 27930478, 27931299
27931506, 27934468, 27935348, 27935464, 27935493, 27935826, 27936676
27938736, 27940876, 27941110, 27941514, 27941896, 27945870, 27948050
27948153, 27950708, 27952586, 27952762, 27957892, 27959594, 27960021
27961746, 27964051, 27964513, 27965400, 27965830, 27966472, 27967484
27970265, 27971503, 27971575, 27972265, 27975778, 27977039, 27978668
27983174, 27984028, 27984314, 27986817, 27989556, 27989849, 27991970
27993289, 27993298, 27994325, 27994333, 27995215, 27995248, 27997875
27998003, 27999073, 27999597, 27999638, 28000269, 28004853, 28006704
28007516, 28018962, 28019283, 28019592, 28021205, 28022101, 28022847
28023081, 28023399, 28023410, 28023482, 28024347, 28024793, 28025398
28025414, 28026866, 28032758, 28033429, 28036487, 28039471, 28039953
28043157, 28045209, 28045903, 28057267, 28058612, 28059199, 28066655
28067846, 28071549, 28072130, 28072383, 28072464, 28072567, 28073470
28074713, 28079127, 28085865, 28088762, 28089440, 28090453, 28091981
28092783, 28098040, 28098160, 28098865, 28099592, 28103600, 28103869
28104176, 28104361, 28104409, 28106402, 28108003, 28108898, 28109326
28109698, 28111583, 28120036, 28120951, 28124631, 28125601, 28125947
28127569, 28129791, 28131767, 28132287, 28135648, 28157786, 28164480
28165439, 28165545, 28169711, 28174827, 28174926, 28174951, 28175445

28180464, 28181021, 28182503, 28184554, 28184800, 28187706, 28188330
28189466, 28194173, 28199085, 28201419, 28204262, 28204423, 28204443
28209341, 28209985, 28210192, 28211734, 28214943, 28215510, 28218832
28220398, 28223871, 28226179, 28227512, 28229360, 28236305, 28238264
28240153, 28242712, 28250929, 28256164, 28257335, 28258608, 28264172
28271107, 28271119, 28271693, 28276054, 28278547, 28278640, 28279837
28281094, 28282606, 28285766, 28290434, 28294563, 28302049, 28304709
28305001, 28305362, 28305607, 28309182, 28309406, 28312508, 28315031
28315995, 28319114, 28319623, 28320117, 28320399, 28321446, 28323201
28328895, 28329450, 28330714, 28330971, 28333072, 28338399, 28338999
28344964, 28350595, 28354603, 28357401, 28361083, 28361221, 28361787
28365111, 28369092, 28371123, 28373960, 28375383, 28378446, 28379065
28384353, 28385102, 28386259, 28388910, 28389153, 28390273, 28391210
28391582, 28392168, 28392251, 28393678, 28394726, 28396445, 28397317
28401116, 28402823, 28403295, 28413955, 28420042, 28420457, 28423598
28432129, 28434028, 28435825, 28437849, 28439086, 28445741, 28448314
28454215, 28455212, 28468312, 28468493, 28475164, 28478676, 28481149
28481679, 28483184, 28489150, 28492362, 28493478, 28498976, 28501075
28502098, 28502403, 28502773, 28503038, 28503484, 28504545, 28507324
28508053, 28508296, 28508557, 28512336, 28512761, 28513333, 28514693
28521330, 28527416, 28528349, 28530171, 28535127, 28535272, 28538439
28542455, 28544633, 28545134, 28545687, 28546290, 28547068, 28547478
28553468, 28558645, 28564479, 28565296, 28571483, 28572407, 28572834
28578164, 28578945, 28580528, 28584193, 28584217, 28584444, 28585411
28587723, 28589509, 28600233, 28601874, 28602253, 28606598, 28608211
28611037, 28612674, 28614072, 28617631, 28617959, 28621470, 28622202
28627255, 28627686, 28632559, 28636676, 28639299, 28642273, 28642899
28644549, 28646200, 28670445, 28673203, 28678804, 28679454, 28680029
28685371, 28689483, 28690694, 28692103, 28692275, 28695694, 28697526
28697806, 28702188, 28703812, 28708023, 28709063, 28710469, 28710734
28710827, 28713840, 28714058, 28714988, 28715655, 28728040, 28728272
28730044, 28730076, 28730253, 28734355, 28740708, 28742555, 28745367
28747182, 28749289, 28752599, 28755011, 28757758, 28758090, 28758722
28761812, 28767240, 28770146, 28774416, 28776431, 28776811, 28777174
28777214, 28777332, 28781754, 28785022, 28785531, 28791725, 28793062
28794230, 28797711, 28803345, 28805612, 28805695, 28808314, 28809909
28817449, 28819640, 28820669, 28821847, 28827682, 28830691, 28831971
28835937, 28836716, 28838066, 28844866, 28847136, 28849751, 28852325
28852691, 28855922, 28856060, 28856172, 28863263, 28863487, 28865569
28867992, 28876639, 28878525, 28881723, 28887305, 28887509, 28889389
28889730, 28891984, 28900506, 28905390, 28905457, 28910498, 28910586
28915870, 28919145, 28925880, 28927452, 28938924, 28940179, 28945922
28948554, 28949888, 28950868, 28951014, 28951382, 28956908, 28959493
28960211, 28965084, 28965095, 28973650, 28986231, 28986257, 28987454

28993295, 28993353, 28993590, 28994890, 29000190, 29002488, 29006527
29007321, 29007353, 29009513, 29013832, 29015118, 29015706, 29024054
29026309, 29026582, 29027694, 29027940, 29032276, 29033896, 29036278
29037290, 29039510, 29040739, 29044086, 29044954, 29048498, 29048728
29050886, 29051702, 29055644, 29056270, 29056767, 29060216, 29061016
29115857, 29123482, 29125374, 29136111, 29139070, 29139591, 29154725
29158680, 29163567, 29165682, 29170232, 29171683, 29173817, 29177886
29179097, 29182517, 29182901, 29189889, 29190663, 29198092, 29200700
29202461, 29203604, 29205918, 29212433, 29213320, 29213351, 29213893
29224605, 29224710, 29225076, 29230252, 29230565, 29233415, 29237575
29241345, 29242017, 29247712, 29247906, 29249289, 29250317, 29254623
29255273, 29260956, 29261548, 29278684, 29281112, 29285503, 29296257
29301463, 29307638, 29311927, 29312672, 29312889, 29314539, 29331209
29331493, 29332763, 29337294, 29338348, 29339155, 29342099, 29343086
29343156, 29343861, 29344541, 29346057, 29347981, 29350868, 29351662
29351771, 29353821, 29356752, 29361472, 29362596, 29364171, 29366406
29372069, 29372460, 29374604, 29375355, 29375984, 29376346, 29378913
29379978, 29382784, 29383695, 29386635, 29388020, 29388952, 29391849
29394749, 29395657, 29396481, 29398488, 29399046, 29399336, 29404483
29405462, 29407804, 29408853, 29409149, 29409455, 29412269, 29417719
29418165, 29420254, 29426241, 29428230, 29429264, 29430524, 29434301
29436454, 29437712, 29439522, 29442936, 29445548, 29448498, 29450812
29452251, 29454978, 29457978, 29463047, 29464779, 29465177, 29472618
29477015, 29483626, 29483672, 29483723, 29483771, 29489436, 29493122
29500257, 29500963, 29501218, 29504682, 29506942, 29511611, 29515766
29521862, 29524599, 29524985, 29525886, 29530515, 29531541, 29536342
29538631, 29541742, 29542449, 29542580, 29548413, 29548592, 29549071
29557261, 29558238, 29559395, 29564592, 29579919, 29580394, 29591343
29604257, 29607136, 29608023, 29614098, 29614987, 29616244, 29625065
29626154, 29629430, 29629745, 29632265, 29633753, 29637526, 29637560
29643721, 29645167, 29645349, 29651520, 29656843, 29667994, 29668005
29670713, 29676089, 29685137, 29687220, 29687459, 29688867, 29703195
29705793, 29707896, 29717901, 29719146, 29720133, 29722167, 29724041
29726695, 29739576, 29741319, 29766435, 29769901, 29773197, 29774362
29780140, 29782211, 29782284, 29789911, 29791152, 29794174, 29794462
29796916, 29807964, 29809792, 29813494, 29814995, 29815341, 29817278
29822714, 29825525, 29827852, 29841687, 29844131, 29846645, 29850930
29853485, 29865188, 29869404, 29869906, 29875459, 29876358, 29881050
29881575, 29884958, 29891916, 29893132, 29896510, 29902299, 29914449
29922225, 29930457, 29932310, 29941062, 29942554, 29944035, 29944159
29944660, 29951620, 29951759, 29961353, 29962927, 29962939, 29965888
29991257, 29997326, 29997937, 30008125, 30014200, 30018017, 30018903
30031027, 30034456, 30039959, 30064268, 30068871, 30073422, 30073744
30074349, 30076253, 30078675, 30078934, 30085980, 30088912, 30092280

30098251, 30099302, 30114477, 30116203, 30117469, 30120608, 30125944
30128047, 30131286, 30139392, 30147928, 30149035, 30160625, 30163243
30164714, 30173113, 30177597, 30179644, 30186706, 30189023, 30193165
30193736, 30194710, 30196358, 30200680, 30200758, 30215130, 30218044
30218317, 30223712, 30225443, 30232638, 30239480, 30240547, 30241567
30246179, 30247305, 30252098, 30252156, 30253255, 30259008, 30265523
30265615, 30272329, 30282501, 30283932, 30293345, 30305880, 30312094
30312559, 30316897, 30320029, 30325407, 30331356, 30342878, 30345926
30350543, 30352623, 30355490, 30357897, 30361635, 30364613, 30365745
30368482, 30368668, 30372081, 30374739, 30376986, 30377692, 30381207
30384121, 30384152, 30387666, 30391272, 30396120, 30397100, 30402386
30403763, 30408515, 30409339, 30412188, 30413137, 30416034, 30421204
30431274, 30441687, 30443393, 30450787, 30453442, 30458593, 30460922
30464250, 30464655, 30473634, 30474774, 30475115, 30476768, 30485255
30496957, 30497057, 30498824, 30501574, 30503943, 30509277, 30510527
30517516, 30522998, 30528547, 30528704, 30532811, 30533172, 30534662
30544595, 30571306, 30578221, 30581448, 30582500, 30599407, 30602230
30606345, 30613937, 30619525, 30623138, 30624864, 30635302, 30652853
30654454, 30657365, 30662736, 30668407, 30671813, 30679595, 30679771
30681462, 30691604, 30698289, 30741263, 30749644, 30751639, 30755348
30758943, 30773164, 30783551, 30803210, 30809087, 30814266, 30814285
30815852, 30816938, 30826474, 30829779, 30841241, 30855101, 30856358
30860803, 30866988, 30870439, 30881588, 30887501, 30891760, 30896620
30904672, 30914674, 30919804, 30922819, 30930149, 30931311, 30937340
30957739, 30964194, 30968737, 30978554, 30985027, 30987088, 30994996
30998759, 31001455, 31004719, 31013127, 31019767, 31022858, 31028986
31029936, 31046619, 31058548, 31061482, 31100172, 31104809, 31106577
31109506, 31115502, 31156383, 31172207, 31182793, 31192039, 31194264
31200845, 31201001, 31204878, 31215438, 31228670, 31233170, 31254535
31258101, 31298871, 31302462, 31306248, 31306261, 31309867, 31315876
31326608, 31331354, 31335037, 31335142, 31343752, 31348018, 31377487
31393600, 31408636, 31430722, 31454972, 31476736, 31501139, 31525783
31544097, 31570161, 31574244, 31600023, 31628311, 31637680, 31658464
31658943, 31663788, 31668061, 31668872, 31674731, 31696577, 31711889
31718134, 31748000, 31749759, 31758083, 31769373, 31783451, 31786838
31799775, 31816631, 31867037, 31883124, 31886547, 31905033, 31909295
31921267, 31927930, 31986836, 31997805, 32032887, 32079739, 32089820
32097882, 32105135, 32165759, 32234161, 32290399, 32296941

Version 18.0.0.0.ru-2020-10.rur-2020-10.r1

Version 18.0.0.0.ru-2020-10.rur-2020-10.r1 includes the following:

- Patch [31730250](#): Database Release Update: 18.12.0.0.201020 (31730250)
- Patch [31668892](#): OJVM RELEASE UPDATE: 18.12.0.0.201020 (31668892)
- Patch [31335037](#): RDBMS - DSTV35 UPDATE - TZDATA2020A
- Patch [31335142](#): DSTV35 UPDATE - TZDATA2020A - NEED OJVM FIX
- Patch [28730253](#): SUPPORT NEW ERA REIWA FOR JAPANESE IMPERIAL CALENDAR
- Patch [29213893](#): DBMS_STATS FAILING WITH ERROR ORA-01422 WHEN GATHERING STATS FOR USER\$ TABLE
- Patch [29374604](#): IE not starting against 18c Oracle RDBMS Standard Edition.
- PreUpgrade Jar: preupgrade_181_cbuild_10_lf.zip
- Support for setting and unsetting system diagnostic events using procedures in the `rdsadmin.rdsadmin_util` package

For more information, see [Setting and unsetting system diagnostic events](#) in the *Amazon RDS User Guide*.

- Support for the procedure `rdsadmin_util.truncate_apply$_cdr_info` described in [Integrated REPLICAT slow due to query on sys."_DBA_APPLY_CDR_INFO"](#) in the *Amazon RDS User Guide*.

Combined patches for version 18.0.0.0.ru-2020-10.rur-2020-10.r1, released October 2020

Bugs fixed:

```
7391838, 8932139, 9062315, 12816839, 13554903, 14221306, 17468475
17958365, 18701017, 18986501, 20436508, 20549013, 20917487, 21095391
21223848, 21374587, 21547051, 21744603, 21766220, 21806121, 21935698
22174392, 22282748, 22363790, 22645496, 22729345, 22734786, 23003564
23061453, 23109325, 23310101, 23698980, 23761724, 23763462, 23840305
24489904, 24596874, 24669730, 24687075, 24689376, 24737581, 24763196
24798481, 24841671, 24844841, 24903291, 24925863, 24971597, 25031502
25035594, 25035599, 25060506, 25092651, 25210690, 25287072, 25293659
25303284, 25309116, 25348956, 25404117, 25405687, 25416731, 25487146
25560538, 25573623, 25576115, 25591292, 25607397, 25634405, 25644811
25663488, 25686739, 25696520, 25709124, 25724089, 25726981, 25736428
25740844, 25743479, 25756945, 25809524, 25824236, 25882883, 25890002
25908728, 25911069, 25929650, 25943740, 25958554, 25986062, 25997810
```

26001677, 26083489, 26115103, 26164661, 26226953, 26237338, 26281476
26284722, 26297826, 26299684, 26313403, 26336101, 26362155, 26375330
26399691, 26399839, 26405036, 26410240, 26422277, 26423085, 26427905
26433972, 26440142, 26440169, 26441345, 26450454, 26476244, 26521043
26527054, 26536320, 26586174, 26587652, 26595088, 26598422, 26615291
26617804, 26646549, 26647619, 26654411, 26694735, 26716835, 26724511
26731697, 26745002, 26785169, 26790514, 26790923, 26792891, 26798411
26818960, 26822620, 26827699, 26843558, 26843664, 26846077, 26860285
26871815, 26882126, 26882316, 26883456, 26894737, 26895149, 26898279
26910716, 26914402, 26927998, 26928317, 26933599, 26943004, 26943660
26956033, 26960097, 26961415, 26966120, 26966916, 26970175, 26976568
26985002, 26986173, 26992964, 26996813, 27000158, 27005278, 27006120
27006664, 27012915, 27013566, 27016033, 27018734, 27026401, 27028251
27030974, 27032726, 27033520, 27034318, 27034688, 27035653, 27036163
27036408, 27037839, 27038986, 27040560, 27041253, 27044169, 27044575
27047831, 27053044, 27054231, 27058530, 27060167, 27060859, 27061736
27066451, 27066519, 27072923, 27073066, 27075854, 27080748, 27080874
27086406, 27086821, 27090765, 27092991, 27093423, 27098733, 27100800
27101105, 27101527, 27101652, 27105900, 27106301, 27106915, 27110878
27111780, 27112686, 27114112, 27115422, 27119621, 27119861, 27121566
27122162, 27125872, 27126666, 27128580, 27133637, 27135647, 27142120
27142529, 27143756, 27143882, 27144533, 27144928, 27147979, 27150500
27151826, 27152892, 27153641, 27153755, 27155549, 27156355, 27160360
27160922, 27163928, 27164352, 27165231, 27166354, 27166715, 27169796
27169888, 27170305, 27174938, 27174948, 27177551, 27177852, 27179264
27181521, 27181537, 27181897, 27182006, 27182064, 27184253, 27185188
27187440, 27189611, 27190851, 27193810, 27195935, 27197334, 27199245
27200959, 27202015, 27203055, 27204476, 27207634, 27208795, 27208953
27210038, 27210263, 27210872, 27212837, 27213140, 27214085, 27214204
27215007, 27216046, 27216224, 27217412, 27220610, 27220937, 27221900
27222121, 27222423, 27222626, 27222938, 27223075, 27224987, 27226913
27228786, 27229389, 27231051, 27232983, 27233563, 27234962, 27236052
27236110, 27236722, 27238077, 27238258, 27240246, 27240570, 27241221
27241247, 27242226, 27242616, 27244337, 27244785, 27244999, 27249215
27249531, 27249544, 27250547, 27251690, 27252023, 27254335, 27254851
27255377, 27256000, 27256488, 27256534, 27256584, 27257509, 27258578
27259307, 27259386, 27259983, 27262601, 27262650, 27262798, 27262945
27262991, 27263276, 27263677, 27263996, 27264464, 27265816, 27266245
27267992, 27270197, 27271876, 27274143, 27274456, 27274536, 27275136
27275533, 27275776, 27276231, 27282707, 27283029, 27283960, 27284375
27284499, 27285244, 27285557, 27288230, 27288638, 27288894, 27292213
27293599, 27294480, 27299455, 27300007, 27301308, 27301568, 27302415
27302594, 27302632, 27302681, 27302695, 27302711, 27302714, 27302730
27302777, 27302800, 27302960, 27303287, 27303785, 27303938, 27304131

27304410, 27304906, 27304936, 27305318, 27307868, 27308088, 27309182
27310092, 27313687, 27314206, 27314390, 27314512, 27314697, 27315159
27318117, 27318869, 27320576, 27320985, 27321179, 27321834, 27326204
27329812, 27330158, 27330161, 27333658, 27333664, 27333693, 27333731
27334316, 27334353, 27334648, 27335682, 27338838, 27338912, 27338946
27339115, 27339396, 27339483, 27339495, 27341036, 27343844, 27345190
27345231, 27345450, 27345498, 27346329, 27346644, 27346709, 27346949
27346984, 27347126, 27348081, 27348707, 27349393, 27350267, 27351628
27352600, 27354783, 27356373, 27357773, 27358232, 27358241, 27359178
27359368, 27360126, 27362190, 27364854, 27364891, 27364916, 27364947
27365014, 27365139, 27365702, 27365993, 27367194, 27368850, 27369515
27370933, 27372756, 27375260, 27375542, 27376871, 27377219, 27378103
27378959, 27379233, 27379846, 27379956, 27381383, 27381417, 27381498
27381656, 27383281, 27384222, 27386467, 27389352, 27392187, 27392968
27393421, 27393570, 27394086, 27395404, 27395416, 27395794, 27396357
27396365, 27396377, 27396624, 27396666, 27396672, 27396720, 27396794
27396813, 27397048, 27398080, 27398223, 27398660, 27399499, 27399762
27399985, 27400416, 27400598, 27401618, 27401637, 27403244, 27404573
27404599, 27404668, 27405242, 27405645, 27405696, 27406105, 27410279
27410300, 27410595, 27412805, 27416327, 27416997, 27417186, 27420715
27421101, 27421733, 27422874, 27423251, 27424405, 27425507, 27425622
27426277, 27426363, 27427805, 27428790, 27430219, 27430254, 27430802
27432062, 27432338, 27432355, 27432826, 27433163, 27433385, 27433870
27434050, 27434193, 27434486, 27434974, 27435537, 27439835, 27441326
27441980, 27442041, 27444727, 27445330, 27445462, 27445727, 27447452
27447687, 27448162, 27449814, 27450355, 27450400, 27450783, 27451049
27451182, 27451187, 27451531, 27452046, 27452760, 27452897, 27453225
27454722, 27457666, 27457891, 27458164, 27458829, 27459593, 27459909
27459948, 27460675, 27461740, 27462994, 27465480, 27466597, 27467543
27468303, 27469245, 27469329, 27471876, 27472969, 27473800, 27475272
27479358, 27480784, 27481406, 27481765, 27483974, 27484556, 27486253
27486805, 27487309, 27487795, 27487919, 27489107, 27489719, 27492916
27493674, 27494663, 27496224, 27496308, 27496424, 27496806, 27497950
27498477, 27501327, 27501413, 27501465, 27502420, 27503318, 27503413
27504190, 27504770, 27505229, 27505603, 27506774, 27507968, 27508936
27508984, 27508985, 27510959, 27511196, 27512439, 27513114, 27517818
27518227, 27518310, 27519708, 27520070, 27520900, 27522245, 27523368
27523800, 27525909, 27526362, 27526744, 27528204, 27529661, 27532009
27532375, 27533780, 27533819, 27534289, 27534509, 27537472, 27539757
27539876, 27540613, 27541286, 27541468, 27542824, 27544030, 27544973
27545630, 27547732, 27550341, 27551855, 27554074, 27555481, 27558557
27558559, 27558861, 27560562, 27560602, 27560702, 27560735, 27562488
27563629, 27563767, 27565906, 27567477, 27570318, 27573154, 27573408
27574335, 27576342, 27576354, 27577122, 27577758, 27578007, 27579353

27579969, 27580996, 27581484, 27585755, 27585800, 27586810, 27586895
27587672, 27587905, 27588271, 27589260, 27591842, 27592466, 27593389
27593501, 27593585, 27593587, 27595096, 27595801, 27595973, 27599689
27599927, 27600706, 27601118, 27601441, 27602091, 27602488, 27603841
27604293, 27605482, 27607563, 27607805, 27608669, 27609819, 27610269
27613080, 27613247, 27613530, 27613554, 27615608, 27615649, 27616657
27617522, 27617978, 27620808, 27623159, 27623844, 27625010, 27625050
27625274, 27625620, 27627992, 27629756, 27629928, 27631506, 27632114
27634676, 27634991, 27635508, 27636900, 27642235, 27644757, 27645231
27645940, 27649707, 27652302, 27654039, 27654521, 27655217, 27657467
27657712, 27657920, 27658186, 27658205, 27662528, 27663370, 27664702
27666312, 27668379, 27671633, 27679488, 27679664, 27679793, 27679806
27679961, 27680162, 27680509, 27680669, 27682151, 27682288, 27686599
27688036, 27688099, 27688692, 27690513, 27690578, 27691717, 27691809
27691920, 27691939, 27692215, 27693416, 27693713, 27694261, 27695063
27697092, 27698953, 27700466, 27701795, 27702244, 27703242, 27704237
27705761, 27707544, 27708711, 27709046, 27710072, 27714373, 27717210
27718914, 27719187, 27723002, 27723151, 27725967, 27726269, 27726780
27729678, 27731346, 27732323, 27733415, 27734470, 27735534, 27739006
27739957, 27740424, 27740844, 27740854, 27744211, 27745220, 27745728
27747407, 27747869, 27748321, 27748954, 27751006, 27751755, 27753336
27756900, 27757567, 27757794, 27757888, 27757979, 27758544, 27758653
27758972, 27759077, 27759457, 27761402, 27766324, 27766679, 27767081
27768034, 27769361, 27772093, 27772815, 27773602, 27774320, 27774539
27778433, 27779886, 27780562, 27780683, 27782339, 27782464, 27783059
27783289, 27786669, 27786699, 27786772, 27791223, 27793533, 27797290
27801337, 27801774, 27803665, 27807441, 27810967, 27811439, 27812560
27812593, 27813267, 27815347, 27818389, 27818871, 27819881, 27824540
27824543, 27825241, 27828794, 27828892, 27829295, 27832643, 27833369
27833672, 27834551, 27834569, 27834984, 27835925, 27837219, 27839353
27839616, 27839732, 27840386, 27843646, 27846298, 27846499, 27847259
27849825, 27850112, 27850736, 27851757, 27856471, 27861226, 27861452
27861909, 27862636, 27864737, 27865439, 27869075, 27869339, 27873412
27873643, 27876671, 27882176, 27886087, 27889841, 27892488, 27896388
27896443, 27896458, 27897639, 27897759, 27898015, 27900663, 27902561
27906509, 27908396, 27908644, 27909478, 27912301, 27917669, 27918832
27920184, 27924147, 27926113, 27927431, 27929287, 27929509, 27930478
27931299, 27931506, 27934468, 27935348, 27935464, 27935493, 27935826
27936676, 27938736, 27940876, 27941110, 27941514, 27941896, 27945870
27948050, 27948153, 27950708, 27952586, 27952762, 27957892, 27959594
27960021, 27961746, 27964051, 27964513, 27965400, 27965830, 27966472
27967484, 27970265, 27971503, 27971575, 27972265, 27975778, 27977039
27978668, 27983174, 27984028, 27984314, 27986817, 27989556, 27989849
27991970, 27993289, 27993298, 27994325, 27994333, 27995215, 27995248

27997875, 27998003, 27999073, 27999597, 27999638, 28000269, 28004853
28006704, 28018962, 28019283, 28019592, 28021205, 28022101, 28022847
28023081, 28023399, 28023410, 28023482, 28024347, 28024793, 28025398
28025414, 28026866, 28032758, 28033429, 28036487, 28039471, 28039953
28043157, 28045209, 28045903, 28057267, 28058612, 28059199, 28066655
28067846, 28071549, 28072130, 28072383, 28072464, 28072567, 28073470
28074713, 28079127, 28085865, 28088762, 28089440, 28090453, 28091981
28092783, 28098040, 28098160, 28098865, 28099592, 28103600, 28103869
28104176, 28104361, 28104409, 28106402, 28108003, 28108898, 28109326
28109698, 28111583, 28120036, 28120951, 28124631, 28125601, 28125947
28129791, 28131767, 28132287, 28135648, 28157786, 28164480, 28165439
28165545, 28169711, 28174827, 28174926, 28174951, 28175445, 28180464
28181021, 28182503, 28184554, 28184800, 28187706, 28188330, 28189466
28194173, 28199085, 28201419, 28204262, 28204423, 28204443, 28209341
28209985, 28210192, 28211734, 28214943, 28215510, 28218832, 28220398
28223871, 28226179, 28227512, 28229360, 28236305, 28238264, 28240153
28242712, 28250929, 28256164, 28258608, 28264172, 28271107, 28271119
28271693, 28276054, 28278547, 28278640, 28279837, 28281094, 28282606
28285766, 28290434, 28294563, 28302049, 28304709, 28305001, 28305362
28305607, 28309182, 28309406, 28312508, 28315031, 28315995, 28319114
28319623, 28320117, 28320399, 28321446, 28323201, 28328895, 28329450
28330714, 28330971, 28333072, 28338399, 28338999, 28344964, 28350595
28354603, 28357401, 28361083, 28361221, 28361787, 28365111, 28369092
28371123, 28373960, 28375383, 28378446, 28379065, 28384353, 28385102
28386259, 28388910, 28389153, 28390273, 28391210, 28391582, 28392168
28392251, 28393678, 28394726, 28396445, 28397317, 28401116, 28402823
28403295, 28413955, 28420042, 28420457, 28423598, 28432129, 28434028
28435825, 28437849, 28439086, 28445741, 28448314, 28454215, 28455212
28468312, 28468493, 28475164, 28478676, 28481149, 28481679, 28483184
28489150, 28492362, 28493478, 28498976, 28501075, 28502098, 28502403
28502773, 28503038, 28503484, 28504545, 28507324, 28508053, 28508296
28508557, 28512336, 28512761, 28513333, 28514693, 28521330, 28527416
28528349, 28530171, 28535127, 28535272, 28538439, 28542455, 28544633
28545134, 28545687, 28546290, 28547068, 28547478, 28553468, 28558645
28564479, 28565296, 28571483, 28572407, 28572834, 28578164, 28578945
28580528, 28584193, 28584217, 28584444, 28585411, 28587723, 28589509
28600233, 28601874, 28602253, 28606598, 28608211, 28611037, 28612674
28614072, 28617631, 28617959, 28621470, 28622202, 28627255, 28627686
28632559, 28636676, 28639299, 28642273, 28642899, 28644549, 28646200
28670445, 28673203, 28678804, 28679454, 28680029, 28685371, 28689483
28690694, 28692103, 28692275, 28695694, 28697526, 28697806, 28702188
28703812, 28708023, 28709063, 28710469, 28710734, 28710827, 28713840
28714058, 28714988, 28715655, 28728040, 28728272, 28730044, 28730076
28730253, 28734355, 28740708, 28742555, 28745367, 28747182, 28749289

28752599, 28755011, 28757758, 28758090, 28758722, 28761812, 28767240
28770146, 28774416, 28776431, 28776811, 28777174, 28777214, 28777332
28781754, 28785022, 28785531, 28791725, 28793062, 28797711, 28803345
28805612, 28805695, 28808314, 28809909, 28817449, 28819640, 28820669
28821847, 28827682, 28830691, 28831971, 28835937, 28836716, 28838066
28844866, 28847136, 28849751, 28852325, 28852691, 28855922, 28856060
28856172, 28863263, 28863487, 28865569, 28867992, 28876639, 28878525
28881723, 28887305, 28887509, 28889730, 28891984, 28900506, 28905390
28905457, 28910498, 28910586, 28915870, 28919145, 28925880, 28927452
28938924, 28940179, 28945922, 28948554, 28949888, 28950868, 28951014
28951382, 28956908, 28959493, 28960211, 28965084, 28965095, 28986231
28986257, 28987454, 28993295, 28993353, 28993590, 28994890, 29000190
29002488, 29006527, 29007321, 29007353, 29009513, 29013832, 29015118
29015706, 29024054, 29026309, 29026582, 29027694, 29027940, 29032276
29033896, 29036278, 29037290, 29039510, 29040739, 29044086, 29044954
29048498, 29048728, 29050886, 29051702, 29055644, 29056270, 29056767
29060216, 29061016, 29115857, 29123482, 29125374, 29136111, 29139070
29139591, 29154725, 29158680, 29163567, 29165682, 29170232, 29171683
29173817, 29177886, 29179097, 29182517, 29182901, 29189889, 29190663
29198092, 29200700, 29202461, 29203604, 29205918, 29212433, 29213320
29213351, 29213893, 29224605, 29224710, 29225076, 29230252, 29230565
29233415, 29237575, 29241345, 29242017, 29247712, 29247906, 29249289
29250317, 29254623, 29255273, 29260956, 29261548, 29278684, 29285503
29296257, 29301463, 29307638, 29311927, 29312672, 29312889, 29314539
29331209, 29331493, 29332763, 29337294, 29338348, 29339155, 29343086
29343156, 29343861, 29344541, 29346057, 29347981, 29350868, 29351662
29351771, 29353821, 29356752, 29361472, 29362596, 29364171, 29366406
29372069, 29372460, 29374604, 29375355, 29375984, 29376346, 29378913
29379978, 29382784, 29383695, 29386635, 29388020, 29388952, 29391849
29394749, 29395657, 29398488, 29399046, 29399336, 29404483, 29405462
29407804, 29408853, 29409149, 29409455, 29412269, 29417719, 29418165
29420254, 29426241, 29428230, 29429264, 29430524, 29434301, 29436454
29437712, 29439522, 29442936, 29445548, 29448498, 29450812, 29452251
29454978, 29457978, 29463047, 29464779, 29465177, 29472618, 29477015
29483626, 29483672, 29483723, 29483771, 29489436, 29493122, 29500257
29500963, 29501218, 29504682, 29506942, 29511611, 29515766, 29521862
29524599, 29524985, 29525886, 29530515, 29531541, 29536342, 29538631
29541742, 29542449, 29542580, 29548413, 29548592, 29549071, 29557261
29558238, 29559395, 29564592, 29579919, 29580394, 29591343, 29604257
29607136, 29608023, 29614098, 29614987, 29616244, 29625065, 29626154
29629430, 29629745, 29632265, 29633753, 29637526, 29637560, 29643721
29645167, 29645349, 29651520, 29656843, 29667994, 29668005, 29676089
29685137, 29687220, 29687459, 29688867, 29703195, 29705793, 29707896
29717901, 29719146, 29720133, 29722167, 29724041, 29726695, 29739576

29741319, 29766435, 29769901, 29773197, 29774362, 29780140, 29782211
29789911, 29791152, 29794174, 29794462, 29807964, 29809792, 29813494
29815341, 29817278, 29822714, 29825525, 29827852, 29841687, 29844131
29846645, 29850930, 29853485, 29865188, 29869404, 29869906, 29875459
29876358, 29881050, 29881575, 29884958, 29891916, 29893132, 29896510
29902299, 29914449, 29922225, 29930457, 29941062, 29942554, 29944035
29944159, 29944660, 29951620, 29951759, 29961353, 29962927, 29962939
29965888, 29991257, 29997326, 29997937, 30008125, 30018017, 30018903
30031027, 30034456, 30039959, 30064268, 30068871, 30073744, 30074349
30076253, 30078934, 30085980, 30088912, 30092280, 30098251, 30099302
30114477, 30116203, 30120608, 30125944, 30128047, 30131286, 30139392
30147928, 30149035, 30160625, 30163243, 30164714, 30173113, 30177597
30179644, 30186706, 30189023, 30193165, 30193736, 30194710, 30196358
30200680, 30200758, 30215130, 30218044, 30218317, 30223712, 30225443
30232638, 30239480, 30240547, 30241567, 30246179, 30247305, 30252098
30252156, 30253255, 30259008, 30265523, 30265615, 30272329, 30282501
30283932, 30293345, 30305880, 30312094, 30312559, 30316897, 30320029
30325407, 30331356, 30342878, 30350543, 30352623, 30355490, 30357897
30364613, 30365745, 30368482, 30368668, 30372081, 30374739, 30376986
30381207, 30384121, 30384152, 30387666, 30391272, 30397100, 30402386
30403763, 30408515, 30409339, 30412188, 30413137, 30416034, 30421204
30431274, 30441687, 30443393, 30450787, 30453442, 30458593, 30460922
30464250, 30464655, 30473634, 30474774, 30475115, 30476768, 30485255
30496957, 30497057, 30498824, 30501574, 30503943, 30509277, 30510527
30517516, 30522998, 30528547, 30528704, 30532811, 30533172, 30534662
30544595, 30578221, 30581448, 30582500, 30599407, 30602230, 30606345
30613937, 30623138, 30624864, 30635302, 30652853, 30654454, 30662736
30668407, 30671813, 30679595, 30679771, 30681462, 30691604, 30698289
30741263, 30749644, 30755348, 30758943, 30773164, 30783551, 30803210
30814266, 30814285, 30815852, 30816938, 30829779, 30855101, 30856358
30866988, 30870439, 30881588, 30887501, 30904672, 30914674, 30919804
30922819, 30937340, 30957739, 30964194, 30968737, 30985027, 30987088
30994996, 30998759, 31001455, 31004719, 31013127, 31019767, 31022858
31028986, 31029936, 31061482, 31100172, 31104809, 31106577, 31109506
31115502, 31156383, 31172207, 31182793, 31192039, 31194264, 31200845
31201001, 31215438, 31228670, 31254535, 31258101, 31302462, 31306248
31306261, 31309867, 31315876, 31326608, 31331354, 31335037, 31335142
31343752, 31348018, 31393600, 31430722, 31544097, 31570161, 31600023
31658464, 31668061, 31668872, 31674731, 31718134, 31799775, 31867037
31886547, 31905033

Version 18.0.0.0.ru-2020-07.rur-2020-07.r1

Version 18.0.0.0.ru-2020-07.rur-2020-07.r1 includes the following:

- Patch [31308624](#): Database Release Update 18.11.0.0.200714
- Patch [31219909](#): OJVM RELEASE UPDATE: 18.11.0.0.200714
- Patch [31335037](#): DSTV35 for RDBMS (TZDATA2020A)
- Patch [31335142](#): DSTV35 for OJVM (TZDATA2020A)
- Patch [29213893](#): DBMS_STATS FAILING WITH ERROR ORA-01422 WHEN GATHERING STATS FOR USER\$ TABLE
- Patch [28730253](#): SUPPORT NEW ERA REIWA FOR JAPANESE IMPERIAL CALENDAR
- Patch [29374604](#): IE not starting against 18c Oracle RDBMS Standard Edition
- PreUpgrade Jar: preupgrade_181_cbuild_10_lf.zip

Combined patches for version 18.0.0.0.ru-2020-07.rur-2020-07.r1, released July 2020

Bugs fixed:

```
7391838, 8932139, 9062315, 12816839, 13554903, 14221306, 18701017
18986501, 20436508, 20549013, 20917487, 21095391, 21223848, 21374587
21547051, 21744603, 21766220, 21806121, 21935698, 22174392, 22282748
22363790, 22645496, 22729345, 22734786, 23003564, 23061453, 23109325
23310101, 23698980, 23761724, 23840305, 24489904, 24596874, 24669730
24687075, 24689376, 24737581, 24798481, 24841671, 24844841, 24903291
24925863, 24971597, 25031502, 25035594, 25035599, 25060506, 25092651
25210690, 25287072, 25293659, 25303284, 25309116, 25348956, 25405687
25416731, 25487146, 25560538, 25573623, 25576115, 25591292, 25607397
25634405, 25644811, 25663488, 25686739, 25696520, 25709124, 25724089
25726981, 25736428, 25740844, 25743479, 25756945, 25809524, 25824236
25882883, 25890002, 25908728, 25911069, 25929650, 25943740, 25958554
25986062, 25997810, 26083489, 26115103, 26164661, 26226953, 26237338
26281476, 26284722, 26297826, 26299684, 26313403, 26336101, 26362155
26375330, 26399691, 26405036, 26410240, 26422277, 26423085, 26427905
26433972, 26440142, 26440169, 26441345, 26450454, 26476244, 26521043
26527054, 26536320, 26586174, 26587652, 26595088, 26598422, 26615291
26617804, 26646549, 26647619, 26654411, 26694735, 26724511, 26731697
```

26745002, 26785169, 26790514, 26790923, 26792891, 26798411, 26818960
26822620, 26827699, 26843558, 26843664, 26846077, 26860285, 26871815
26882126, 26882316, 26883456, 26894737, 26895149, 26898279, 26910716
26914402, 26927998, 26928317, 26933599, 26943004, 26943660, 26956033
26960097, 26961415, 26966120, 26966916, 26970175, 26976568, 26985002
26986173, 26992964, 26996813, 27000158, 27005278, 27006120, 27006664
27012915, 27013566, 27016033, 27018734, 27026401, 27028251, 27030974
27032726, 27033520, 27034318, 27034688, 27035653, 27036163, 27036408
27037839, 27038986, 27040560, 27041253, 27044169, 27044575, 27047831
27053044, 27054231, 27058530, 27060167, 27060859, 27061736, 27066451
27066519, 27072923, 27073066, 27075854, 27080748, 27080874, 27086406
27086821, 27090765, 27092991, 27093423, 27098733, 27100800, 27101105
27101527, 27101652, 27105900, 27106301, 27106915, 27110878, 27111780
27112686, 27114112, 27115422, 27119621, 27119861, 27121566, 27122162
27125872, 27126666, 27128580, 27133637, 27135647, 27142120, 27142529
27143756, 27143882, 27144533, 27144928, 27147979, 27150500, 27151826
27152892, 27153641, 27153755, 27155549, 27156355, 27160360, 27160922
27163928, 27164352, 27165231, 27166354, 27166715, 27169796, 27169888
27170305, 27174938, 27174948, 27177551, 27177852, 27179264, 27181521
27181537, 27181897, 27182006, 27182064, 27184253, 27185188, 27187440
27189611, 27190851, 27193810, 27195935, 27197334, 27199245, 27200959
27202015, 27203055, 27204476, 27207634, 27208795, 27208953, 27210038
27210263, 27210872, 27212837, 27213140, 27214085, 27214204, 27215007
27216046, 27216224, 27217412, 27220610, 27220937, 27221900, 27222121
27222423, 27222626, 27222938, 27223075, 27224987, 27226913, 27228786
27229389, 27231051, 27232983, 27233563, 27234962, 27236052, 27236110
27236722, 27238077, 27238258, 27240246, 27240570, 27241221, 27241247
27242226, 27242616, 27244337, 27244785, 27244999, 27249215, 27249531
27249544, 27250547, 27251690, 27252023, 27254335, 27254851, 27255377
27256000, 27256488, 27256534, 27256584, 27257509, 27258578, 27259307
27259386, 27259983, 27262601, 27262650, 27262798, 27262945, 27262991
27263276, 27263677, 27263996, 27264464, 27265816, 27266245, 27267992
27270197, 27271876, 27274143, 27274456, 27274536, 27275136, 27275533
27275776, 27276231, 27282707, 27283029, 27283960, 27284375, 27284499
27285244, 27285557, 27288230, 27288638, 27288894, 27292213, 27293599
27294480, 27299455, 27300007, 27301308, 27301568, 27302415, 27302594
27302632, 27302681, 27302695, 27302711, 27302714, 27302730, 27302777
27302800, 27302960, 27303287, 27303785, 27303938, 27304131, 27304410
27304906, 27304936, 27305318, 27307868, 27308088, 27309182, 27310092
27313687, 27314206, 27314390, 27314512, 27314697, 27315159, 27318117
27318869, 27320576, 27320985, 27321179, 27321834, 27326204, 27329812
27330158, 27330161, 27333658, 27333664, 27333693, 27333731, 27334316
27334353, 27334648, 27335682, 27338838, 27338912, 27338946, 27339115
27339396, 27339483, 27339495, 27341036, 27343844, 27345190, 27345231

27345450, 27345498, 27346329, 27346644, 27346709, 27346949, 27346984
27347126, 27348081, 27348707, 27349393, 27350267, 27351628, 27352600
27354783, 27356373, 27357773, 27358232, 27358241, 27359178, 27359368
27360126, 27362190, 27364854, 27364891, 27364916, 27364947, 27365014
27365139, 27365702, 27365993, 27367194, 27368850, 27369515, 27370933
27372756, 27375260, 27375542, 27376871, 27377219, 27378103, 27378959
27379233, 27379846, 27379956, 27381383, 27381417, 27381498, 27381656
27383281, 27384222, 27386467, 27389352, 27392187, 27392968, 27393421
27393570, 27394086, 27395404, 27395416, 27395794, 27396357, 27396365
27396377, 27396624, 27396666, 27396672, 27396720, 27396794, 27396813
27397048, 27398080, 27398223, 27398660, 27399499, 27399762, 27399985
27400416, 27400598, 27401618, 27401637, 27403244, 27404573, 27404599
27404668, 27405242, 27405645, 27405696, 27406105, 27410279, 27410300
27410595, 27412805, 27416327, 27416997, 27417186, 27420715, 27421101
27421733, 27422874, 27423251, 27424405, 27425507, 27425622, 27426277
27426363, 27427805, 27428790, 27430219, 27430254, 27430802, 27432062
27432338, 27432355, 27432826, 27433163, 27433385, 27433870, 27434050
27434193, 27434486, 27434974, 27435537, 27439835, 27441326, 27441980
27442041, 27444727, 27445330, 27445462, 27445727, 27447452, 27447687
27448162, 27449814, 27450355, 27450400, 27450783, 27451049, 27451182
27451187, 27451531, 27452046, 27452760, 27452897, 27453225, 27454722
27457666, 27457891, 27458164, 27458829, 27459593, 27459909, 27459948
27460675, 27461740, 27462994, 27465480, 27466597, 27467543, 27468303
27469245, 27469329, 27471876, 27472969, 27473800, 27475272, 27479358
27480784, 27481406, 27481765, 27483974, 27484556, 27486253, 27486805
27487309, 27487795, 27487919, 27489107, 27489719, 27492916, 27493674
27494663, 27496224, 27496308, 27496424, 27496806, 27497950, 27498477
27501327, 27501413, 27501465, 27502420, 27503318, 27503413, 27504190
27504770, 27505229, 27505603, 27506774, 27507968, 27508936, 27508984
27508985, 27510959, 27511196, 27512439, 27513114, 27517818, 27518227
27518310, 27519708, 27520070, 27520900, 27522245, 27523368, 27523800
27525909, 27526362, 27526744, 27528204, 27529661, 27532009, 27532375
27533780, 27533819, 27534289, 27534509, 27537472, 27539757, 27539876
27540613, 27541286, 27541468, 27542824, 27544030, 27544973, 27545630
27547732, 27550341, 27551855, 27554074, 27555481, 27558557, 27558559
27558861, 27560562, 27560602, 27560702, 27560735, 27562488, 27563629
27563767, 27565906, 27567477, 27570318, 27573154, 27573408, 27574335
27576342, 27576354, 27577122, 27577758, 27578007, 27579353, 27579969
27580996, 27581484, 27585755, 27585800, 27586810, 27586895, 27587672
27587905, 27588271, 27589260, 27591842, 27592466, 27593389, 27593501
27593585, 27593587, 27595096, 27595801, 27595973, 27599689, 27599927
27600706, 27601118, 27601441, 27602091, 27602488, 27603841, 27604293
27605482, 27607563, 27607805, 27608669, 27609819, 27610269, 27613080
27613247, 27613530, 27613554, 27615608, 27615649, 27616657, 27617522

27617978, 27620808, 27623159, 27623844, 27625010, 27625050, 27625274
27625620, 27627992, 27629756, 27629928, 27631506, 27632114, 27634676
27634991, 27635508, 27636900, 27642235, 27644757, 27645231, 27645940
27649707, 27652302, 27654039, 27654521, 27655217, 27657467, 27657712
27657920, 27658186, 27658205, 27662528, 27663370, 27664702, 27666312
27668379, 27671633, 27679488, 27679664, 27679793, 27679806, 27679961
27680162, 27680509, 27680669, 27682151, 27682288, 27686599, 27688036
27688099, 27688692, 27690513, 27690578, 27691717, 27691809, 27691920
27691939, 27692215, 27693416, 27693713, 27694261, 27695063, 27697092
27698953, 27700466, 27701795, 27702244, 27703242, 27704237, 27705761
27707544, 27708711, 27709046, 27710072, 27714373, 27718914, 27719187
27723002, 27723151, 27725967, 27726269, 27726780, 27729678, 27731346
27732323, 27733415, 27734470, 27735534, 27739006, 27739957, 27740424
27740844, 27740854, 27744211, 27745220, 27747407, 27747869, 27748321
27748954, 27751006, 27751755, 27753336, 27756900, 27757567, 27757794
27757888, 27757979, 27758544, 27758653, 27758972, 27759077, 27759457
27761402, 27766324, 27766679, 27767081, 27768034, 27769361, 27772093
27772815, 27773602, 27774320, 27774539, 27778433, 27779886, 27780562
27780683, 27782339, 27782464, 27783059, 27783289, 27786669, 27786699
27786772, 27791223, 27793533, 27797290, 27801337, 27801774, 27803665
27807441, 27810967, 27811439, 27812560, 27812593, 27813267, 27815347
27818389, 27818871, 27819881, 27824540, 27824543, 27825241, 27828794
27828892, 27829295, 27832643, 27833369, 27833672, 27834551, 27834569
27834984, 27835925, 27839353, 27839616, 27839732, 27840386, 27843646
27846298, 27846499, 27847259, 27849825, 27850112, 27850736, 27851757
27856471, 27861226, 27861452, 27861909, 27862636, 27864737, 27865439
27869075, 27869339, 27873412, 27873643, 27876671, 27882176, 27886087
27889841, 27892488, 27896388, 27896443, 27896458, 27897639, 27897759
27898015, 27900663, 27902561, 27906509, 27908396, 27908644, 27909478
27912301, 27917669, 27918832, 27920184, 27924147, 27926113, 27927431
27929287, 27929509, 27930478, 27931299, 27931506, 27934468, 27935348
27935464, 27935493, 27935826, 27936676, 27938736, 27940876, 27941110
27941514, 27941896, 27945870, 27948050, 27948153, 27950708, 27952586
27952762, 27957892, 27959594, 27960021, 27961746, 27964051, 27964513
27965400, 27965830, 27966472, 27967484, 27970265, 27971503, 27971575
27972265, 27975778, 27977039, 27978668, 27983174, 27984028, 27984314
27986817, 27989556, 27989849, 27991970, 27993289, 27993298, 27994325
27994333, 27995215, 27995248, 27997875, 27998003, 27999073, 27999597
27999638, 28000269, 28004853, 28006704, 28018962, 28019283, 28019592
28021205, 28022101, 28022847, 28023081, 28023399, 28023410, 28023482
28024347, 28024793, 28025398, 28025414, 28026866, 28032758, 28033429
28036487, 28039471, 28039953, 28043157, 28045209, 28045903, 28057267
28058612, 28059199, 28067846, 28071549, 28072130, 28072383, 28072464
28072567, 28073470, 28074713, 28079127, 28085865, 28088762, 28089440

28090453, 28091981, 28092783, 28098040, 28098160, 28098865, 28099592
28103600, 28103869, 28104176, 28104361, 28104409, 28106402, 28108003
28108898, 28109326, 28109698, 28111583, 28120036, 28120951, 28124631
28125601, 28125947, 28129791, 28131767, 28132287, 28135648, 28157786
28164480, 28165439, 28165545, 28169711, 28174827, 28174926, 28174951
28175445, 28180464, 28181021, 28182503, 28184554, 28184800, 28187706
28188330, 28189466, 28194173, 28199085, 28201419, 28204262, 28204423
28204443, 28209341, 28209985, 28210192, 28211734, 28214943, 28215510
28218832, 28220398, 28223871, 28226179, 28227512, 28229360, 28236305
28238264, 28240153, 28242712, 28250929, 28256164, 28258608, 28264172
28271107, 28271119, 28271693, 28276054, 28278547, 28278640, 28279837
28281094, 28282606, 28285766, 28290434, 28294563, 28302049, 28304709
28305001, 28305362, 28305607, 28309182, 28309406, 28312508, 28315031
28315995, 28319114, 28319623, 28320117, 28320399, 28321446, 28323201
28328895, 28329450, 28330714, 28330971, 28333072, 28338399, 28338999
28344964, 28350595, 28354603, 28357401, 28361083, 28361221, 28361787
28365111, 28369092, 28371123, 28373960, 28375383, 28378446, 28379065
28384353, 28385102, 28386259, 28388910, 28390273, 28391210, 28391582
28392168, 28392251, 28393678, 28396445, 28397317, 28401116, 28402823
28403295, 28413955, 28420042, 28420457, 28423598, 28432129, 28434028
28435825, 28437849, 28439086, 28445741, 28448314, 28454215, 28455212
28468312, 28468493, 28475164, 28478676, 28481149, 28481679, 28483184
28489150, 28492362, 28493478, 28498976, 28501075, 28502098, 28502403
28502773, 28503038, 28503484, 28504545, 28507324, 28508053, 28508296
28508557, 28512336, 28512761, 28513333, 28514693, 28521330, 28527416
28528349, 28530171, 28535127, 28535272, 28538439, 28542455, 28544633
28545134, 28545687, 28546290, 28547068, 28547478, 28553468, 28558645
28564479, 28565296, 28571483, 28572407, 28572834, 28578164, 28578945
28580528, 28584193, 28584217, 28584444, 28585411, 28587723, 28589509
28600233, 28601874, 28606598, 28608211, 28611037, 28612674, 28614072
28617631, 28617959, 28621470, 28622202, 28627255, 28627686, 28632559
28636676, 28639299, 28642273, 28642899, 28644549, 28646200, 28670445
28673203, 28678804, 28679454, 28680029, 28685371, 28689483, 28692103
28692275, 28695694, 28697806, 28702188, 28703812, 28708023, 28709063
28710469, 28710827, 28713840, 28714058, 28714988, 28715655, 28728040
28728272, 28730076, 28730253, 28734355, 28740708, 28742555, 28745367
28747182, 28749289, 28752599, 28755011, 28757758, 28758090, 28758722
28761812, 28767240, 28770146, 28774416, 28776431, 28776811, 28777174
28777214, 28777332, 28781754, 28785022, 28785531, 28791725, 28793062
28797711, 28803345, 28805612, 28805695, 28808314, 28809909, 28817449
28819640, 28820669, 28821847, 28827682, 28830691, 28831971, 28835937
28836716, 28838066, 28844866, 28847136, 28849751, 28852325, 28852691
28855922, 28856060, 28856172, 28863263, 28863487, 28865569, 28867992
28876639, 28878525, 28881723, 28887305, 28887509, 28889730, 28891984

28900506, 28905390, 28905457, 28910498, 28915870, 28919145, 28925880
28927452, 28938924, 28940179, 28949888, 28950868, 28951014, 28951382
28956908, 28959493, 28960211, 28965084, 28965095, 28986231, 28986257
28987454, 28993295, 28993353, 28993590, 28994890, 29000190, 29002488
29006527, 29007321, 29007353, 29009513, 29013832, 29015118, 29015706
29024054, 29026582, 29027694, 29027940, 29032276, 29033896, 29036278
29037290, 29039510, 29040739, 29044954, 29048498, 29048728, 29050886
29051702, 29055644, 29056270, 29056767, 29060216, 29061016, 29115857
29123482, 29125374, 29136111, 29139070, 29139591, 29158680, 29163567
29165682, 29170232, 29171683, 29173817, 29177886, 29179097, 29182517
29182901, 29189889, 29190663, 29198092, 29200700, 29202461, 29203604
29205918, 29212433, 29213320, 29213351, 29213893, 29224605, 29225076
29230252, 29230565, 29233415, 29237575, 29241345, 29242017, 29247712
29247906, 29249289, 29250317, 29254623, 29255273, 29260956, 29261548
29278684, 29285503, 29296257, 29301463, 29307638, 29311927, 29312672
29312889, 29314539, 29331209, 29331493, 29332763, 29339155, 29343086
29343156, 29343861, 29344541, 29346057, 29347981, 29350868, 29351662
29351771, 29353821, 29356752, 29361472, 29362596, 29364171, 29366406
29372069, 29372460, 29374604, 29375355, 29375984, 29376346, 29378913
29379978, 29382784, 29383695, 29386635, 29388020, 29388952, 29391849
29394749, 29395657, 29398488, 29399046, 29399336, 29404483, 29405462
29407804, 29408853, 29409149, 29409455, 29412269, 29417719, 29418165
29420254, 29426241, 29428230, 29429264, 29430524, 29434301, 29436454
29437712, 29439522, 29442936, 29445548, 29448498, 29450812, 29452251
29454978, 29457978, 29464779, 29465177, 29483626, 29483672, 29483723
29483771, 29489436, 29493122, 29500257, 29500963, 29501218, 29504682
29506942, 29511611, 29515766, 29521862, 29524599, 29524985, 29525886
29530515, 29531541, 29536342, 29538631, 29541742, 29542449, 29542580
29548413, 29548592, 29549071, 29557261, 29558238, 29559395, 29564592
29579919, 29580394, 29591343, 29604257, 29607136, 29608023, 29614098
29614987, 29616244, 29625065, 29626154, 29629430, 29629745, 29632265
29633753, 29637526, 29637560, 29643721, 29645167, 29645349, 29651520
29656843, 29667994, 29668005, 29676089, 29685137, 29687220, 29687459
29688867, 29703195, 29705793, 29707896, 29717901, 29719146, 29720133
29722167, 29724041, 29726695, 29739576, 29766435, 29773197, 29774362
29780140, 29782211, 29789911, 29791152, 29794462, 29807964, 29809792
29813494, 29815341, 29817278, 29822714, 29825525, 29827852, 29841687
29846645, 29853485, 29865188, 29869404, 29869906, 29875459, 29876358
29881050, 29881575, 29884958, 29891916, 29893132, 29896510, 29902299
29914449, 29922225, 29930457, 29944035, 29944660, 29951620, 29951759
29961353, 29962927, 29962939, 29965888, 29991257, 29997326, 29997937
30008125, 30018017, 30018903, 30031027, 30034456, 30039959, 30064268
30068871, 30073744, 30074349, 30076253, 30078934, 30085980, 30088912
30092280, 30098251, 30099302, 30114477, 30116203, 30120608, 30125944

30128047, 30131286, 30139392, 30147928, 30149035, 30160625, 30163243
30164714, 30173113, 30177597, 30179644, 30186706, 30189023, 30193165
30193736, 30194710, 30196358, 30200680, 30200758, 30215130, 30218044
30218317, 30223712, 30225443, 30232638, 30239480, 30240547, 30241567
30246179, 30247305, 30252098, 30252156, 30253255, 30259008, 30265523
30272329, 30282501, 30283932, 30293345, 30305880, 30312094, 30312559
30316897, 30325407, 30342878, 30352623, 30355490, 30357897, 30364613
30365745, 30368482, 30368668, 30372081, 30374739, 30376986, 30381207
30384121, 30384152, 30391272, 30397100, 30402386, 30403763, 30408515
30409339, 30412188, 30413137, 30416034, 30431274, 30441687, 30443393
30450787, 30453442, 30458593, 30460922, 30464655, 30474774, 30475115
30476768, 30485255, 30496957, 30497057, 30501574, 30503943, 30509277
30510527, 30522998, 30528547, 30528704, 30533172, 30534662, 30544595
30581448, 30582500, 30599407, 30602230, 30613937, 30623138, 30624864
30635302, 30652853, 30654454, 30668407, 30671813, 30681462, 30691604
30698289, 30741263, 30758943, 30773164, 30783551, 30803210, 30814285
30815852, 30816938, 30829779, 30855101, 30881588, 30887501, 30904672
30922819, 30957739, 30964194, 30968737, 30987088, 30998759, 31001455
31004719, 31013127, 31019767, 31022858, 31029936, 31100172, 31106577
31156383, 31172207, 31182793, 31200845, 31306261, 31335037, 31335142
31393600

Version 18.0.0.0.ru-2020-04.rur-2020-04.r1

Version 18.0.0.0.ru-2020-04.rur-2020-04.r1 includes the following:

- Patch [30872794](#): Database Release Update 18.10.0.0.200414
- Patch [30805598](#): Oracle JVM Release Update 18.10.0.0.200414
- Patch [29997937](#): DSTv34 for RDBMS (TZDATA2019B)
- Patch [29997959](#): DSTv34 for OJVM (TZDATA2019G)
- PreUpgrade Jar: preupgrade_181_cbuild_9_lf.zip
- Patch [28730253](#): SUPPORT NEW ERA REIWA FOR JAPANESE IMPERIAL CALENDAR is included in DB PATCH 30138470
- Patch [29213893](#): DBMS_STATS FAILING WITH ERROR ORA-01422 WHEN GATHERING STATS FOR USER\$ TABLE
- Support for purging the recycle bin

For more information, see [Purging the recycle bin](#) in the *Amazon RDS User Guide*.

- Support for generating performance reports with Automatic Workload Repository (AWR) using the `rdsadmin.rdsadmin_diagnostic_util` package

For more information, see [Generating performance reports with Automatic Workload Repository \(AWR\)](#) in the *Amazon RDS User Guide*.

Combined patches for version 18.0.0.0.ru-2020-04.rur-2020-04.r1, released April 2020

Bugs fixed:

8932139, 9062315, 13554903, 14221306, 20436508, 20549013, 21095391
21223848, 21374587, 21547051, 21744603, 21766220, 21806121, 21935698
22174392, 22282748, 22363790, 22645496, 23003564, 23061453, 23109325
23310101, 23761724, 24489904, 24687075, 24689376, 24737581, 24841671
24844841, 24903291, 24925863, 24971597, 25031502, 25035594, 25035599
25060506, 25210690, 25287072, 25293659, 25303284, 25309116, 25348956
25405687, 25416731, 25487146, 25573623, 25591292, 25607397, 25634405
25644811, 25663488, 25686739, 25696520, 25726981, 25736428, 25740844
25743479, 25756945, 25809524, 25824236, 25882883, 25890002, 25908728
25911069, 25929650, 25943740, 25958554, 25986062, 25997810, 26083489
26115103, 26164661, 26226953, 26237338, 26281476, 26284722, 26297826
26336101, 26362155, 26399691, 26405036, 26410240, 26422277, 26423085
26427905, 26440169, 26450454, 26476244, 26521043, 26536320, 26595088
26598422, 26615291, 26617804, 26646549, 26654411, 26694735, 26724511
26731697, 26745002, 26785169, 26790514, 26790923, 26792891, 26798411
26818960, 26822620, 26843558, 26843664, 26846077, 26871815, 26883456
26894737, 26895149, 26898279, 26910716, 26927998, 26928317, 26933599
26943004, 26956033, 26960097, 26961415, 26966120, 26966916, 26970175
26976568, 26985002, 26986173, 26992964, 27000158, 27005278, 27006120
27006664, 27013566, 27016033, 27026401, 27028251, 27030974, 27033520
27034688, 27035653, 27036163, 27036408, 27037839, 27038986, 27041253
27044169, 27044575, 27047831, 27053044, 27054231, 27058530, 27060167
27060859, 27061736, 27066451, 27066519, 27072923, 27073066, 27075854
27080874, 27086821, 27090765, 27093423, 27100800, 27101105, 27101527
27101652, 27105900, 27106301, 27110878, 27111780, 27112686, 27115422
27119621, 27119861, 27122162, 27125872, 27126666, 27128580, 27135647
27142120, 27142529, 27143756, 27143882, 27144928, 27147979, 27150500
27151826, 27152892, 27153641, 27155549, 27156355, 27160360, 27160922
27163928, 27164352, 27165231, 27166354, 27169796, 27169888, 27170305
27179264, 27181521, 27181537, 27181897, 27185188, 27187440, 27189611

27190851, 27193810, 27195935, 27197334, 27199245, 27200959, 27202015
27203055, 27208795, 27208953, 27210038, 27210263, 27210872, 27214085
27214204, 27215007, 27216046, 27216224, 27217412, 27220937, 27221900
27222121, 27222626, 27223075, 27224987, 27226913, 27228786, 27229389
27231051, 27232983, 27233563, 27234962, 27236052, 27236110, 27236722
27240246, 27240570, 27241221, 27241247, 27242226, 27242616, 27244337
27244785, 27244999, 27249215, 27249531, 27250547, 27251690, 27254851
27255377, 27256000, 27256488, 27256534, 27256584, 27258578, 27259307
27259386, 27259983, 27262601, 27262650, 27262798, 27262945, 27262991
27263276, 27263996, 27264464, 27266245, 27270197, 27274456, 27274536
27275136, 27275533, 27275776, 27276231, 27282707, 27283029, 27283960
27284375, 27284499, 27285244, 27288230, 27288638, 27288894, 27292213
27293599, 27294480, 27301308, 27301568, 27302594, 27302632, 27302681
27302695, 27302711, 27302714, 27302730, 27302777, 27302800, 27302960
27303287, 27303785, 27303938, 27304410, 27304906, 27304936, 27305318
27307868, 27308088, 27310092, 27313687, 27314206, 27314390, 27314697
27318117, 27318869, 27320576, 27321179, 27321834, 27326204, 27329812
27330158, 27330161, 27333658, 27333664, 27333693, 27333731, 27334316
27334648, 27335682, 27338912, 27338946, 27339115, 27339396, 27339483
27339495, 27341036, 27343844, 27345190, 27345231, 27345450, 27345498
27346329, 27346644, 27346709, 27346949, 27347126, 27348081, 27348707
27349393, 27350267, 27351628, 27352600, 27354783, 27356373, 27357773
27358241, 27359178, 27359368, 27360126, 27364854, 27364891, 27364916
27364947, 27365139, 27365702, 27365993, 27367194, 27368850, 27369515
27372756, 27375260, 27375542, 27376871, 27378103, 27379233, 27381383
27381417, 27381498, 27381656, 27383281, 27384222, 27386467, 27389352
27392187, 27393570, 27394086, 27395404, 27395416, 27395794, 27396357
27396365, 27396377, 27396624, 27396666, 27396672, 27396720, 27396794
27396813, 27397048, 27398080, 27398660, 27400416, 27400598, 27401637
27404573, 27404668, 27405242, 27405645, 27405696, 27406105, 27410279
27410300, 27410595, 27412805, 27416327, 27416997, 27417186, 27420715
27421101, 27421733, 27422874, 27423251, 27424405, 27425507, 27425622
27426363, 27427805, 27430802, 27432062, 27432338, 27432355, 27432826
27433385, 27433870, 27434050, 27434193, 27434486, 27434974, 27435537
27439835, 27441326, 27441980, 27442041, 27444727, 27445330, 27445462
27445727, 27447452, 27447687, 27448162, 27449814, 27450355, 27450400
27450783, 27451049, 27451182, 27451187, 27451531, 27452046, 27452760
27453225, 27454722, 27457666, 27457891, 27458164, 27459593, 27459909
27459948, 27460675, 27462994, 27466597, 27467543, 27468303, 27469245
27469329, 27471876, 27472969, 27473800, 27479358, 27480784, 27483974
27484556, 27486253, 27486805, 27487309, 27487795, 27487919, 27489107
27489719, 27493674, 27494663, 27496224, 27496308, 27496424, 27497950
27498477, 27501327, 27501413, 27501465, 27502420, 27504190, 27504770
27505229, 27505603, 27506774, 27507968, 27508985, 27510959, 27511196

27512439, 27517818, 27518227, 27518310, 27520070, 27520900, 27522245
27523368, 27523800, 27525909, 27526744, 27529661, 27532375, 27533780
27533819, 27534509, 27537472, 27539757, 27540613, 27541286, 27541468
27542824, 27544030, 27544973, 27545630, 27547732, 27550341, 27551855
27554074, 27555481, 27558557, 27558559, 27558861, 27560602, 27560702
27562488, 27563629, 27563767, 27565906, 27567477, 27570318, 27576342
27576354, 27577758, 27578007, 27579353, 27580996, 27585755, 27585800
27586810, 27586895, 27587672, 27587905, 27588271, 27591842, 27592466
27593389, 27593501, 27593585, 27595096, 27595973, 27599689, 27599927
27601118, 27601441, 27602091, 27602488, 27603841, 27604293, 27607563
27607805, 27608669, 27610269, 27613080, 27613247, 27613530, 27615608
27616657, 27617522, 27617978, 27620808, 27623159, 27623844, 27625274
27625620, 27629756, 27631506, 27632114, 27634676, 27634991, 27635508
27644757, 27645231, 27645940, 27649707, 27652302, 27654521, 27655217
27657712, 27658186, 27658205, 27662528, 27663370, 27664702, 27666312
27671633, 27679488, 27679664, 27679793, 27679806, 27679961, 27680162
27680509, 27680669, 27682151, 27686599, 27688036, 27688099, 27688692
27690513, 27690578, 27691809, 27691920, 27691939, 27692215, 27693416
27693713, 27694261, 27695063, 27697092, 27698953, 27700466, 27701795
27704237, 27705761, 27707544, 27709046, 27710072, 27718914, 27719187
27723002, 27723151, 27726269, 27726780, 27729678, 27732323, 27733415
27739006, 27740424, 27740844, 27744211, 27745220, 27747869, 27748954
27751006, 27751755, 27753336, 27756900, 27757567, 27757794, 27757888
27758544, 27758653, 27758972, 27759077, 27759457, 27761402, 27766324
27767081, 27769361, 27772093, 27772815, 27773602, 27774320, 27774539
27779886, 27780562, 27780683, 27782339, 27783289, 27786772, 27791223
27793533, 27797290, 27801337, 27803665, 27807441, 27810967, 27812560
27812593, 27813267, 27815347, 27818389, 27818871, 27819881, 27824540
27824543, 27825241, 27828794, 27829295, 27832643, 27833369, 27833672
27834551, 27834569, 27834984, 27835925, 27839353, 27840386, 27843646
27846298, 27846499, 27847259, 27849825, 27850112, 27851757, 27856471
27861226, 27861452, 27861909, 27869075, 27869339, 27873412, 27873643
27876671, 27882176, 27886087, 27892488, 27896443, 27896458, 27897759
27898015, 27900663, 27902561, 27908644, 27909478, 27912301, 27917669
27918832, 27920184, 27924147, 27926113, 27927431, 27929287, 27930478
27931299, 27934468, 27935348, 27935464, 27935493, 27938736, 27940876
27941110, 27941896, 27945870, 27948050, 27948153, 27950708, 27952762
27959594, 27960021, 27961746, 27964051, 27965400, 27965830, 27966472
27967484, 27970265, 27971503, 27971575, 27972265, 27975778, 27977039
27983174, 27984028, 27986817, 27989556, 27989849, 27991970, 27993289
27994325, 27994333, 27995215, 27995248, 27997875, 27998003, 27999073
27999597, 27999638, 28000269, 28004853, 28006704, 28018962, 28019283
28021205, 28022101, 28022847, 28023081, 28023399, 28023482, 28024347
28024793, 28025414, 28026866, 28033429, 28036487, 28043157, 28045903

28057267, 28058612, 28059199, 28067846, 28071549, 28072130, 28072383
28072464, 28072567, 28074713, 28079127, 28085865, 28088762, 28089440
28090453, 28091981, 28098160, 28098865, 28103600, 28103869, 28104361
28104409, 28106402, 28108003, 28108898, 28109326, 28111583, 28120036
28120951, 28124631, 28125947, 28129791, 28132287, 28135648, 28157786
28164480, 28165439, 28165545, 28169711, 28174827, 28174951, 28175445
28180464, 28181021, 28184554, 28184800, 28187706, 28188330, 28189466
28194173, 28199085, 28201419, 28204262, 28204443, 28209341, 28209985
28210192, 28211734, 28214943, 28215510, 28218832, 28220398, 28223871
28226179, 28227512, 28229360, 28236305, 28238264, 28242712, 28250929
28256164, 28258608, 28264172, 28271107, 28271119, 28271693, 28276054
28279837, 28281094, 28282606, 28285766, 28290434, 28294563, 28302049
28304709, 28305001, 28305362, 28309182, 28309406, 28312508, 28315031
28315995, 28319114, 28319623, 28320117, 28320399, 28321446, 28323201
28328895, 28329450, 28330714, 28330971, 28333072, 28338399, 28338999
28344964, 28350595, 28354603, 28357401, 28361083, 28361221, 28361787
28365111, 28369092, 28371123, 28373960, 28375383, 28378446, 28379065
28384353, 28385102, 28386259, 28388910, 28390273, 28391210, 28391582
28392168, 28392251, 28393678, 28396445, 28397317, 28401116, 28402823
28403295, 28413955, 28420042, 28420457, 28423598, 28432129, 28434028
28435825, 28437849, 28439086, 28445741, 28448314, 28454215, 28455212
28468312, 28468493, 28475164, 28478676, 28481149, 28481679, 28483184
28489150, 28492362, 28493478, 28498976, 28501075, 28502403, 28502773
28503038, 28503484, 28504545, 28507324, 28508053, 28508296, 28508557
28512336, 28512761, 28513333, 28514693, 28521330, 28527416, 28528349
28530171, 28535127, 28535272, 28538439, 28542455, 28544633, 28545134
28545687, 28546290, 28547068, 28553468, 28558645, 28564479, 28571483
28572407, 28572834, 28578164, 28578945, 28580528, 28584193, 28584217
28584444, 28585411, 28587723, 28589509, 28600233, 28608211, 28611037
28612674, 28614072, 28617631, 28617959, 28621470, 28622202, 28627255
28627686, 28632559, 28636676, 28639299, 28644549, 28646200, 28670445
28673203, 28678804, 28679454, 28680029, 28685371, 28692103, 28692275
28695694, 28697806, 28702188, 28708023, 28709063, 28710469, 28710827
28713840, 28714058, 28714988, 28728040, 28728272, 28730076, 28734355
28740708, 28742555, 28747182, 28749289, 28752599, 28755011, 28758090
28758722, 28761812, 28767240, 28770146, 28774416, 28776811, 28777174
28777214, 28777332, 28781754, 28785022, 28785531, 28791725, 28797711
28803345, 28805612, 28805695, 28809909, 28817449, 28819640, 28820669
28821847, 28830691, 28831971, 28835937, 28836716, 28838066, 28844866
28849751, 28852691, 28855922, 28856060, 28856172, 28863263, 28863487
28865569, 28867992, 28876639, 28878525, 28881723, 28887305, 28887509
28889730, 28891984, 28905457, 28919145, 28925880, 28927452, 28938924
28940179, 28949888, 28950868, 28951014, 28951382, 28956908, 28959493
28960211, 28965084, 28965095, 28986231, 28986257, 28987454, 28993295

28993353, 28993590, 29000190, 29002488, 29006527, 29007321, 29007353
29009513, 29013832, 29015118, 29015706, 29024054, 29026582, 29027694
29027940, 29032276, 29033896, 29037290, 29040739, 29048498, 29050886
29051702, 29056270, 29056767, 29060216, 29061016, 29115857, 29123482
29125374, 29136111, 29139591, 29158680, 29163567, 29170232, 29171683
29173817, 29177886, 29179097, 29182517, 29182901, 29189889, 29190663
29198092, 29200700, 29202461, 29203604, 29205918, 29212433, 29213320
29213351, 29224605, 29225076, 29230252, 29230565, 29233415, 29237575
29241345, 29242017, 29247712, 29247906, 29249289, 29250317, 29255273
29260956, 29261548, 29278684, 29285503, 29301463, 29312672, 29314539
29331209, 29331493, 29332763, 29339155, 29343086, 29343861, 29347981
29351662, 29351771, 29353821, 29356752, 29361472, 29364171, 29372460
29375355, 29375984, 29376346, 29378913, 29379978, 29382784, 29383695
29386635, 29388020, 29388952, 29391849, 29394749, 29395657, 29398488
29399046, 29399336, 29404483, 29405462, 29407804, 29408853, 29409149
29409455, 29412269, 29417719, 29426241, 29429264, 29430524, 29434301
29436454, 29437712, 29439522, 29448498, 29450812, 29452251, 29454978
29457978, 29464779, 29465177, 29483626, 29483672, 29483723, 29483771
29489436, 29493122, 29500257, 29500963, 29504682, 29511611, 29515766
29521862, 29524599, 29524985, 29525886, 29530515, 29531541, 29536342
29538631, 29541742, 29542449, 29542580, 29548413, 29548592, 29549071
29557261, 29558238, 29580394, 29591343, 29604257, 29607136, 29614098
29616244, 29625065, 29626154, 29629430, 29629745, 29632265, 29633753
29637526, 29643721, 29645349, 29651520, 29656843, 29667994, 29668005
29676089, 29685137, 29687220, 29687459, 29703195, 29707896, 29719146
29720133, 29724041, 29726695, 29739576, 29773197, 29780140, 29782211
29791152, 29794462, 29807964, 29813494, 29817278, 29825525, 29827852
29841687, 29846645, 29853485, 29865188, 29869404, 29875459, 29876358
29881050, 29884958, 29891916, 29893132, 29896510, 29902299, 29914449
29944035, 29944660, 29951620, 29961353, 29962927, 29962939, 29991257
29997326, 30018017, 30031027, 30034456, 30064268, 30073744, 30074349
30076253, 30078934, 30088912, 30098251, 30099302, 30114477, 30120608
30125944, 30128047, 30131286, 30147928, 30149035, 30163243, 30164714
30173113, 30177597, 30179644, 30189023, 30193165, 30194710, 30196358
30200758, 30215130, 30218044, 30218317, 30223712, 30232638, 30239480
30241567, 30246179, 30247305, 30252098, 30252156, 30253255, 30259008
30265523, 30272329, 30282501, 30283932, 30305880, 30312094, 30342878
30352623, 30355490, 30364613, 30365745, 30374739, 30384152, 30402386
30403763, 30408515, 30409339, 30412188, 30413137, 30416034, 30431274
30441687, 30453442, 30458593, 30460922, 30475115, 30485255, 30496957
30497057, 30501574, 30503943, 30509277, 30510527, 30582500, 30613937
30635302, 30654454, 30671813, 30741263, 30783551, 30803210, 30815852
30881588, 30533172, 30312559, 30085980, 29997959, 29997937, 28852325
28125601, 29213893, 28730253, 27304131, 27539876, 27952586, 27642235

27636900, 27461740, 28278547, 28278640, 27936676, 28502098, 28915870
28601874, 29445548, 29254623, 29774362, 30160625, 30534662, 26914402
30855101, 12816839, 18701017, 22734786, 23698980, 23840305, 25709124
25724089, 26299684, 26313403, 26433972, 26527054, 26586174, 26587652
26647619, 26827699, 26860285, 26882126, 26882316, 26943660, 26996813
27012915, 27018734, 27032726, 27034318, 27040560, 27080748, 27086406
27092991, 27098733, 27106915, 27114112, 27121566, 27133637, 27144533
27153755, 27166715, 27174938, 27174948, 27177551, 27177852, 27182006
27182064, 27184253, 27204476, 27212837, 27213140, 27220610, 27222423
27222938, 27238077, 27238258, 27249544, 27252023, 27257509, 27263677
27265816, 27267992, 27271876, 27274143, 27285557, 27299455, 27300007
27302415, 27309182, 27314512, 27315159, 27320985, 27334353, 27338838
27346984, 27358232, 27362190, 27370933, 27377219, 27378959, 27379846
27379956, 27393421, 27398223, 27399499, 27399762, 27399985, 27401618
27403244, 27404599, 27426277, 27428790, 27430219, 27430254, 27433163
27452897, 27458829, 27465480, 27475272, 27481406, 27481765, 27492916
27496806, 27503318, 27503413, 27508936, 27508984, 27513114, 27519708
27526362, 27528204, 27532009, 27534289, 27560562, 27560735, 27573154
27573408, 27574335, 27577122, 27579969, 27581484, 27593587, 27595801
27600706, 27609819, 27625010, 27625050, 27627992, 27654039, 27657467
27657920, 27668379, 27682288, 27691717, 27702244, 27703242, 27708711
27714373, 27725967, 27731346, 27734470, 27735534, 27739957, 27740854
27747407, 27748321, 27757979, 27766679, 27768034, 27778433, 27782464
27783059, 27786669, 27786699, 27801774, 27811439, 27839732, 27850736
27862636, 27864737, 27865439, 27889841, 27896388, 27897639, 27906509
27931506, 27935826, 27941514, 27957892, 27978668, 27984314, 27993298
28023410, 28025398, 28032758, 28039471, 28039953, 28045209, 28099592
28109698, 28174926, 28182503, 28204423, 28240153

Version 18.0.0.0.ru-2020-01.rur-2020-01.r1

Version 18.0.0.0.ru-2020-01.rur-2020-01.r1 includes the following:

- Patch [30480385](#): Database Release Update: 18.9.0.0.200114
- Patch [30501926](#): OJVM RELEASE UPDATE: 18.9.0.0.200114
- Patch [29997937](#): DSTv34 for RDBMS (TZDATA2019B)
- Patch [29997959](#): DSTv34 for OJVM (TZDATA2019G)
- PreUpgrade Jar: preupgrade_181_cbuild_9_lf.zip

- Patch [28730253](#): SUPPORT NEW ERA REIWA FOR JAPANESE IMPERIAL CALENDAR is included in DB PATCH 30138470
- Patch [29213893](#): DBMS_STATS FAILING WITH ERROR ORA-01422 WHEN GATHERING STATS FOR USER\$ TABLE

Oracle release update 18.9.0.0.200114, released January 2020

Bugs fixed:

8932139, 9062315, 13554903, 14221306, 20436508, 20549013, 21095391
21223848, 21374587, 21547051, 21744603, 21766220, 21806121, 21935698
22174392, 22282748, 22363790, 22645496, 23003564, 23061453, 23109325
23310101, 23761724, 24489904, 24687075, 24689376, 24737581, 24841671
24844841, 24903291, 24925863, 24971597, 25035594, 25035599, 25060506
25210690, 25287072, 25293659, 25303284, 25309116, 25348956, 25405687
25487146, 25573623, 25591292, 25607397, 25634405, 25644811, 25663488
25686739, 25696520, 25726981, 25736428, 25743479, 25756945, 25824236
25882883, 25890002, 25908728, 25911069, 25929650, 25943740, 25958554
25986062, 25997810, 26083489, 26115103, 26164661, 26226953, 26237338
26281476, 26284722, 26297826, 26336101, 26362155, 26399691, 26405036
26410240, 26422277, 26423085, 26427905, 26440169, 26450454, 26476244
26521043, 26536320, 26595088, 26598422, 26615291, 26617804, 26646549
26654411, 26694735, 26724511, 26731697, 26745002, 26785169, 26790514
26792891, 26798411, 26818960, 26822620, 26843558, 26843664, 26846077
26871815, 26883456, 26894737, 26895149, 26898279, 26910716, 26927998
26928317, 26933599, 26943004, 26956033, 26960097, 26961415, 26966120
26966916, 26970175, 26976568, 26985002, 26986173, 26992964, 27000158
27005278, 27006120, 27006664, 27016033, 27026401, 27028251, 27030974
27033520, 27034688, 27035653, 27036163, 27036408, 27037839, 27038986
27041253, 27044169, 27044575, 27047831, 27053044, 27054231, 27058530
27060167, 27060859, 27061736, 27066451, 27066519, 27072923, 27073066
27075854, 27080874, 27086821, 27090765, 27093423, 27101105, 27101527
27101652, 27105900, 27106301, 27110878, 27111780, 27112686, 27115422
27119621, 27119861, 27122162, 27125872, 27126666, 27128580, 27135647
27142529, 27143756, 27143882, 27144928, 27147979, 27150500, 27151826
27152892, 27153641, 27155549, 27156355, 27160360, 27160922, 27163928
27164352, 27165231, 27166354, 27169796, 27169888, 27170305, 27179264
27181521, 27181537, 27181897, 27185188, 27187440, 27189611, 27190851
27193810, 27195935, 27197334, 27199245, 27200959, 27202015, 27203055
27208795, 27208953, 27210038, 27210263, 27210872, 27214085, 27214204
27215007, 27216046, 27216224, 27220937, 27221900, 27222121, 27222626

27223075, 27224987, 27226913, 27228786, 27229389, 27231051, 27232983
27233563, 27234962, 27236052, 27236110, 27236722, 27240246, 27240570
27241221, 27241247, 27242226, 27242616, 27244337, 27244785, 27244999
27249215, 27249531, 27250547, 27251690, 27254851, 27255377, 27256000
27256488, 27256534, 27256584, 27258578, 27259307, 27259386, 27259983
27262601, 27262650, 27262798, 27262945, 27262991, 27263276, 27263996
27264464, 27266245, 27270197, 27274456, 27274536, 27275136, 27275533
27275776, 27276231, 27282707, 27283029, 27283960, 27284375, 27284499
27285244, 27288230, 27288638, 27288894, 27292213, 27293599, 27294480
27301308, 27301568, 27302594, 27302632, 27302681, 27302695, 27302711
27302714, 27302730, 27302777, 27302800, 27302960, 27303287, 27303785
27303938, 27304410, 27304906, 27304936, 27305318, 27307868, 27308088
27310092, 27313687, 27314206, 27314390, 27318117, 27318869, 27320576
27321179, 27321834, 27326204, 27329812, 27330158, 27330161, 27333658
27333664, 27333693, 27333731, 27334316, 27334648, 27335682, 27338912
27338946, 27339115, 27339396, 27339483, 27339495, 27341036, 27345190
27345231, 27345450, 27345498, 27346329, 27346644, 27346709, 27346949
27347126, 27348081, 27348707, 27349393, 27350267, 27351628, 27352600
27354783, 27356373, 27357773, 27358241, 27359178, 27359368, 27360126
27364854, 27364891, 27364916, 27364947, 27365139, 27365702, 27365993
27367194, 27368850, 27369515, 27372756, 27375260, 27375542, 27376871
27378103, 27379233, 27381383, 27381417, 27381498, 27381656, 27383281
27384222, 27386467, 27389352, 27392187, 27393570, 27394086, 27395404
27395416, 27395794, 27396357, 27396365, 27396377, 27396624, 27396666
27396672, 27396720, 27396813, 27397048, 27398080, 27398660, 27400416
27400598, 27401637, 27404573, 27404668, 27405242, 27405645, 27405696
27406105, 27410279, 27410300, 27410595, 27412805, 27416327, 27416997
27417186, 27420715, 27421101, 27421733, 27422874, 27423251, 27424405
27425507, 27425622, 27426363, 27427805, 27430802, 27432062, 27432338
27432355, 27432826, 27433385, 27433870, 27434050, 27434193, 27434486
27434974, 27435537, 27439835, 27441326, 27441980, 27442041, 27444727
27445330, 27445462, 27445727, 27447452, 27447687, 27448162, 27449814
27450355, 27450400, 27450783, 27451049, 27451182, 27451187, 27451531
27452046, 27452760, 27453225, 27454722, 27457666, 27457891, 27458164
27459909, 27459948, 27460675, 27462994, 27466597, 27467543, 27468303
27469245, 27469329, 27471876, 27472969, 27473800, 27479358, 27480784
27483974, 27484556, 27486253, 27486805, 27487309, 27487795, 27487919
27489107, 27489719, 27493674, 27496224, 27496308, 27496424, 27497950
27498477, 27501327, 27501413, 27501465, 27502420, 27504190, 27504770
27505229, 27505603, 27506774, 27507968, 27508985, 27510959, 27511196
27512439, 27517818, 27518227, 27518310, 27520070, 27520900, 27522245
27523368, 27523800, 27525909, 27526744, 27529661, 27532375, 27533780
27533819, 27534509, 27537472, 27539757, 27540613, 27541286, 27541468
27542824, 27544030, 27544973, 27545630, 27547732, 27550341, 27551855

27554074, 27555481, 27558557, 27558559, 27558861, 27560602, 27560702
27562488, 27563629, 27563767, 27565906, 27567477, 27570318, 27576342
27576354, 27577758, 27578007, 27579353, 27580996, 27585755, 27585800
27586810, 27586895, 27587672, 27587905, 27588271, 27591842, 27592466
27593389, 27593501, 27593585, 27595096, 27595973, 27599689, 27599927
27601118, 27601441, 27602091, 27602488, 27603841, 27604293, 27607563
27607805, 27608669, 27610269, 27613080, 27613247, 27613530, 27615608
27616657, 27617522, 27617978, 27620808, 27623159, 27623844, 27625274
27625620, 27629756, 27631506, 27632114, 27634676, 27634991, 27635508
27644757, 27645940, 27649707, 27652302, 27654521, 27655217, 27657712
27658186, 27658205, 27662528, 27663370, 27664702, 27666312, 27671633
27679488, 27679664, 27679793, 27679806, 27679961, 27680162, 27680509
27680669, 27682151, 27686599, 27688036, 27688099, 27688692, 27690513
27690578, 27691809, 27691920, 27691939, 27692215, 27693416, 27693713
27694261, 27695063, 27697092, 27698953, 27700466, 27701795, 27704237
27705761, 27707544, 27709046, 27710072, 27718914, 27719187, 27723002
27723151, 27726269, 27726780, 27729678, 27732323, 27733415, 27739006
27740424, 27740844, 27744211, 27745220, 27747869, 27748954, 27751006
27751755, 27753336, 27756900, 27757567, 27757794, 27757888, 27758544
27758653, 27758972, 27759077, 27759457, 27761402, 27766324, 27767081
27769361, 27772093, 27772815, 27773602, 27774320, 27774539, 27779886
27780562, 27780683, 27782339, 27783289, 27786772, 27791223, 27793533
27797290, 27801337, 27803665, 27807441, 27810967, 27812560, 27812593
27813267, 27815347, 27818389, 27818871, 27819881, 27824540, 27824543
27825241, 27828794, 27829295, 27832643, 27833369, 27833672, 27834551
27834569, 27834984, 27835925, 27839353, 27840386, 27843646, 27846298
27846499, 27847259, 27849825, 27850112, 27851757, 27856471, 27861226
27861452, 27861909, 27869075, 27869339, 27873412, 27873643, 27876671
27882176, 27886087, 27892488, 27896443, 27896458, 27897759, 27898015
27900663, 27902561, 27908644, 27909478, 27912301, 27917669, 27918832
27920184, 27924147, 27926113, 27927431, 27929287, 27930478, 27931299
27934468, 27935348, 27935493, 27938736, 27940876, 27941110, 27941896
27945870, 27948050, 27948153, 27950708, 27952762, 27959594, 27960021
27961746, 27964051, 27965400, 27965830, 27966472, 27967484, 27970265
27971503, 27971575, 27972265, 27975778, 27977039, 27983174, 27984028
27986817, 27989556, 27989849, 27991970, 27993289, 27994325, 27994333
27995215, 27995248, 27997875, 27998003, 27999073, 27999597, 27999638
28000269, 28004853, 28006704, 28018962, 28019283, 28021205, 28022101
28022847, 28023081, 28023399, 28023482, 28024347, 28026866, 28033429
28036487, 28043157, 28045903, 28057267, 28058612, 28059199, 28067846
28071549, 28072130, 28072464, 28072567, 28074713, 28079127, 28085865
28088762, 28089440, 28090453, 28091981, 28098160, 28098865, 28103600
28103869, 28104361, 28104409, 28106402, 28108003, 28108898, 28109326
28111583, 28120036, 28120951, 28124631, 28125947, 28129791, 28132287

28135648, 28164480, 28165439, 28165545, 28169711, 28174827, 28174951
28175445, 28180464, 28181021, 28184554, 28184800, 28187706, 28188330
28189466, 28194173, 28199085, 28201419, 28204262, 28204443, 28209341
28209985, 28210192, 28211734, 28214943, 28215510, 28218832, 28220398
28223871, 28226179, 28227512, 28229360, 28236305, 28238264, 28242712
28256164, 28258608, 28264172, 28271119, 28271693, 28279837, 28281094
28282606, 28285766, 28290434, 28294563, 28302049, 28304709, 28305001
28305362, 28309182, 28309406, 28312508, 28315031, 28315995, 28319114
28319623, 28320117, 28320399, 28321446, 28323201, 28328895, 28329450
28330714, 28330971, 28333072, 28338399, 28338999, 28344964, 28350595
28354603, 28357401, 28361083, 28361221, 28361787, 28365111, 28369092
28371123, 28373960, 28375383, 28378446, 28379065, 28384353, 28385102
28386259, 28388910, 28390273, 28391210, 28391582, 28392168, 28392251
28393678, 28396445, 28397317, 28401116, 28402823, 28403295, 28413955
28420042, 28420457, 28423598, 28432129, 28434028, 28435825, 28437849
28445741, 28448314, 28454215, 28455212, 28468312, 28468493, 28475164
28478676, 28481149, 28481679, 28483184, 28489150, 28492362, 28493478
28498976, 28501075, 28502403, 28502773, 28503484, 28504545, 28507324
28508053, 28508296, 28508557, 28512336, 28512761, 28513333, 28514693
28521330, 28527416, 28528349, 28530171, 28535272, 28538439, 28542455
28544633, 28545134, 28545687, 28546290, 28547068, 28553468, 28558645
28571483, 28572407, 28572834, 28578164, 28578945, 28580528, 28584193
28584217, 28584444, 28585411, 28587723, 28589509, 28600233, 28612674
28614072, 28617631, 28617959, 28621470, 28627255, 28627686, 28632559
28636676, 28639299, 28644549, 28646200, 28670445, 28673203, 28678804
28679454, 28680029, 28685371, 28692103, 28692275, 28695694, 28697806
28702188, 28708023, 28710827, 28713840, 28714058, 28714988, 28728040
28728272, 28730076, 28734355, 28742555, 28747182, 28749289, 28752599
28755011, 28758090, 28758722, 28761812, 28767240, 28770146, 28774416
28776811, 28777174, 28777214, 28777332, 28781754, 28785022, 28785531
28791725, 28797711, 28803345, 28805612, 28805695, 28809909, 28817449
28819640, 28820669, 28821847, 28830691, 28831971, 28836716, 28838066
28844866, 28849751, 28852691, 28855922, 28856060, 28856172, 28863487
28867992, 28876639, 28878525, 28881723, 28887305, 28887509, 28889730
28891984, 28905457, 28919145, 28925880, 28927452, 28938924, 28940179
28949888, 28951014, 28951382, 28956908, 28959493, 28960211, 28965084
28965095, 28986231, 28986257, 28987454, 28993353, 28993590, 29000190
29002488, 29006527, 29007321, 29007353, 29009513, 29013832, 29015118
29015706, 29024054, 29027694, 29027940, 29032276, 29033896, 29037290
29040739, 29050886, 29051702, 29056270, 29056767, 29060216, 29061016
29115857, 29123482, 29125374, 29136111, 29139591, 29158680, 29163567
29170232, 29171683, 29173817, 29177886, 29182901, 29189889, 29190663
29198092, 29200700, 29202461, 29203604, 29205918, 29212433, 29213320
29213351, 29224605, 29225076, 29230252, 29230565, 29233415, 29237575

29241345, 29242017, 29247906, 29250317, 29255273, 29260956, 29261548
29278684, 29285503, 29301463, 29312672, 29314539, 29331209, 29331493
29339155, 29347981, 29351662, 29353821, 29356752, 29364171, 29375355
29375984, 29376346, 29378913, 29379978, 29382784, 29383695, 29386635
29388020, 29388952, 29391849, 29394749, 29395657, 29398488, 29399336
29404483, 29405462, 29407804, 29408853, 29409149, 29412269, 29417719
29429264, 29430524, 29434301, 29436454, 29437712, 29439522, 29448498
29450812, 29452251, 29454978, 29457978, 29464779, 29465177, 29483626
29483672, 29483723, 29483771, 29489436, 29493122, 29500257, 29504682
29511611, 29515766, 29524599, 29525886, 29530515, 29531541, 29536342
29538631, 29541742, 29542449, 29548413, 29549071, 29557261, 29558238
29604257, 29607136, 29614098, 29616244, 29626154, 29629430, 29629745
29632265, 29633753, 29637526, 29643721, 29645349, 29651520, 29667994
29668005, 29676089, 29687459, 29703195, 29707896, 29719146, 29720133
29724041, 29726695, 29739576, 29773197, 29782211, 29791152, 29794462
29813494, 29817278, 29825525, 29841687, 29846645, 29853485, 29865188
29869404, 29875459, 29884958, 29893132, 29914449, 29944035, 29944660
29951620, 29962927, 29962939, 29991257, 29997326, 30034456, 30074349
30088912, 30098251, 30125944, 30164714, 30189023, 30193165, 30218044
30223712, 30252098, 30252156, 30253255, 30259008, 30342878, 30365745
30402386, 30408515, 30458593, 30485255

Version 18.0.0.0.ru-2019-10.rur-2019-10.r1

Version 18.0.0.0.ru-2019-10.rur-2019-10.r1 includes the following:

- Patch [30112122](#): DATABASE OCT 2019 RELEASE UPDATE 18.8.0.0.191015
- Patch [30133625](#): OJVM RELEASE UPDATE 12.2.0.1.191015
- Patch [29997937](#): DSTv34 for RDBMS (TZDATA2019G)
- Patch [29997959](#): DSTv34 for OJVM (TZDATA2019G)
- PreUpgrade Jar: preupgrade_181_cbuild_8_lf.zip
- Patch [28730253](#): SUPPORT NEW ERA REIWA FOR JAPANESE IMPERIAL CALENDAR is included in DB PATCH 30138470
- Patch [29213893](#): DBMS_STATS FAILING WITH ERROR ORA-01422 WHEN GATHERING STATS FOR USER\$ TABLE
- Support for resizing the temporary tablespace in a read replica

For more information, see [Resizing the temporary tablespace in a read replica](#) in the *Amazon RDS User Guide*.

Oracle release update 18.8.0.0.0, released October 2019

Bugs fixed:

30259008, 30253255, 8932139, 9062315, 13554903, 14221306, 20436508
21095391, 21223848, 21374587, 21547051, 21744603, 21766220, 21806121
21935698, 23003564, 23061453, 23310101, 23761724, 24489904, 24687075
24689376, 24737581, 24841671, 24844841, 24903291, 24925863, 24971597
25035594, 25035599, 25060506, 25287072, 25293659, 25303284, 25309116
25348956, 25405687, 25487146, 25591292, 25607397, 25634405, 25644811
25663488, 25686739, 25696520, 25726981, 25736428, 25743479, 25756945
25824236, 25882883, 25890002, 25908728, 25911069, 25929650, 25943740
25958554, 25986062, 25997810, 26083489, 26115103, 26164661, 26226953
26237338, 26281476, 26284722, 26297826, 26336101, 26362155, 26399691
26422277, 26423085, 26427905, 26440169, 26450454, 26476244, 26521043
26536320, 26595088, 26598422, 26615291, 26617804, 26646549, 26654411
26694735, 26724511, 26731697, 26745002, 26785169, 26790514, 26792891
26798411, 26818960, 26822620, 26843558, 26843664, 26846077, 26871815
26883456, 26894737, 26895149, 26898279, 26910716, 26927998, 26928317
26933599, 26943004, 26956033, 26960097, 26961415, 26966120, 26966916
26970175, 26976568, 26985002, 26986173, 26992964, 27000158, 27005278
27006120, 27006664, 27016033, 27026401, 27028251, 27030974, 27033520
27034688, 27035653, 27036408, 27037839, 27038986, 27041253, 27044575
27047831, 27053044, 27054231, 27058530, 27060167, 27060859, 27061736
27066451, 27066519, 27072923, 27073066, 27075854, 27080874, 27086821
27090765, 27093423, 27101105, 27101527, 27101652, 27105900, 27106301
27110878, 27111780, 27112686, 27115422, 27119621, 27122162, 27125872
27126666, 27128580, 27135647, 27142529, 27143756, 27143882, 27144928
27147979, 27150500, 27151826, 27152892, 27153641, 27155549, 27156355
27160360, 27160922, 27163928, 27164352, 27165231, 27166354, 27169796
27169888, 27170305, 27179264, 27181521, 27181537, 27181897, 27185188
27187440, 27189611, 27190851, 27193810, 27197334, 27199245, 27200959
27202015, 27208795, 27208953, 27210038, 27210263, 27210872, 27214085
27214204, 27215007, 27216046, 27216224, 27220937, 27221900, 27222121
27222626, 27223075, 27224987, 27226913, 27228786, 27229389, 27231051
27232983, 27233563, 27236052, 27236110, 27236722, 27240246, 27240570
27241221, 27241247, 27242226, 27242616, 27244337, 27244785, 27249215
27249531, 27250547, 27251690, 27254851, 27255377, 27256000, 27256488

27256534, 27256584, 27258578, 27259307, 27259386, 27259983, 27262601
27262650, 27262798, 27262945, 27262991, 27263276, 27263996, 27264464
27266245, 27270197, 27274456, 27274536, 27275136, 27275533, 27275776
27276231, 27282707, 27283029, 27283960, 27284375, 27284499, 27285244
27288230, 27288638, 27288894, 27292213, 27293599, 27294480, 27301308
27301568, 27302594, 27302632, 27302681, 27302695, 27302711, 27302714
27302730, 27302777, 27302800, 27302960, 27303287, 27303785, 27303938
27304410, 27304906, 27304936, 27305318, 27307868, 27308088, 27310092
27313687, 27314206, 27314390, 27318117, 27318869, 27320576, 27321179
27321834, 27326204, 27329812, 27330158, 27330161, 27333658, 27333664
27333693, 27333731, 27334316, 27334648, 27335682, 27338912, 27338946
27339115, 27339396, 27339483, 27339495, 27341036, 27345190, 27345231
27345450, 27345498, 27346329, 27346644, 27346709, 27346949, 27347126
27348081, 27348707, 27349393, 27350267, 27351628, 27352600, 27354783
27356373, 27357773, 27358241, 27359178, 27359368, 27360126, 27364854
27364891, 27364916, 27364947, 27365139, 27365702, 27365993, 27367194
27368850, 27369515, 27372756, 27375260, 27375542, 27376871, 27378103
27379233, 27381383, 27381417, 27381498, 27381656, 27383281, 27384222
27386467, 27389352, 27392187, 27393570, 27394086, 27395404, 27395416
27395794, 27396357, 27396365, 27396377, 27396624, 27396666, 27396672
27396813, 27397048, 27398080, 27398660, 27400416, 27400598, 27401637
27404573, 27404668, 27405242, 27405645, 27405696, 27406105, 27410279
27410300, 27410595, 27412805, 27416327, 27416997, 27417186, 27420715
27421101, 27421733, 27422874, 27423251, 27424405, 27425507, 27425622
27426363, 27427805, 27430802, 27432062, 27432338, 27432355, 27432826
27433385, 27433870, 27434050, 27434193, 27434486, 27434974, 27435537
27439835, 27441326, 27441980, 27442041, 27444727, 27445330, 27445462
27445727, 27447452, 27447687, 27448162, 27449814, 27450355, 27450400
27450783, 27451049, 27451182, 27451187, 27451531, 27452046, 27452760
27453225, 27454722, 27457666, 27457891, 27458164, 27459909, 27459948
27460675, 27462994, 27466597, 27467543, 27468303, 27469245, 27469329
27471876, 27472969, 27473800, 27479358, 27480784, 27483974, 27484556
27486253, 27487309, 27487795, 27487919, 27489719, 27493674, 27496224
27496308, 27496424, 27497950, 27498477, 27501327, 27501413, 27501465
27502420, 27504190, 27504770, 27505229, 27505603, 27506774, 27507968
27508985, 27510959, 27511196, 27512439, 27517818, 27518227, 27518310
27520070, 27520900, 27522245, 27523368, 27523800, 27525909, 27526744
27532375, 27533780, 27533819, 27534509, 27537472, 27539757, 27540613
27541286, 27541468, 27542824, 27544030, 27544973, 27545630, 27547732
27550341, 27551855, 27554074, 27555481, 27558557, 27558559, 27558861
27560602, 27560702, 27562488, 27563629, 27563767, 27565906, 27567477
27570318, 27576342, 27576354, 27577758, 27578007, 27579353, 27580996
27585755, 27585800, 27586810, 27586895, 27587672, 27588271, 27591842
27592466, 27593389, 27593501, 27593585, 27595973, 27599689, 27599927

27601118, 27601441, 27602091, 27602488, 27603841, 27604293, 27607563
27607805, 27608669, 27610269, 27613080, 27613247, 27613530, 27615608
27616657, 27617522, 27617978, 27620808, 27623159, 27623844, 27625274
27625620, 27629756, 27631506, 27632114, 27634676, 27634991, 27635508
27644757, 27645940, 27649707, 27652302, 27654521, 27655217, 27658186
27658205, 27662528, 27663370, 27664702, 27666312, 27671633, 27679488
27679664, 27679793, 27679806, 27679961, 27680162, 27680509, 27680669
27682151, 27686599, 27688036, 27688099, 27688692, 27690513, 27690578
27691809, 27691920, 27691939, 27692215, 27693416, 27693713, 27694261
27695063, 27697092, 27698953, 27700466, 27701795, 27704237, 27705761
27707544, 27709046, 27710072, 27718914, 27719187, 27723002, 27723151
27726269, 27726780, 27729678, 27732323, 27733415, 27739006, 27740424
27740844, 27744211, 27745220, 27747869, 27748954, 27751006, 27751755
27753336, 27756900, 27757567, 27757794, 27757888, 27758544, 27758653
27758972, 27759077, 27759457, 27761402, 27766324, 27767081, 27772093
27772815, 27773602, 27774320, 27774539, 27779886, 27780562, 27782339
27783289, 27786772, 27791223, 27793533, 27797290, 27801337, 27803665
27807441, 27810967, 27812560, 27812593, 27813267, 27815347, 27818871
27824540, 27824543, 27825241, 27829295, 27832643, 27833369, 27833672
27834551, 27834569, 27834984, 27835925, 27839353, 27840386, 27843646
27846298, 27846499, 27847259, 27849825, 27850112, 27851757, 27856471
27861226, 27861452, 27861909, 27869075, 27869339, 27873412, 27873643
27876671, 27882176, 27886087, 27892488, 27896443, 27896458, 27898015
27900663, 27902561, 27908644, 27912301, 27918832, 27920184, 27924147
27926113, 27930478, 27931299, 27934468, 27935348, 27935493, 27938736
27940876, 27941110, 27941896, 27945870, 27948050, 27948153, 27950708
27952762, 27959594, 27960021, 27961746, 27964051, 27965400, 27965830
27966472, 27967484, 27970265, 27971503, 27971575, 27972265, 27975778
27977039, 27983174, 27984028, 27986817, 27989556, 27989849, 27991970
27993289, 27994325, 27994333, 27995215, 27995248, 27997875, 27998003
27999073, 27999597, 27999638, 28000269, 28004853, 28006704, 28018962
28019283, 28021205, 28022101, 28022847, 28023081, 28023399, 28023482
28024347, 28026866, 28033429, 28036487, 28043157, 28045903, 28057267
28058612, 28059199, 28067846, 28072130, 28072464, 28072567, 28074713
28085865, 28088762, 28090453, 28091981, 28098865, 28103600, 28103869
28104361, 28104409, 28106402, 28108003, 28108898, 28111583, 28120036
28120951, 28124631, 28125947, 28129791, 28132287, 28135648, 28165439
28165545, 28169711, 28174827, 28174951, 28175445, 28180464, 28181021
28184554, 28184800, 28187706, 28188330, 28189466, 28194173, 28199085
28201419, 28204443, 28209341, 28210192, 28211734, 28214943, 28215510
28218832, 28220398, 28223871, 28226179, 28227512, 28229360, 28236305
28238264, 28242712, 28256164, 28258608, 28264172, 28271119, 28271693
28279837, 28281094, 28282606, 28285766, 28290434, 28294563, 28302049
28304709, 28305001, 28305362, 28309182, 28312508, 28315031, 28315995

28319114, 28319623, 28320117, 28320399, 28321446, 28323201, 28328895
28329450, 28330714, 28333072, 28338399, 28338999, 28344964, 28350595
28354603, 28357401, 28361083, 28361221, 28361787, 28365111, 28369092
28371123, 28378446, 28379065, 28384353, 28385102, 28390273, 28391210
28391582, 28392168, 28392251, 28393678, 28396445, 28401116, 28403295
28413955, 28420042, 28420457, 28423598, 28432129, 28434028, 28435825
28445741, 28448314, 28455212, 28468312, 28475164, 28478676, 28481149
28481679, 28483184, 28489150, 28492362, 28493478, 28498976, 28501075
28502403, 28502773, 28503484, 28504545, 28507324, 28508053, 28508296
28508557, 28512761, 28513333, 28514693, 28521330, 28527416, 28528349
28535272, 28542455, 28544633, 28545134, 28545687, 28547068, 28553468
28571483, 28572834, 28578164, 28580528, 28584193, 28584217, 28584444
28585411, 28587723, 28600233, 28612674, 28614072, 28617631, 28617959
28621470, 28627255, 28627686, 28632559, 28636676, 28644549, 28646200
28670445, 28673203, 28678804, 28679454, 28680029, 28685371, 28692103
28692275, 28695694, 28697806, 28702188, 28708023, 28710827, 28713840
28714058, 28714988, 28728040, 28728272, 28730076, 28742555, 28747182
28749289, 28752599, 28755011, 28758090, 28758722, 28761812, 28767240
28770146, 28774416, 28776811, 28777214, 28781754, 28785022, 28785531
28791725, 28797711, 28803345, 28805612, 28805695, 28809909, 28817449
28819640, 28820669, 28831971, 28849751, 28852691, 28855922, 28856060
28856172, 28867992, 28876639, 28878525, 28881723, 28887509, 28889730
28891984, 28905457, 28919145, 28925880, 28938924, 28940179, 28951014
28951382, 28956908, 28960211, 28965084, 28986231, 28987454, 28993353
28993590, 29000190, 29002488, 29006527, 29009513, 29015118, 29015706
29024054, 29027694, 29027940, 29032276, 29033896, 29037290, 29051702
29056270, 29056767, 29123482, 29125374, 29136111, 29139591, 29158680
29163567, 29171683, 29177886, 29189889, 29198092, 29200700, 29203604
29205918, 29212433, 29213320, 29213351, 29224605, 29225076, 29230252
29230565, 29233415, 29241345, 29242017, 29247906, 29250317, 29255273
29285503, 29301463, 29312672, 29314539, 29331209, 29331493, 29339155
29347981, 29351662, 29353821, 29356752, 29364171, 29376346, 29378913
29379978, 29382784, 29386635, 29388020, 29388952, 29391849, 29394749
29395657, 29398488, 29404483, 29405462, 29407804, 29409149, 29412269
29417719, 29429264, 29430524, 29436454, 29437712, 29439522, 29464779
29465177, 29483672, 29483723, 29493122, 29500257, 29504682, 29511611
29515766, 29524599, 29525886, 29530515, 29531541, 29541742, 29542449
29548413, 29557261, 29607136, 29614098, 29616244, 29632265, 29633753
29637526, 29645349, 29668005, 29676089, 29687459, 29707896, 29724041
29782211, 29813494, 29893132, 30034456, 30088912, 30189023

Version 18.0.0.0.ru-2019-07.rur-2019-07.r1

Version 18.0.0.0.ru-2019-07.rur-2019-07.r1 includes the following:

- Patch [29757256](#): Database Release Update: 18.7.0.0.190716
- Patch [29774410](#): OJVM RELEASE UPDATE: 18.7.0.0.190716
- Patch [27539475](#): "ORA-3816 - MISSING MESSAGE INFORMATION FOR 3816 ERROR."
- Patch [29213893](#): "DBMS_STATS FAILING WITH ERROR ORA-01422 WHEN GATHERING STATS FOR USER\$ TABLE"
- Patch [28125601](#): DSTv32 for RDBMS (TZDATA2018E)
- Patch [28852325](#): DSTv33 for RDBMS (TZDATA2018G)
- Patch [28852334](#): DSTv33 for OJVM (TZDATA2018G)
- PreUpgrade Jar: preupgrade_181_cbuild_7_lf.zip
- Patch [28730253](#): SUPPORT NEW ERA REIWA FOR JAPANESE IMPERIAL CALENDAR

Oracle release update 18.7.0.0.190716, released July 2019

Bugs fixed:

```
8932139, 9062315, 13554903, 14221306, 20436508, 21095391, 21223848
21547051, 21744603, 21766220, 21806121, 23003564, 23061453, 23310101
23761724, 24489904, 24689376, 24737581, 24841671, 24844841, 24903291
24925863, 24971597, 25035594, 25035599, 25287072, 25293659, 25303284
25309116, 25348956, 25405687, 25487146, 25591292, 25607397, 25634405
25644811, 25663488, 25686739, 25726981, 25736428, 25743479, 25756945
25824236, 25882883, 25890002, 25908728, 25911069, 25929650, 25943740
25958554, 25986062, 25997810, 26083489, 26115103, 26164661, 26226953
26237338, 26281476, 26284722, 26297826, 26336101, 26362155, 26399691
26422277, 26423085, 26427905, 26440169, 26450454, 26476244, 26521043
26536320, 26595088, 26598422, 26615291, 26617804, 26646549, 26654411
26694735, 26731697, 26745002, 26785169, 26790514, 26792891, 26818960
26822620, 26843558, 26843664, 26846077, 26871815, 26883456, 26894737
26895149, 26898279, 26927998, 26928317, 26933599, 26943004, 26956033
26960097, 26961415, 26966120, 26966916, 26970175, 26985002, 26986173
26992964, 27000158, 27005278, 27006120, 27006664, 27016033, 27026401
27028251, 27030974, 27034688, 27035653, 27036408, 27037839, 27038986
27041253, 27044575, 27047831, 27053044, 27054231, 27058530, 27060167
```

27060859, 27061736, 27066451, 27066519, 27073066, 27075854, 27080874
27086821, 27090765, 27093423, 27101105, 27101527, 27101652, 27105900
27106301, 27110878, 27111780, 27112686, 27115422, 27119621, 27122162
27125872, 27126666, 27128580, 27135647, 27142529, 27143756, 27143882
27147979, 27150500, 27151826, 27152892, 27153641, 27155549, 27156355
27160360, 27160922, 27163928, 27164352, 27165231, 27166354, 27169796
27169888, 27170305, 27179264, 27181521, 27181537, 27181897, 27185188
27187440, 27189611, 27190851, 27193810, 27197334, 27199245, 27200959
27202015, 27208795, 27208953, 27210038, 27210263, 27210872, 27214085
27215007, 27216046, 27216224, 27220937, 27221900, 27222121, 27222626
27223075, 27224987, 27226913, 27228786, 27229389, 27231051, 27232983
27233563, 27236052, 27236110, 27236722, 27240246, 27240570, 27241221
27241247, 27242226, 27242616, 27244337, 27244785, 27249215, 27249531
27250547, 27251690, 27254851, 27255377, 27256000, 27256488, 27256534
27256584, 27258578, 27259307, 27259386, 27259983, 27262601, 27262650
27262798, 27262945, 27262991, 27263276, 27263996, 27266245, 27270197
27274456, 27274536, 27275136, 27275533, 27275776, 27276231, 27282707
27283029, 27283960, 27284375, 27284499, 27285244, 27288230, 27288638
27288894, 27292213, 27293599, 27294480, 27301308, 27301568, 27302594
27302632, 27302681, 27302695, 27302711, 27302714, 27302730, 27302777
27302800, 27302960, 27303287, 27303785, 27303938, 27304410, 27304936
27305318, 27307868, 27308088, 27310092, 27313687, 27314206, 27314390
27318117, 27318869, 27320576, 27321179, 27321834, 27326204, 27329812
27330158, 27330161, 27333658, 27333664, 27333693, 27333731, 27334316
27334648, 27335682, 27338912, 27338946, 27339115, 27339396, 27339483
27339495, 27341036, 27345190, 27345231, 27345450, 27345498, 27346329
27346644, 27346709, 27346949, 27347126, 27348081, 27348707, 27349393
27350267, 27351628, 27352600, 27354783, 27356373, 27357773, 27358241
27359178, 27359368, 27360126, 27364854, 27364891, 27364916, 27364947
27365139, 27365702, 27365993, 27367194, 27368850, 27372756, 27375260
27375542, 27376871, 27378103, 27379233, 27381383, 27381417, 27381498
27381656, 27384222, 27386467, 27389352, 27392187, 27394086, 27395404
27395416, 27395794, 27396357, 27396365, 27396377, 27396624, 27396666
27396672, 27396813, 27397048, 27398080, 27398660, 27400416, 27400598
27401637, 27404668, 27405242, 27405645, 27405696, 27410279, 27410300
27410595, 27412805, 27416327, 27416997, 27417186, 27420715, 27421101
27421733, 27422874, 27423251, 27424405, 27425507, 27425622, 27426363
27427805, 27430802, 27432062, 27432338, 27432355, 27432826, 27433870
27434050, 27434193, 27434486, 27434974, 27435537, 27439835, 27441326
27441980, 27442041, 27444727, 27445330, 27445462, 27445727, 27447452
27447687, 27448162, 27449814, 27450355, 27450400, 27450783, 27451049
27451182, 27451187, 27451531, 27452046, 27452760, 27453225, 27454722
27457666, 27457891, 27458164, 27459909, 27460675, 27462994, 27466597
27467543, 27468303, 27469245, 27469329, 27471876, 27472969, 27473800

27479358, 27480784, 27483974, 27484556, 27486253, 27487309, 27487795
27487919, 27489719, 27493674, 27496224, 27496308, 27496424, 27497950
27498477, 27501327, 27501413, 27501465, 27502420, 27504190, 27504770
27505229, 27505603, 27506774, 27507968, 27508985, 27510959, 27511196
27512439, 27517818, 27518227, 27518310, 27520070, 27520900, 27522245
27523368, 27523800, 27525909, 27526744, 27532375, 27533819, 27534509
27537472, 27539757, 27540613, 27541286, 27541468, 27542824, 27544030
27544973, 27545630, 27547732, 27550341, 27551855, 27554074, 27555481
27558557, 27558559, 27558861, 27560602, 27560702, 27562488, 27563629
27563767, 27565906, 27567477, 27570318, 27576342, 27577758, 27578007
27579353, 27580996, 27585755, 27585800, 27586810, 27586895, 27587672
27591842, 27592466, 27593389, 27593501, 27593585, 27595973, 27599689
27599927, 27601118, 27602091, 27602488, 27603841, 27604293, 27607563
27607805, 27608669, 27610269, 27613080, 27613247, 27613530, 27615608
27616657, 27617522, 27617978, 27620808, 27623844, 27625274, 27625620
27629756, 27631506, 27634676, 27634991, 27635508, 27644757, 27645940
27649707, 27652302, 27654521, 27655217, 27658186, 27658205, 27662528
27663370, 27664702, 27666312, 27671633, 27679488, 27679664, 27679793
27679806, 27679961, 27680162, 27680509, 27680669, 27682151, 27686599
27688036, 27688099, 27688692, 27690513, 27690578, 27691809, 27691920
27691939, 27692215, 27693416, 27693713, 27694261, 27695063, 27697092
27698953, 27700466, 27701795, 27704237, 27705761, 27707544, 27709046
27710072, 27718914, 27719187, 27723002, 27723151, 27726269, 27726780
27729678, 27732323, 27733415, 27739006, 27740424, 27740844, 27744211
27745220, 27747869, 27748954, 27751006, 27751755, 27753336, 27756900
27757567, 27757794, 27757888, 27758972, 27759077, 27759457, 27761402
27766324, 27767081, 27772093, 27772815, 27773602, 27774320, 27774539
27779886, 27780562, 27782339, 27783289, 27786772, 27791223, 27793533
27797290, 27801337, 27803665, 27807441, 27810967, 27812560, 27812593
27813267, 27815347, 27818871, 27824540, 27824543, 27825241, 27829295
27832643, 27833369, 27833672, 27834551, 27834984, 27835925, 27839353
27840386, 27843646, 27846298, 27846499, 27847259, 27849825, 27851757
27856471, 27861226, 27861452, 27861909, 27869075, 27869339, 27873643
27876671, 27882176, 27892488, 27896443, 27896458, 27898015, 27900663
27908644, 27912301, 27918832, 27920184, 27924147, 27926113, 27930478
27931299, 27934468, 27935348, 27938736, 27940876, 27941110, 27941896
27945870, 27948050, 27948153, 27950708, 27952762, 27959594, 27960021
27961746, 27964051, 27965830, 27966472, 27970265, 27971503, 27971575
27972265, 27975778, 27977039, 27983174, 27984028, 27986817, 27989556
27989849, 27991970, 27993289, 27994325, 27994333, 27995215, 27995248
27997875, 27998003, 27999073, 27999597, 27999638, 28000269, 28004853
28006704, 28018962, 28019283, 28021205, 28022101, 28022847, 28023081
28023399, 28023482, 28024347, 28026866, 28033429, 28036487, 28045903
28057267, 28058612, 28059199, 28067846, 28072130, 28072464, 28072567

28074713, 28085865, 28088762, 28090453, 28091981, 28098865, 28103600
28103869, 28104361, 28106402, 28108003, 28108898, 28111583, 28120036
28120951, 28124631, 28129791, 28132287, 28135648, 28165439, 28165545
28169711, 28174827, 28174951, 28175445, 28180464, 28181021, 28184554
28184800, 28187706, 28188330, 28189466, 28194173, 28199085, 28201419
28204443, 28209341, 28210192, 28211734, 28214943, 28215510, 28218832
28220398, 28223871, 28226179, 28227512, 28229360, 28236305, 28238264
28242712, 28258608, 28264172, 28271119, 28271693, 28279837, 28281094
28282606, 28285766, 28290434, 28302049, 28304709, 28305001, 28305362
28309182, 28312508, 28315031, 28315995, 28319623, 28320117, 28320399
28321446, 28323201, 28328895, 28329450, 28330714, 28333072, 28338399
28338999, 28344964, 28350595, 28354603, 28357401, 28361083, 28361221
28361787, 28365111, 28369092, 28371123, 28378446, 28379065, 28385102
28390273, 28391582, 28392168, 28392251, 28393678, 28396445, 28403295
28413955, 28420042, 28420457, 28423598, 28432129, 28434028, 28435825
28445741, 28448314, 28455212, 28468312, 28475164, 28478676, 28481149
28481679, 28483184, 28489150, 28492362, 28493478, 28501075, 28502403
28502773, 28503484, 28504545, 28507324, 28508053, 28508296, 28508557
28512761, 28513333, 28514693, 28521330, 28527416, 28528349, 28535272
28544633, 28545134, 28545687, 28547068, 28553468, 28571483, 28572834
28578164, 28580528, 28584193, 28584217, 28584444, 28587723, 28600233
28612674, 28614072, 28617631, 28617959, 28621470, 28627255, 28632559
28636676, 28644549, 28646200, 28670445, 28673203, 28679454, 28680029
28685371, 28692275, 28695694, 28702188, 28708023, 28710827, 28713840
28714058, 28728040, 28728272, 28730076, 28742555, 28747182, 28749289
28752599, 28755011, 28758090, 28758722, 28761812, 28767240, 28770146
28774416, 28777214, 28781754, 28785022, 28785531, 28803345, 28805612
28805695, 28809909, 28819640, 28849751, 28852691, 28856060, 28856172
28878525, 28881723, 28887509, 28891984, 28919145, 28925880, 28938924
28940179, 28951014, 28951382, 28956908, 28960211, 28986231, 28987454
28993353, 28993590, 29000190, 29006527, 29015118, 29015706, 29024054
29027694, 29032276, 29033896, 29037290, 29051702, 29056270, 29123482
29125374, 29136111, 29139591, 29158680, 29171683, 29177886, 29189889
29200700, 29203604, 29205918, 29224605, 29230565, 29242017, 29301463
29314539, 29331209, 29331493, 29339155, 29347981, 29356752, 29364171
29376346, 29378913, 29379978, 29382784, 29388020, 29388952, 29394749
29395657, 29405462, 29409149, 29412269, 29429264, 29430524, 29436454
29437712, 29439522, 29504682, 29511611, 29531541, 29542449, 29616244
29676089, 29813494

Amazon RDS for Oracle Database 12c Release 2 (12.2.0.1)

For Oracle Database 12c Release 2 (12.2.0.1), Oracle changed the way it releases Oracle Database updates. Instead of Patch Set Updates (PSUs), Oracle supplies Release Updates (RUs) and Release Updates Revisions (RURs). RUs contain optimizer changes, feature additions, and security fixes. RURs only contain security fixes for the two preceding quarterly patch cycles. We don't support applying one-off patches to individual DB instances.

Starting with Oracle Database 12c Release 2 (12.2.0.1), Amazon RDS makes new RUs available every quarter. The naming format for an RU is as follows: release.ru-date.rur-date.rnumber. The release is the five-digit number of the release, for example, 12.2.0.1. The date is the year and month when the update was made available by Oracle. The number is the revision. The Oracle Database 12c update released by Oracle in April 2022 is named 12.2.0.1.ru-2022-04.rur-2022-04.r1.

An upgrade to an RU is called a minor version upgrade. Even though the string "rur" appears in the name of the patch, it is an RU rather than an RUR. Amazon RDS upgrades from one RU to another RU. RDS doesn't support RURs as part of its minor version upgrade mechanism. We don't support applying one-off patches to individual DB instances.

For more information about the new Oracle Database versioning system, see the posts [Differences between PSU / BP and RU / RUR](#) at the Upgrade your Database – NOW! blog and [RU and RUR patches for Oracle Database 12c Release 2 \(12.2\)](#) at the Oracle–Help blog.

Note

RDS for Oracle Database 12c is no longer supported. This information is only useful if you want to upgrade an Oracle Database 12c snapshot.

To find what RUs are applied to Amazon RDS for Oracle Database 12c Release 2 (12.2.0.1), see the following table.

Date	RU
2022 January	12.2.0.1.ru-2022-01.rur-2022-01.r1
2021 October	12.2.0.1.ru-2021-10.rur-2021-10.r1

Date	RU
2021 July	12.2.0.1.ru-2021-07.rur-2021-07.r1
2021 April	12.2.0.1.ru-2021-04.rur-2021-04.r1
2021 January	12.2.0.1.ru-2021-01.rur-2021-01.r1
2020 October	12.2.0.1.ru-2020-10.rur-2020-10.r1
2020 July	12.2.0.1.ru-2020-07.rur-2020-07.r1
2020 April	12.2.0.1.ru-2020-04.rur-2020-04.r1
2020 January	12.2.0.1.ru-2020-01.rur-2020-01.r1
2019 October	12.2.0.1.ru-2019-10.rur-2019-10.r1
2019 July	12.2.0.1.ru-2019-07.rur-2019-07.r1
2019 April	12.2.0.1.ru-2019-04.rur-2019-04.r1
2019 January	12.2.0.1.ru-2019-01.rur-2019-01.r1
2018 October	12.2.0.1.ru-2018-10.rur-2018-10.r1

Version 12.2.0.1.ru-2022-01.rur-2022-01.r1

Version 12.2.0.1.ru-2022-01.rur-2022-01.r1 includes the following:

- Patch [33587128](#): DATABASE JAN 2022 RELEASE UPDATE 12.2.0.1.220118
- Patch [33561275](#): OJVM RELEASE UPDATE 12.2.0.1.220118
- Patch [33613829](#): RDBMS - DSTV37 UPDATE - TZDATA2021E
- Patch [33613833](#): DSTV37 UPDATE - TZDATA2021E - NEED OJVM FIX
- Patch [29213893](#): DBMS_STATS FAILING WITH ERROR ORA-01422 WHEN GATHERING STATS FOR USER\$ TABLE
- Patch [28730253](#): SUPPORT NEW ERA REIWA FOR JAPANESE IMPERIAL CALENDAR
- Patch [26352615](#): SPILLOVER AUDIT FILES CANNOT BE FOUND ORA-46372

- PreUpgrade Jar: preupgrade_12201_cbuild_24_lf.zip

Combined patches for version 12.2.0.1.ru-2022-01.rur-2022-01.r1, released January 2022

Bugs fixed:

7391838, 8480838, 8932139, 8975044, 12763598, 13554903, 14221306
14690846, 15931756, 16002385, 16438495, 16727454, 16942578, 17027695
17533661, 17947871, 17958365, 18308268, 18521691, 18594510, 18774543
18878420, 18986501, 19072655, 19211433, 19285025, 19327292, 19526548
19614243, 19647894, 19649997, 19702201, 19721304, 20003668, 20087519
20118035, 20120236, 20324049, 20436508, 20532077, 20549013, 20588486
20591151, 20617383, 20620169, 20736227, 20756305, 20866970, 20917487
20976443, 21070321, 21089435, 21095391, 21143725, 21147908, 21159907
21178363, 21186167, 21197098, 21216226, 21320338, 21355390, 21433452
21479706, 21517767, 21520266, 21547051, 21638600, 21744603, 21788462
21837606, 21882528, 21935698, 21962287, 21981529, 21985256, 22007324
22070226, 22070473, 22070853, 22072543, 22087683, 22104866, 22107360
22174392, 22179537, 22282748, 22310426, 22347493, 22363790, 22364044
22367053, 22379010, 22446455, 22454940, 22468255, 22495673, 22503283
22503297, 22504793, 22522515, 22530986, 22564336, 22568728, 22581771
22594071, 22599050, 22628825, 22645009, 22645496, 22654475, 22700845
22726044, 22729345, 22820798, 22826067, 22843979, 22845846, 22864303
22898198, 22921674, 22939829, 22950945, 22970869, 22981722, 23018676
23019710, 23026585, 23035249, 23055900, 23056058, 23061453, 23065002
23066146, 23080557, 23104033, 23105538, 23109325, 23110523, 23125560
23126545, 23127945, 23143074, 23151677, 23168363, 23169712, 23177923
23179662, 23184263, 23197730, 23234232, 23237091, 23249829, 23271203
23278750, 23281269, 23282973, 23300142, 23306590, 23308065, 23310101
23312077, 23328639, 23333567, 23336559, 23342170, 23481673, 23491861
23499004, 23499160, 23521523, 23527363, 23533647, 23548817, 23567857
23572982, 23581777, 23588722, 23599216, 23600861, 23602213, 23614158
23627427, 23645516, 23665623, 23709062, 23715460, 23715518, 23730961
23733981, 23735292, 23738304, 23741944, 23743596, 23746128, 23749454
23761724, 23763462, 24006569, 24010030, 24289874, 24289895, 24294174
24303148, 24307571, 24308349, 24318855, 24326444, 24326846, 24328857
24330708, 24332831, 24334708, 24336249, 24337882, 24341675, 24343905
24345420, 24346821, 24348685, 24350620, 24352981, 24355111, 24357348
24368004, 24371491, 24373528, 24373756, 24374976, 24376875, 24376878
24383086, 24385983, 24401351, 24403922, 24409977, 24415926, 24416451

24421668, 24423416, 24425056, 24425998, 24432875, 24435982, 24437162
24440612, 24440648, 24443539, 24445571, 24457597, 24460392, 24461826
24467122, 24468470, 24470606, 24471079, 24471473, 24473736, 24480567
24484749, 24485034, 24485161, 24485174, 24485619, 24486059, 24486237
24509056, 24516314, 24530364, 24534401, 24554533, 24555417, 24556862
24556967, 24560906, 24563422, 24570214, 24570598, 24573817, 24578718
24578797, 24588377, 24589081, 24589590, 24591506, 24593740, 24595699
24596874, 24600330, 24609592, 24609996, 24611527, 24616637, 24617969
24623975, 24624166, 24642495, 24654629, 24655717, 24664211, 24668398
24669189, 24669730, 24674197, 24674955, 24676172, 24677696, 24680959
24687075, 24689376, 24692973, 24693010, 24693290, 24697323, 24699619
24701840, 24710696, 24713381, 24714096, 24717183, 24717859, 24718260
24719799, 24735430, 24737064, 24737403, 24737581, 24737954, 24739791
24744383, 24744686, 24752618, 24757934, 24759556, 24760407, 24763196
24764085, 24766309, 24784414, 24786669, 24791883, 24792678, 24793511
24796092, 24797119, 24798481, 24800423, 24801152, 24802934, 24808504
24811725, 24812047, 24817447, 24818566, 24827228, 24827654, 24831514
24835919, 24841671, 24843188, 24844549, 24844841, 24845157, 24848746
24848923, 24850622, 24907917, 24908063, 24908321, 24911709, 24912588
24920582, 24921478, 24922704, 24923080, 24923215, 24923338, 24923790
24924667, 24926999, 24929210, 24938784, 24940060, 24942749, 24953434
24957555, 24960044, 24960809, 24965426, 24966594, 24966788, 24967993
24968162, 24976007, 24978100, 25022574, 25027852, 25028996, 25029022
25029423, 25031502, 25032818, 25034396, 25036006, 25036474, 25042823
25044977, 25045228, 25050160, 25051465, 25051628, 25054064, 25057811
25058080, 25060506, 25062592, 25063971, 25065563, 25072986, 25077278
25078611, 25086233, 25087436, 25091141, 25092777, 25093872, 25095982
25098160, 25099339, 25099497, 25099758, 25100063, 25100579, 25103996
25107662, 25110233, 25114561, 25115178, 25120284, 25120668, 25120742
25121089, 25123585, 25124363, 25129925, 25130312, 25140197, 25145163
25145215, 25150925, 25159176, 25162645, 25164293, 25166187, 25171041
25171084, 25173124, 25175723, 25176408, 25178032, 25178101, 25178179
25179774, 25182817, 25184453, 25184555, 25186079, 25189723, 25191872
25192044, 25192528, 25192729, 25195901, 25199585, 25200101, 25201454
25202355, 25203656, 25205368, 25205954, 25206864, 25207410, 25209912
25210268, 25210499, 25210690, 25211628, 25219450, 25223839, 25224242
25225795, 25226665, 25227381, 25230870, 25230945, 25237577, 25240188
25240590, 25241448, 25241625, 25244807, 25248384, 25250109, 25251648
25257085, 25259611, 25262869, 25263960, 25265499, 25269133, 25283790
25287072, 25288078, 25293659, 25296876, 25299227, 25299807, 25300427
25303284, 25303756, 25305405, 25307368, 25309116, 25313154, 25313411
25316758, 25317989, 25320555, 25323525, 25328093, 25328518, 25329664
25335249, 25335360, 25335790, 25337332, 25337640, 25348567, 25348956
25353983, 25356118, 25357142, 25360661, 25362958, 25367588, 25367721

25382812, 25383204, 25384462, 25386748, 25388573, 25388896, 25392535
25393714, 25395696, 25397936, 25398306, 25404117, 25404202, 25405100
25405687, 25405813, 25410017, 25410180, 25410802, 25410877, 25411036
25415713, 25416731, 25417050, 25417056, 25417958, 25425005, 25425451
25425760, 25427662, 25429959, 25430120, 25433696, 25435038, 25437699
25440818, 25442559, 25444961, 25445168, 25451531, 25452452, 25455795
25457409, 25459958, 25462714, 25463844, 25472112, 25472885, 25476125
25476149, 25477657, 25478885, 25479164, 25481087, 25482971, 25486384
25489342, 25489367, 25489607, 25492379, 25498930, 25498994, 25516250
25524955, 25528838, 25530080, 25530814, 25535668, 25536819, 25537470
25539063, 25540738, 25546580, 25546608, 25547901, 25551676, 25553616
25554787, 25555252, 25557886, 25558986, 25560487, 25560538, 25561296
25569149, 25569504, 25570929, 25573623, 25575348, 25575369, 25575628
25576115, 25579458, 25579761, 25591394, 25594901, 25597525, 25598473
25599425, 25600342, 25600421, 25601999, 25602488, 25603923, 25606091
25607726, 25612095, 25614866, 25616268, 25616359, 25616417, 25616645
25631933, 25633101, 25634317, 25634348, 25635149, 25638456, 25639019
25643818, 25643889, 25643931, 25646373, 25647325, 25648731, 25653109
25654459, 25654936, 25655390, 25655966, 25659655, 25660847, 25661819
25662088, 25662101, 25662524, 25663488, 25667973, 25669791, 25670786
25671354, 25672640, 25674386, 25680221, 25685152, 25686739, 25687460
25691904, 25694206, 25695903, 25696520, 25699321, 25700654, 25709368
25710420, 25715167, 25717371, 25722055, 25722608, 25722720, 25723097
25723158, 25728085, 25729507, 25730014, 25734963, 25736747, 25739065
25740844, 25741955, 25743479, 25747569, 25749273, 25752755, 25754606
25756945, 25757697, 25757748, 25760195, 25762221, 25764020, 25766822
25768681, 25772669, 25774077, 25775213, 25775444, 25780343, 25783447
25784002, 25785331, 25785441, 25788879, 25789041, 25789277, 25789579
25790353, 25792911, 25795865, 25797092, 25797124, 25797305, 25800464
25802510, 25803364, 25803545, 25807997, 25809524, 25810263, 25810704
25811105, 25811650, 25812390, 25813931, 25818707, 25822410, 25823532
25823754, 25824372, 25825910, 25826740, 25830492, 25832935, 25834581
25835365, 25838361, 25838755, 25852885, 25856821, 25858672, 25861398
25865785, 25866948, 25870579, 25871177, 25871639, 25871753, 25872127
25872389, 25873336, 25874050, 25874678, 25881255, 25882264, 25883438
25885148, 25888073, 25888984, 25890002, 25890046, 25890056, 25890673
25890782, 25894239, 25895224, 25897615, 25898228, 25904273, 25904490
25905130, 25906117, 25906886, 25908728, 25911724, 25914276, 25919622
25932524, 25932728, 25933494, 25941836, 25942868, 25943271, 25945130
25947799, 25951571, 25953857, 25954022, 25954054, 25957038, 25963024
25964954, 25967544, 25967985, 25970731, 25971286, 25972417, 25973152
25975723, 25977302, 25980605, 25980770, 25981498, 25982666, 25986062
25990907, 25995938, 25997810, 26006257, 26007010, 26019148, 26023042
26024732, 26024784, 26025681, 26029075, 26029777, 26029780, 26032573

26034119, 26036748, 26037215, 26038086, 26039623, 26040483, 26045732
26051656, 26078437, 26078493, 26080410, 26083298, 26087754, 26088426
26088836, 26089669, 26090767, 26090893, 26091640, 26091786, 26095327
26095405, 26096382, 26108080, 26108337, 26110259, 26110632, 26111842
26112621, 26115103, 26121990, 26123175, 26124078, 26130486, 26137367
26137416, 26138085, 26145560, 26149904, 26153372, 26153977, 26168933
26169341, 26169345, 26170659, 26170715, 26176002, 26187943, 26189861
26198757, 26198926, 26201113, 26203182, 26223039, 26237338, 26237431
26237773, 26238195, 26242031, 26242677, 26243698, 26244115, 26245237
26248143, 26249718, 26256131, 26257953, 26259265, 26261327, 26263328
26263721, 26268756, 26269790, 26271001, 26274660, 26275023, 26275415
26277439, 26281476, 26285062, 26285933, 26301540, 26308650, 26309047
26317991, 26318200, 26318627, 26323308, 26324206, 26324769, 26325856
26327418, 26327624, 26327775, 26330994, 26331743, 26333141, 26334602
26336977, 26338953, 26351334, 26351996, 26352615, 26353617, 26354844
26356098, 26358670, 26359091, 26362155, 26362821, 26366517, 26367012
26367460, 26371725, 26373967, 26374791, 26375052, 26375250, 26375330
26380097, 26385189, 26386858, 26388538, 26396790, 26398675, 26399626
26399691, 26399839, 26405036, 26406387, 26407408, 26410240, 26412540
26418088, 26420561, 26421667, 26422277, 26423085, 26426526, 26426967
26430323, 26430737, 26434436, 26434999, 26435073, 26436168, 26438612
26439748, 26440142, 26440169, 26440749, 26441345, 26442308, 26444601
26444887, 26446098, 26451793, 26452606, 26474662, 26474703, 26475419
26476090, 26476244, 26478970, 26479173, 26482376, 26486365, 26492666
26492866, 26493289, 26498354, 26513067, 26513709, 26521043, 26522439
26523432, 26526726, 26526799, 26536320, 26537307, 26541685, 26542135
26542236, 26542835, 26544823, 26545688, 26546070, 26546664, 26546754
26548363, 26556014, 26558437, 26569225, 26570134, 26575788, 26580633
26582460, 26584641, 26588069, 26597140, 26599395, 26608137, 26608238
26609942, 26615291, 26615690, 26617804, 26623652, 26626879, 26629381
26633355, 26633558, 26635897, 26637273, 26637824, 26639167, 26641610
26641852, 26650226, 26650540, 26654363, 26658759, 26659182, 26669550
26680105, 26712331, 26714486, 26714910, 26716835, 26717528, 26724511
26725687, 26727397, 26729494, 26729611, 26740700, 26743240, 26744595
26745002, 26751106, 26751171, 26755171, 26758193, 26764561, 26765212
26768025, 26775602, 26784509, 26790923, 26794786, 26797591, 26798411
26798514, 26798516, 26802503, 26816582, 26820076, 26822314, 26822620
26824833, 26828994, 26829845, 26830694, 26832296, 26833932, 26837569
26837702, 26840654, 26844406, 26844870, 26849779, 26855406, 26855855
26871815, 26875822, 26883456, 26895149, 26896659, 26898563, 26907236
26907327, 26908788, 26909100, 26909504, 26910716, 26911000, 26923777
26939314, 26943004, 26944190, 26947373, 26958896, 26963310, 26966616
26966916, 26967713, 26968670, 26969321, 26970175, 26970717, 26981902
26983259, 26985002, 26986173, 26992964, 26999139, 27000158, 27000702

27006120, 27006664, 27009164, 27013146, 27015449, 27028251, 27032785
27033520, 27033652, 27034890, 27036163, 27037839, 27038986, 27039712
27044169, 27044297, 27045634, 27052607, 27056711, 27058530, 27060167
27060859, 27061736, 27072923, 27073314, 27079140, 27079651, 27084613
27087426, 27090765, 27092508, 27093423, 27097854, 27100800, 27101105
27105900, 27106179, 27110878, 27115422, 27117822, 27119621, 27119861
27122162, 27124624, 27125872, 27133662, 27134734, 27135647, 27135993
27138325, 27142120, 27142373, 27142529, 27144928, 27151826, 27153641
27160922, 27161071, 27162390, 27162405, 27163928, 27165231, 27169796
27170305, 27181537, 27181897, 27185188, 27195935, 27199245, 27200959
27202015, 27203055, 27207110, 27207634, 27208795, 27213224, 27216046
27217412, 27223075, 27229389, 27231051, 27234962, 27236722, 27242226
27244337, 27244999, 27248917, 27249531, 27250547, 27251690, 27254335
27255377, 27256000, 27258578, 27259307, 27262945, 27264464, 27266245
27274456, 27274536, 27275533, 27276231, 27283960, 27284499, 27285244
27288638, 27292213, 27293599, 27302711, 27302730, 27303287, 27303938
27304410, 27304906, 27305039, 27308088, 27314206, 27314390, 27314697
27320576, 27321179, 27329612, 27333106, 27334316, 27338912, 27338946
27339115, 27345231, 27346709, 27348081, 27349393, 27350267, 27351628
27359178, 27364854, 27365014, 27367194, 27369515, 27370965, 27375542
27381498, 27383281, 27386467, 27392968, 27393570, 27394703, 27395416
27396624, 27396672, 27396813, 27397048, 27400416, 27400598, 27404573
27404668, 27405645, 27416997, 27423251, 27424405, 27426363, 27432062
27432826, 27433385, 27433870, 27434193, 27439835, 27441326, 27442041
27443406, 27445727, 27452046, 27457891, 27459593, 27459948, 27461740
27466597, 27468303, 27486805, 27487919, 27489107, 27493674, 27494663
27501373, 27501413, 27502420, 27504770, 27505229, 27508985, 27510959
27525909, 27529661, 27533780, 27533819, 27534509, 27539876, 27540613
27544973, 27548131, 27554074, 27555481, 27558861, 27560602, 27562488
27565906, 27567477, 27576342, 27576354, 27587905, 27588271, 27589260
27593501, 27595973, 27601118, 27601441, 27607563, 27611612, 27613080
27613530, 27613554, 27615649, 27617978, 27620808, 27623159, 27629756
27629928, 27632114, 27634676, 27634991, 27642235, 27645231, 27657712
27658186, 27666312, 27671633, 27680669, 27686599, 27687880, 27688036
27688099, 27688692, 27691920, 27691939, 27693416, 27693713, 27695063
27698953, 27700466, 27704237, 27709046, 27710072, 27717210, 27719000
27726780, 27729678, 27739006, 27740424, 27745728, 27748954, 27751755
27757567, 27757888, 27758544, 27758653, 27758972, 27759077, 27769361
27779886, 27793533, 27799032, 27801337, 27818389, 27819881, 27824540
27824543, 27825241, 27828794, 27828892, 27829295, 27833672, 27834551
27834569, 27835925, 27837219, 27839353, 27839616, 27846298, 27846499
27847259, 27850112, 27855490, 27861226, 27873412, 27882176, 27886087
27897759, 27898015, 27902561, 27908396, 27909478, 27927431, 27929287
27929509, 27931299, 27935493, 27940876, 27945870, 27951817, 27952586

27959048, 27959594, 27964513, 27966472, 27967484, 27983174, 27986817
27994325, 27995215, 27995248, 27997875, 27998003, 27999073, 27999638
28000269, 28007516, 28019592, 28022101, 28023081, 28023399, 28023482
28024793, 28025414, 28026866, 28033429, 28040776, 28043157, 28045903
28066655, 28067846, 28071549, 28072383, 28072567, 28073470, 28074713
28079127, 28090453, 28092783, 28098040, 28098160, 28099662, 28104176
28108003, 28111583, 28120036, 28120951, 28124631, 28125601, 28125947
28129791, 28140658, 28157786, 28164480, 28165439, 28171079, 28174827
28180464, 28181021, 28184554, 28188330, 28190796, 28194173, 28199085
28201419, 28204262, 28209985, 28215510, 28218832, 28220398, 28223871
28226179, 28229360, 28236305, 28238264, 28242712, 28250929, 28256164
28271119, 28276054, 28279837, 28281094, 28282606, 28287484, 28290434
28294563, 28302049, 28305001, 28305362, 28305607, 28309406, 28319114
28320399, 28330714, 28330971, 28350595, 28354603, 28357401, 28361221
28365111, 28369092, 28371123, 28373960, 28375383, 28378446, 28384353
28386259, 28388910, 28389153, 28390273, 28391210, 28394726, 28396445
28397317, 28401116, 28402823, 28420042, 28420457, 28423598, 28432129
28434028, 28435902, 28437315, 28439086, 28454215, 28454242, 28468312
28468493, 28481149, 28483184, 28489150, 28501075, 28502098, 28502343
28503038, 28507324, 28508053, 28508557, 28512336, 28521330, 28522441
28528349, 28530171, 28535127, 28535272, 28537715, 28538439, 28542455
28545134, 28546290, 28547068, 28547478, 28564479, 28566241, 28571483
28572407, 28572834, 28578164, 28578945, 28585411, 28587723, 28589509
28600233, 28602253, 28606598, 28608211, 28612674, 28614372, 28617631
28617959, 28621470, 28622202, 28627255, 28636676, 28639299, 28642899
28644756, 28661362, 28678804, 28690694, 28691965, 28692103, 28692275
28697526, 28697806, 28703812, 28708023, 28709063, 28710469, 28710734
28714988, 28715655, 28728272, 28730044, 28730253, 28734355, 28740708
28742555, 28749289, 28749724, 28758090, 28758722, 28774416, 28776431
28777174, 28791725, 28797711, 28803345, 28808314, 28817449, 28819640
28820669, 28821847, 28827682, 28830691, 28831971, 28835937, 28836716
28838066, 28844866, 28847136, 28849751, 28852325, 28852691, 28855922
28856060, 28856172, 28863263, 28863487, 28867992, 28887305, 28889730
28891984, 28905390, 28910498, 28915870, 28927452, 28945922, 28948554
28949888, 28951026, 28951382, 28956908, 28959493, 28960211, 28965095
28965787, 28986231, 28986257, 28987439, 28991884, 28993295, 28993590
29002488, 29006527, 29007321, 29007353, 29009513, 29013832, 29024054
29026309, 29026582, 29027694, 29032276, 29039510, 29040739, 29044086
29044954, 29048498, 29048728, 29050886, 29060216, 29061016, 29115857
29125374, 29154725, 29158680, 29163567, 29170232, 29173817, 29179097
29182517, 29182901, 29189889, 29198092, 29200700, 29203604, 29213320
29213351, 29213893, 29224605, 29224710, 29237575, 29247712, 29249289
29250230, 29250317, 29254623, 29260956, 29278684, 29296257, 29301463
29307638, 29312889, 29337294, 29338348, 29339155, 29342099, 29343086

29343156, 29343861, 29347943, 29353821, 29372069, 29372460, 29375355
29375984, 29376346, 29378913, 29379978, 29383695, 29388020, 29398488
29399336, 29405462, 29409149, 29409455, 29415774, 29418165, 29420254
29426241, 29434301, 29436454, 29437712, 29450812, 29452251, 29454978
29463047, 29464779, 29472618, 29477015, 29483626, 29483672, 29483723
29483771, 29500257, 29500963, 29501218, 29504682, 29511611, 29524985
29530515, 29536342, 29538631, 29542449, 29542580, 29548592, 29549071
29559395, 29564592, 29580394, 29591343, 29608023, 29614575, 29614987
29621961, 29625065, 29626154, 29629430, 29633753, 29637526, 29637560
29645349, 29651520, 29656843, 29667994, 29676089, 29678163, 29685137
29687220, 29688867, 29689697, 29690625, 29703195, 29705793, 29707896
29717901, 29719146, 29724063, 29726695, 29741319, 29766435, 29767177
29769901, 29774362, 29782211, 29791152, 29794174, 29794462, 29796916
29807964, 29813494, 29815341, 29817278, 29822714, 29825525, 29836659
29841687, 29844131, 29846645, 29853485, 29865188, 29869404, 29869906
29875459, 29876358, 29881050, 29881575, 29884958, 29893132, 29902299
29902311, 29914449, 29930457, 29933718, 29941062, 29942554, 29944035
29944159, 29944660, 29951620, 29951759, 29961353, 29962927, 29962939
29965888, 29991257, 29997937, 30008125, 30018017, 30018903, 30031027
30039959, 30064268, 30068871, 30076253, 30078934, 30086166, 30088912
30092280, 30098251, 30099302, 30114477, 30116203, 30117469, 30120608
30125995, 30128047, 30131286, 30139392, 30147928, 30150731, 30160625
30163243, 30164714, 30173113, 30177597, 30179644, 30186706, 30189023
30193736, 30196358, 30200680, 30200758, 30215130, 30218044, 30218317
30223712, 30225443, 30239480, 30241567, 30244787, 30246179, 30247305
30252098, 30252156, 30253255, 30265523, 30265615, 30272329, 30281591
30282501, 30283932, 30293345, 30305880, 30312094, 30312568, 30316897
30320029, 30324059, 30325407, 30331356, 30342878, 30345926, 30352623
30355490, 30357897, 30364613, 30365745, 30368482, 30368668, 30372081
30374739, 30377692, 30381207, 30384121, 30384152, 30387666, 30391272
30397100, 30402386, 30403763, 30408515, 30413137, 30416034, 30421204
30431274, 30441687, 30443393, 30453442, 30458593, 30460922, 30464250
30464655, 30473634, 30474774, 30475041, 30475115, 30476768, 30485255
30489582, 30496957, 30497057, 30498824, 30501574, 30503943, 30509277
30510527, 30517516, 30522998, 30528547, 30528704, 30532811, 30533198
30534662, 30578221, 30581448, 30582500, 30606345, 30613937, 30623138
30624864, 30635302, 30652853, 30654409, 30662736, 30668407, 30671813
30679595, 30679771, 30681462, 30698289, 30741263, 30749644, 30755348
30758943, 30783551, 30803210, 30809087, 30814266, 30814285, 30815852
30816938, 30822919, 30826474, 30855101, 30856358, 30866988, 30887501
30891760, 30904672, 30905638, 30914674, 30919804, 30922870, 30937340
30964194, 30968208, 30980615, 30985027, 30987088, 30994996, 30998759
31001455, 31004719, 31013127, 31022858, 31028986, 31061482, 31100172
31104809, 31106577, 31109506, 31115502, 31156383, 31172207, 31182793

31192039, 31194264, 31200845, 31201001, 31215438, 31228670, 31233170
31254535, 31257826, 31258101, 31302499, 31306248, 31306261, 31309867
31315876, 31326608, 31331354, 31335037, 31341859, 31343752, 31347532
31377487, 31393600, 31408636, 31430722, 31501139, 31508450, 31525783
31527103, 31544097, 31570161, 31600023, 31628311, 31637680, 31647304
31658464, 31658943, 31668061, 31668872, 31696577, 31711889, 31718134
31726483, 31748000, 31749740, 31771858, 31786838, 31816631, 31836113
31862611, 31867037, 31886745, 31897786, 31905033, 31909295, 31945038
31986836, 31997805, 32028155, 32081381, 32089820, 32095380, 32105135
32119339, 32153619, 32161381, 32162748, 32165759, 32186646, 32190132
32190190, 32190284, 32191451, 32222473, 32234161, 32245850, 32246090
32296941, 32312131, 32327201, 32335769, 32359044, 32368789, 32368792
32404638, 32425124, 32426251, 32436757, 32442404, 32478429, 32494298
32505009, 32509606, 32523206, 32523613, 32530202, 32583355, 32626756
32676350, 32704765, 32720458, 32725484, 32755493, 32775512, 32776891
32786309, 32803807, 32834168, 32846272, 32851841, 32858446, 32878039
32889434, 32892883, 32900208, 32918266, 32939376, 32984679, 33003817
33027553, 33034103, 33040335, 33050626, 33065437, 33090781, 33090848
33096609, 33106822, 33131742, 33136252, 33178248, 33197448, 33223248
33289442, 33414041, 33425127, 33458732, 33558058, 33563137, 33613829
33613833, 33661960, 33674035

Version 12.2.0.1.ru-2021-10.rur-2021-10.r1

Version 12.2.0.1.ru-2021-10.rur-2021-10.r1 includes the following:

- Patch [33261817](#): DATABASE OCT 2021 RELEASE UPDATE 12.2.0.1.211019
- Patch [33192662](#): OJVM RELEASE UPDATE 12.2.0.1.211019
- Patch [32327201](#): RDBMS - DSTV36 UPDATE - TZDATA2020E
- Patch [29213893](#): DBMS_STATS FAILING WITH ERROR ORA-01422 WHEN GATHERING STATS FOR USER\$ TABLE
- Patch [28730253](#): SUPPORT NEW ERA REIWA FOR JAPANESE IMPERIAL CALENDAR
- Patch [26352615](#): SPILLOVER AUDIT FILES CANNOT BE FOUND ORA-46372
- PreUpgrade Jar: preupgrade_12201_cbuild_24_lf.zip

Combined patches for version 12.2.0.1.ru-2021-10.rur-2021-10.r1, released October 2021

Bugs fixed:

.

7391838, 8480838, 8932139, 8975044, 12763598, 13554903, 14221306
14690846, 15931756, 16002385, 16438495, 16727454, 16942578, 17027695
17533661, 17947871, 17958365, 18308268, 18521691, 18594510, 18774543
18878420, 18986501, 19072655, 19211433, 19285025, 19327292, 19526548
19614243, 19647894, 19649997, 19702201, 19721304, 20003668, 20087519
20118035, 20120236, 20324049, 20436508, 20532077, 20549013, 20588486
20591151, 20617383, 20620169, 20736227, 20756305, 20866970, 20917487
20976443, 21070321, 21089435, 21095391, 21143725, 21147908, 21159907
21178363, 21186167, 21197098, 21216226, 21320338, 21355390, 21433452
21479706, 21517767, 21520266, 21547051, 21638600, 21744603, 21788462
21837606, 21882528, 21935698, 21962287, 21981529, 21985256, 22007324
22070226, 22070473, 22070853, 22072543, 22087683, 22104866, 22107360
22174392, 22179537, 22282748, 22310426, 22347493, 22363790, 22364044
22367053, 22379010, 22446455, 22454940, 22468255, 22495673, 22503283
22503297, 22504793, 22522515, 22530986, 22564336, 22568728, 22581771
22594071, 22599050, 22628825, 22645009, 22645496, 22654475, 22700845
22726044, 22729345, 22820798, 22826067, 22843979, 22845846, 22864303
22898198, 22921674, 22939829, 22950945, 22970869, 22981722, 23018676
23019710, 23026585, 23035249, 23055900, 23056058, 23061453, 23065002
23066146, 23080557, 23104033, 23105538, 23109325, 23110523, 23125560
23126545, 23127945, 23143074, 23151677, 23168363, 23169712, 23177923
23179662, 23184263, 23197730, 23234232, 23237091, 23249829, 23271203
23278750, 23281269, 23282973, 23300142, 23306590, 23308065, 23310101
23312077, 23328639, 23333567, 23336559, 23342170, 23481673, 23491861
23499004, 23499160, 23521523, 23527363, 23533647, 23548817, 23567857
23572982, 23581777, 23588722, 23599216, 23600861, 23602213, 23614158
23627427, 23645516, 23665623, 23709062, 23715460, 23715518, 23730961
23733981, 23735292, 23738304, 23741944, 23743596, 23746128, 23749454
23761724, 23763462, 24006569, 24010030, 24289874, 24289895, 24294174
24303148, 24307571, 24308349, 24318855, 24326444, 24326846, 24328857
24330708, 24332831, 24334708, 24336249, 24337882, 24341675, 24343905
24345420, 24346821, 24348685, 24350620, 24352981, 24355111, 24357348
24368004, 24371491, 24373528, 24373756, 24374976, 24376875, 24376878
24383086, 24385983, 24401351, 24403922, 24409977, 24415926, 24416451
24421668, 24423416, 24425056, 24425998, 24432875, 24435982, 24437162
24440612, 24440648, 24443539, 24445571, 24457597, 24460392, 24461826
24467122, 24468470, 24470606, 24471079, 24471473, 24473736, 24480567

24484749, 24485034, 24485161, 24485174, 24485619, 24486059, 24486237
24509056, 24516314, 24530364, 24534401, 24554533, 24555417, 24556862
24556967, 24560906, 24563422, 24570214, 24570598, 24573817, 24578718
24578797, 24588377, 24589081, 24589590, 24591506, 24593740, 24595699
24596874, 24600330, 24609592, 24609996, 24611527, 24616637, 24617969
24623975, 24624166, 24642495, 24654629, 24655717, 24664211, 24668398
24669189, 24669730, 24674197, 24674955, 24676172, 24677696, 24680959
24687075, 24689376, 24692973, 24693010, 24693290, 24697323, 24699619
24701840, 24710696, 24713381, 24714096, 24717183, 24717859, 24718260
24719799, 24735430, 24737064, 24737403, 24737581, 24737954, 24739791
24744383, 24744686, 24752618, 24757934, 24759556, 24760407, 24763196
24764085, 24766309, 24784414, 24786669, 24791883, 24792678, 24793511
24796092, 24797119, 24798481, 24800423, 24801152, 24802934, 24808504
24811725, 24812047, 24817447, 24818566, 24827228, 24827654, 24831514
24835919, 24841671, 24843188, 24844549, 24844841, 24845157, 24848746
24848923, 24850622, 24907917, 24908063, 24908321, 24911709, 24912588
24920582, 24921478, 24922704, 24923080, 24923215, 24923338, 24923790
24924667, 24926999, 24929210, 24938784, 24940060, 24942749, 24953434
24957555, 24960044, 24960809, 24965426, 24966594, 24966788, 24967993
24968162, 24976007, 24978100, 25022574, 25027852, 25028996, 25029022
25029423, 25031502, 25032818, 25034396, 25036006, 25036474, 25042823
25044977, 25045228, 25050160, 25051465, 25051628, 25054064, 25057811
25058080, 25060506, 25062592, 25063971, 25065563, 25072986, 25077278
25078611, 25086233, 25087436, 25091141, 25092777, 25093872, 25095982
25098160, 25099339, 25099497, 25099758, 25100063, 25100579, 25103996
25107662, 25110233, 25114561, 25115178, 25120284, 25120668, 25120742
25121089, 25123585, 25124363, 25129925, 25130312, 25140197, 25145163
25145215, 25150925, 25159176, 25162645, 25164293, 25166187, 25171041
25171084, 25173124, 25175723, 25176408, 25178032, 25178101, 25178179
25179774, 25182817, 25184453, 25184555, 25186079, 25189723, 25191872
25192044, 25192528, 25192729, 25195901, 25199585, 25200101, 25201454
25202355, 25203656, 25205368, 25205954, 25206864, 25207410, 25209912
25210268, 25210499, 25210690, 25211628, 25219450, 25223839, 25224242
25225795, 25226665, 25227381, 25230870, 25230945, 25237577, 25240188
25240590, 25241448, 25241625, 25244807, 25248384, 25250109, 25251648
25257085, 25259611, 25262869, 25263960, 25265499, 25269133, 25283790
25287072, 25288078, 25293659, 25296876, 25299227, 25299807, 25300427
25303284, 25303756, 25305405, 25307368, 25309116, 25313154, 25313411
25316758, 25317989, 25320555, 25323525, 25328093, 25328518, 25329664
25335249, 25335360, 25335790, 25337332, 25337640, 25348567, 25348956
25353983, 25356118, 25357142, 25360661, 25362958, 25367588, 25367721
25382812, 25383204, 25384462, 25386748, 25388573, 25388896, 25392535
25393714, 25395696, 25397936, 25398306, 25404117, 25404202, 25405100
25405687, 25405813, 25410017, 25410180, 25410802, 25410877, 25411036

25415713, 25416731, 25417050, 25417056, 25417958, 25425005, 25425451
25425760, 25427662, 25429959, 25430120, 25433696, 25435038, 25437699
25440818, 25442559, 25444961, 25445168, 25451531, 25452452, 25455795
25457409, 25459958, 25462714, 25463844, 25472112, 25472885, 25476125
25476149, 25477657, 25478885, 25479164, 25481087, 25482971, 25486384
25489342, 25489367, 25489607, 25492379, 25498930, 25498994, 25516250
25524955, 25528838, 25530080, 25530814, 25535668, 25536819, 25537470
25539063, 25540738, 25546580, 25546608, 25547901, 25551676, 25553616
25554787, 25555252, 25557886, 25558986, 25560487, 25560538, 25561296
25569149, 25569504, 25570929, 25573623, 25575348, 25575369, 25575628
25576115, 25579458, 25579761, 25591394, 25594901, 25597525, 25598473
25599425, 25600342, 25600421, 25601999, 25602488, 25603923, 25606091
25607726, 25612095, 25614866, 25616268, 25616359, 25616417, 25616645
25631933, 25633101, 25634317, 25634348, 25635149, 25638456, 25639019
25643818, 25643889, 25643931, 25646373, 25647325, 25648731, 25653109
25654459, 25654936, 25655390, 25655966, 25659655, 25660847, 25661819
25662088, 25662101, 25662524, 25663488, 25667973, 25669791, 25670786
25671354, 25672640, 25674386, 25680221, 25685152, 25686739, 25687460
25691904, 25694206, 25695903, 25696520, 25699321, 25700654, 25709368
25710420, 25715167, 25717371, 25722055, 25722608, 25722720, 25723097
25723158, 25728085, 25729507, 25730014, 25734963, 25736747, 25739065
25740844, 25741955, 25743479, 25747569, 25749273, 25752755, 25754606
25756945, 25757697, 25757748, 25760195, 25762221, 25764020, 25766822
25768681, 25772669, 25774077, 25775213, 25775444, 25780343, 25783447
25784002, 25785331, 25785441, 25788879, 25789041, 25789277, 25789579
25790353, 25792911, 25795865, 25797092, 25797124, 25797305, 25800464
25802510, 25803364, 25803545, 25807997, 25809524, 25810263, 25810704
25811105, 25811650, 25812390, 25813931, 25818707, 25822410, 25823532
25823754, 25824372, 25825910, 25826740, 25830492, 25832935, 25834581
25835365, 25838361, 25838755, 25852885, 25856821, 25858672, 25861398
25865785, 25866948, 25870579, 25871177, 25871639, 25871753, 25872127
25872389, 25873336, 25874050, 25874678, 25881255, 25882264, 25883438
25885148, 25888073, 25888984, 25890002, 25890046, 25890056, 25890673
25890782, 25894239, 25895224, 25897615, 25898228, 25904273, 25904490
25905130, 25906117, 25906886, 25908728, 25911724, 25914276, 25919622
25932524, 25932728, 25933494, 25941836, 25942868, 25943271, 25945130
25947799, 25951571, 25953857, 25954022, 25954054, 25957038, 25963024
25964954, 25967544, 25967985, 25970731, 25971286, 25972417, 25973152
25975723, 25977302, 25980605, 25980770, 25981498, 25982666, 25986062
25990907, 25995938, 25997810, 26006257, 26007010, 26019148, 26023042
26024732, 26024784, 26025681, 26029075, 26029777, 26029780, 26032573
26034119, 26036748, 26037215, 26038086, 26039623, 26040483, 26045732
26051656, 26078437, 26078493, 26080410, 26083298, 26087754, 26088426
26088836, 26089669, 26090767, 26090893, 26091640, 26091786, 26095327

26095405, 26096382, 26108080, 26108337, 26110259, 26110632, 26111842
26112621, 26115103, 26121990, 26123175, 26124078, 26130486, 26137367
26137416, 26138085, 26145560, 26149904, 26153372, 26153977, 26168933
26169341, 26169345, 26170659, 26170715, 26176002, 26187943, 26189861
26198757, 26198926, 26201113, 26203182, 26223039, 26237338, 26237431
26237773, 26238195, 26242031, 26242677, 26243698, 26244115, 26245237
26248143, 26249718, 26256131, 26257953, 26259265, 26261327, 26263328
26263721, 26268756, 26269790, 26271001, 26274660, 26275023, 26275415
26277439, 26281476, 26285062, 26285933, 26301540, 26308650, 26309047
26317991, 26318200, 26318627, 26323308, 26324206, 26324769, 26325856
26327418, 26327624, 26327775, 26330994, 26331743, 26333141, 26334602
26336977, 26338953, 26351334, 26351996, 26352615, 26353617, 26354844
26356098, 26358670, 26359091, 26362155, 26362821, 26366517, 26367012
26367460, 26371725, 26373967, 26374791, 26375052, 26375250, 26375330
26380097, 26385189, 26386858, 26388538, 26396790, 26398675, 26399626
26399691, 26399839, 26405036, 26406387, 26407408, 26410240, 26412540
26418088, 26420561, 26421667, 26422277, 26423085, 26426526, 26426967
26430323, 26430737, 26434436, 26434999, 26435073, 26436168, 26438612
26439748, 26440142, 26440169, 26440749, 26441345, 26442308, 26444601
26444887, 26446098, 26451793, 26452606, 26474662, 26474703, 26475419
26476090, 26476244, 26478970, 26479173, 26482376, 26486365, 26492666
26492866, 26493289, 26498354, 26513067, 26513709, 26521043, 26522439
26523432, 26526726, 26526799, 26536320, 26537307, 26542135, 26542236
26542835, 26544823, 26545688, 26546070, 26546664, 26546754, 26548363
26556014, 26558437, 26569225, 26570134, 26575788, 26580633, 26582460
26584641, 26588069, 26597140, 26599395, 26608137, 26608238, 26609942
26615291, 26615690, 26617804, 26623652, 26626879, 26629381, 26633355
26633558, 26635897, 26637273, 26637824, 26639167, 26641610, 26641852
26650226, 26650540, 26654363, 26658759, 26659182, 26669550, 26680105
26712331, 26714486, 26714910, 26716835, 26717528, 26724511, 26725687
26727397, 26729494, 26729611, 26740700, 26743240, 26744595, 26745002
26751106, 26751171, 26755171, 26758193, 26764561, 26765212, 26768025
26775602, 26784509, 26790923, 26794786, 26797591, 26798411, 26798514
26798516, 26802503, 26816582, 26820076, 26822314, 26822620, 26824833
26828994, 26829845, 26830694, 26832296, 26833932, 26837569, 26837702
26840654, 26844406, 26844870, 26849779, 26855406, 26855855, 26871815
26875822, 26883456, 26895149, 26896659, 26898563, 26907236, 26907327
26908788, 26909100, 26909504, 26910716, 26911000, 26923777, 26939314
26943004, 26944190, 26947373, 26958896, 26963310, 26966616, 26966916
26967713, 26968670, 26969321, 26970175, 26970717, 26981902, 26983259
26985002, 26986173, 26992964, 26999139, 27000158, 27000702, 27006120
27006664, 27009164, 27013146, 27015449, 27028251, 27032785, 27033520
27033652, 27034890, 27036163, 27037839, 27038986, 27039712, 27044169
27044297, 27045634, 27052607, 27056711, 27058530, 27060167, 27060859

27061736, 27072923, 27073314, 27079140, 27079651, 27084613, 27087426
27090765, 27092508, 27093423, 27097854, 27100800, 27101105, 27105900
27106179, 27110878, 27115422, 27117822, 27119621, 27119861, 27122162
27124624, 27125872, 27133662, 27134734, 27135647, 27135993, 27138325
27142120, 27142373, 27142529, 27144928, 27151826, 27153641, 27160922
27161071, 27162390, 27162405, 27163928, 27165231, 27169796, 27170305
27181537, 27181897, 27185188, 27195935, 27199245, 27200959, 27202015
27203055, 27207110, 27207634, 27208795, 27213224, 27216046, 27217412
27223075, 27229389, 27231051, 27234962, 27236722, 27242226, 27244337
27244999, 27248917, 27249531, 27250547, 27251690, 27254335, 27255377
27256000, 27258578, 27259307, 27262945, 27264464, 27266245, 27274456
27274536, 27275533, 27276231, 27283960, 27284499, 27285244, 27288638
27292213, 27293599, 27302711, 27302730, 27303287, 27303938, 27304410
27304906, 27305039, 27308088, 27314206, 27314390, 27314697, 27320576
27321179, 27329612, 27333106, 27334316, 27338912, 27338946, 27339115
27345231, 27346709, 27348081, 27349393, 27350267, 27351628, 27359178
27364854, 27365014, 27367194, 27369515, 27370965, 27375542, 27381498
27383281, 27386467, 27392968, 27393570, 27394703, 27395416, 27396624
27396672, 27396813, 27397048, 27400416, 27400598, 27404573, 27404668
27405645, 27416997, 27423251, 27424405, 27426363, 27432062, 27432826
27433385, 27433870, 27434193, 27439835, 27441326, 27442041, 27443406
27445727, 27452046, 27457891, 27459593, 27459948, 27461740, 27466597
27468303, 27486805, 27487919, 27489107, 27493674, 27494663, 27501373
27501413, 27502420, 27504770, 27505229, 27508985, 27510959, 27525909
27529661, 27533780, 27533819, 27534509, 27539876, 27540613, 27544973
27548131, 27554074, 27555481, 27558861, 27560602, 27562488, 27565906
27567477, 27576342, 27576354, 27587905, 27588271, 27589260, 27593501
27595973, 27601118, 27601441, 27607563, 27611612, 27613080, 27613530
27613554, 27615649, 27617978, 27620808, 27623159, 27629756, 27629928
27632114, 27634676, 27634991, 27642235, 27645231, 27657712, 27658186
27666312, 27671633, 27680669, 27686599, 27687880, 27688036, 27688099
27688692, 27691920, 27691939, 27693416, 27693713, 27695063, 27698953
27700466, 27704237, 27709046, 27710072, 27717210, 27719000, 27726780
27729678, 27739006, 27740424, 27745728, 27748954, 27751755, 27757567
27757888, 27758544, 27758653, 27758972, 27759077, 27769361, 27779886
27793533, 27799032, 27801337, 27818389, 27819881, 27824540, 27824543
27825241, 27828794, 27828892, 27829295, 27833672, 27834551, 27834569
27835925, 27837219, 27839353, 27839616, 27846298, 27846499, 27847259
27850112, 27855490, 27861226, 27873412, 27882176, 27886087, 27897759
27898015, 27902561, 27908396, 27909478, 27927431, 27929287, 27929509
27931299, 27935493, 27940876, 27945870, 27951817, 27952586, 27959048
27959594, 27964513, 27966472, 27967484, 27983174, 27986817, 27994325
27995215, 27995248, 27997875, 27998003, 27999073, 27999638, 28000269
28007516, 28019592, 28022101, 28023081, 28023399, 28023482, 28024793

28025414, 28026866, 28033429, 28040776, 28043157, 28045903, 28066655
28067846, 28071549, 28072383, 28072567, 28073470, 28074713, 28079127
28090453, 28092783, 28098040, 28098160, 28099662, 28104176, 28108003
28111583, 28120036, 28120951, 28124631, 28125601, 28125947, 28129791
28140658, 28157786, 28164480, 28165439, 28171079, 28174827, 28180464
28181021, 28184554, 28188330, 28190796, 28194173, 28199085, 28201419
28204262, 28209985, 28215510, 28218832, 28220398, 28223871, 28226179
28229360, 28236305, 28238264, 28242712, 28250929, 28256164, 28271119
28276054, 28279837, 28281094, 28282606, 28287484, 28290434, 28294563
28302049, 28305001, 28305362, 28305607, 28309406, 28319114, 28320399
28330714, 28330971, 28350595, 28354603, 28357401, 28361221, 28365111
28369092, 28371123, 28373960, 28375383, 28378446, 28384353, 28386259
28388910, 28389153, 28390273, 28391210, 28394726, 28396445, 28397317
28401116, 28402823, 28420042, 28420457, 28423598, 28432129, 28434028
28435902, 28437315, 28439086, 28454215, 28454242, 28468312, 28468493
28481149, 28483184, 28489150, 28501075, 28502098, 28502343, 28503038
28507324, 28508053, 28508557, 28512336, 28521330, 28522441, 28528349
28530171, 28535127, 28535272, 28537715, 28538439, 28542455, 28545134
28546290, 28547068, 28547478, 28564479, 28566241, 28571483, 28572407
28572834, 28578164, 28578945, 28585411, 28587723, 28589509, 28600233
28602253, 28606598, 28608211, 28612674, 28614372, 28617631, 28617959
28621470, 28622202, 28627255, 28636676, 28639299, 28642899, 28644756
28661362, 28678804, 28690694, 28691965, 28692103, 28692275, 28697526
28697806, 28703812, 28708023, 28709063, 28710469, 28710734, 28714988
28715655, 28728272, 28730044, 28730253, 28734355, 28740708, 28742555
28749289, 28749724, 28758090, 28758722, 28774416, 28776431, 28777174
28791725, 28797711, 28803345, 28808314, 28817449, 28819640, 28820669
28821847, 28827682, 28830691, 28831971, 28835937, 28836716, 28838066
28844866, 28847136, 28849751, 28852325, 28852691, 28855922, 28856060
28856172, 28863263, 28863487, 28867992, 28887305, 28889730, 28891984
28905390, 28910498, 28915870, 28927452, 28945922, 28948554, 28949888
28951026, 28951382, 28956908, 28959493, 28960211, 28965095, 28965787
28986231, 28986257, 28987439, 28991884, 28993295, 28993590, 29002488
29006527, 29007321, 29007353, 29009513, 29013832, 29024054, 29026309
29026582, 29027694, 29032276, 29039510, 29040739, 29044086, 29044954
29048498, 29048728, 29050886, 29060216, 29061016, 29115857, 29125374
29154725, 29158680, 29163567, 29170232, 29173817, 29179097, 29182517
29182901, 29189889, 29198092, 29200700, 29203604, 29213320, 29213351
29213893, 29224605, 29224710, 29237575, 29247712, 29249289, 29250230
29250317, 29254623, 29260956, 29278684, 29296257, 29301463, 29307638
29312889, 29337294, 29338348, 29339155, 29342099, 29343086, 29343156
29343861, 29347943, 29353821, 29372069, 29372460, 29375355, 29375984
29376346, 29378913, 29379978, 29383695, 29388020, 29398488, 29399336
29405462, 29409149, 29409455, 29415774, 29418165, 29420254, 29426241

29434301, 29436454, 29437712, 29450812, 29452251, 29454978, 29463047
29464779, 29472618, 29477015, 29483626, 29483672, 29483723, 29483771
29500257, 29500963, 29501218, 29504682, 29511611, 29524985, 29530515
29536342, 29538631, 29542449, 29542580, 29548592, 29549071, 29559395
29564592, 29580394, 29591343, 29608023, 29614575, 29614987, 29621961
29625065, 29626154, 29629430, 29633753, 29637526, 29637560, 29645349
29651520, 29656843, 29667994, 29676089, 29678163, 29685137, 29687220
29688867, 29689697, 29690625, 29703195, 29705793, 29707896, 29717901
29719146, 29724063, 29726695, 29741319, 29766435, 29767177, 29769901
29774362, 29782211, 29791152, 29794174, 29794462, 29796916, 29807964
29813494, 29815341, 29817278, 29822714, 29825525, 29836659, 29841687
29844131, 29846645, 29853485, 29865188, 29869404, 29869906, 29875459
29876358, 29881050, 29881575, 29884958, 29893132, 29902299, 29902311
29914449, 29930457, 29933718, 29941062, 29942554, 29944035, 29944159
29944660, 29951620, 29951759, 29961353, 29962927, 29962939, 29965888
29991257, 29997937, 29997959, 30008125, 30018017, 30018903, 30031027
30039959, 30064268, 30068871, 30076253, 30078934, 30086166, 30088912
30092280, 30098251, 30099302, 30114477, 30116203, 30117469, 30120608
30125995, 30128047, 30131286, 30139392, 30147928, 30150731, 30160625
30163243, 30164714, 30173113, 30177597, 30179644, 30186706, 30189023
30193736, 30196358, 30200680, 30200758, 30215130, 30218044, 30218317
30223712, 30225443, 30239480, 30241567, 30244787, 30246179, 30247305
30252098, 30252156, 30253255, 30265523, 30265615, 30272329, 30281591
30282501, 30283932, 30293345, 30305880, 30312094, 30312568, 30316897
30320029, 30325407, 30331356, 30342878, 30345926, 30352623, 30355490
30357897, 30364613, 30365745, 30368482, 30368668, 30372081, 30374739
30377692, 30381207, 30384121, 30384152, 30387666, 30391272, 30397100
30402386, 30403763, 30408515, 30413137, 30416034, 30421204, 30431274
30441687, 30443393, 30453442, 30458593, 30460922, 30464250, 30464655
30473634, 30474774, 30475041, 30475115, 30476768, 30485255, 30489582
30496957, 30497057, 30498824, 30501574, 30503943, 30509277, 30510527
30517516, 30522998, 30528547, 30528704, 30532811, 30533198, 30534662
30578221, 30581448, 30582500, 30606345, 30613937, 30623138, 30624864
30635302, 30652853, 30654409, 30662736, 30668407, 30671813, 30679595
30679771, 30681462, 30698289, 30741263, 30749644, 30755348, 30758943
30783551, 30803210, 30809087, 30814266, 30814285, 30815852, 30816938
30822919, 30826474, 30855101, 30856358, 30866988, 30887501, 30891760
30904672, 30905638, 30914674, 30919804, 30922870, 30937340, 30964194
30968208, 30980615, 30985027, 30987088, 30994996, 30998759, 31001455
31004719, 31013127, 31022858, 31028986, 31061482, 31100172, 31104809
31106577, 31109506, 31115502, 31156383, 31172207, 31182793, 31192039
31194264, 31200845, 31201001, 31215438, 31228670, 31233170, 31254535
31257826, 31258101, 31302499, 31306248, 31306261, 31309867, 31315876
31326608, 31331354, 31335037, 31335142, 31341859, 31343752, 31347532

31377487, 31393600, 31408636, 31430722, 31501139, 31508450, 31525783
31527103, 31544097, 31570161, 31600023, 31628311, 31637680, 31647304
31658464, 31658943, 31668061, 31668872, 31696577, 31711889, 31718134
31726483, 31748000, 31749740, 31771858, 31786838, 31816631, 31836113
31862611, 31867037, 31886745, 31897786, 31905033, 31909295, 31945038
31986836, 31997805, 32028155, 32081381, 32089820, 32095380, 32105135
32119339, 32153619, 32162748, 32165759, 32186646, 32190132, 32190190
32190284, 32191451, 32222473, 32234161, 32245850, 32246090, 32296941
32312131, 32327201, 32327208, 32335769, 32359044, 32368789, 32368792
32404638, 32425124, 32426251, 32436757, 32442404, 32478429, 32494298
32505009, 32509606, 32523206, 32530202, 32583355, 32626756, 32676350
32704765, 32720458, 32725484, 32755493, 32775512, 32776891, 32786309
32834168, 32846272, 32851841, 32858446, 32878039, 32889434, 32892883
32918266, 32939376, 33003817, 33034103, 33131742, 33223248, 33289442

Version 12.2.0.1.ru-2021-07.rur-2021-07.r1

Version 12.2.0.1.ru-2021-07.rur-2021-07.r1 includes the following:

- Patch [32916808](#): DATABASE JUL 2021 RELEASE UPDATE 12.2.0.1.210720
- Patch [32876409](#): OJVM RELEASE UPDATE 12.2.0.1.210720
- Patch [32327201](#): RDBMS - DSTV36 UPDATE - TZDATA2020E
- Patch [29213893](#): DBMS_STATS FAILING WITH ERROR ORA-01422 WHEN GATHERING STATS FOR USER\$ TABLE
- Patch [28730253](#): SUPPORT NEW ERA REIWA FOR JAPANESE IMPERIAL CALENDAR
- Patch [26352615](#): SPILLOVER AUDIT FILES CANNOT BE FOUND ORA-46372
- PreUpgrade Jar: preupgrade_12201_cbuild_24_lf.zip

Combined patches for version 12.2.0.1.ru-2021-07.rur-2021-07.r1, released July 2021

Bugs fixed:

7391838, 8480838, 8932139, 8975044, 12763598, 13554903, 14221306
14690846, 15931756, 16002385, 16438495, 16727454, 16942578, 17027695
17533661, 17947871, 17958365, 18308268, 18521691, 18594510, 18774543
18878420, 18986501, 19072655, 19211433, 19285025, 19327292, 19526548

19614243, 19647894, 19649997, 19702201, 19721304, 20003668, 20087519
20118035, 20120236, 20324049, 20436508, 20532077, 20549013, 20588486
20591151, 20617383, 20620169, 20736227, 20756305, 20866970, 20917487
20976443, 21070321, 21089435, 21095391, 21143725, 21147908, 21159907
21178363, 21186167, 21197098, 21216226, 21320338, 21355390, 21433452
21479706, 21517767, 21520266, 21547051, 21638600, 21744603, 21788462
21837606, 21882528, 21935698, 21962287, 21981529, 21985256, 22007324
22070226, 22070473, 22070853, 22072543, 22087683, 22104866, 22107360
22174392, 22179537, 22282748, 22310426, 22347493, 22363790, 22364044
22367053, 22379010, 22446455, 22454940, 22468255, 22495673, 22503283
22503297, 22504793, 22522515, 22530986, 22564336, 22568728, 22581771
22594071, 22599050, 22628825, 22645009, 22645496, 22654475, 22700845
22726044, 22729345, 22820798, 22826067, 22843979, 22845846, 22864303
22898198, 22921674, 22939829, 22950945, 22970869, 22981722, 23018676
23019710, 23026585, 23035249, 23055900, 23056058, 23061453, 23065002
23066146, 23080557, 23104033, 23105538, 23109325, 23110523, 23125560
23126545, 23127945, 23143074, 23151677, 23168363, 23169712, 23177923
23179662, 23184263, 23197730, 23234232, 23237091, 23249829, 23271203
23278750, 23281269, 23282973, 23300142, 23306590, 23308065, 23310101
23312077, 23328639, 23333567, 23336559, 23342170, 23481673, 23491861
23499004, 23499160, 23521523, 23527363, 23533647, 23548817, 23567857
23572982, 23581777, 23588722, 23599216, 23600861, 23602213, 23614158
23627427, 23645516, 23665623, 23709062, 23715460, 23715518, 23730961
23733981, 23735292, 23738304, 23741944, 23743596, 23746128, 23749454
23761724, 23763462, 24006569, 24010030, 24289874, 24289895, 24294174
24303148, 24307571, 24308349, 24326444, 24326846, 24328857, 24330708
24332831, 24334708, 24336249, 24337882, 24341675, 24343905, 24345420
24346821, 24348685, 24350620, 24352981, 24355111, 24357348, 24368004
24371491, 24373528, 24373756, 24374976, 24376875, 24376878, 24383086
24385983, 24401351, 24403922, 24409977, 24415926, 24416451, 24421668
24423416, 24425056, 24425998, 24432875, 24435982, 24437162, 24440612
24440648, 24443539, 24445571, 24457597, 24460392, 24461826, 24467122
24468470, 24470606, 24471079, 24471473, 24473736, 24480567, 24484749
24485034, 24485161, 24485174, 24485619, 24486059, 24486237, 24509056
24516314, 24530364, 24534401, 24554533, 24555417, 24556862, 24556967
24560906, 24563422, 24570214, 24570598, 24573817, 24578718, 24578797
24588377, 24589081, 24589590, 24591506, 24593740, 24595699, 24596874
24600330, 24609592, 24609996, 24611527, 24616637, 24617969, 24623975
24624166, 24642495, 24654629, 24655717, 24664211, 24668398, 24669189
24669730, 24674197, 24674955, 24676172, 24677696, 24680959, 24687075
24689376, 24692973, 24693010, 24693290, 24697323, 24699619, 24701840
24710696, 24713381, 24714096, 24717183, 24717859, 24718260, 24719799
24735430, 24737064, 24737403, 24737581, 24737954, 24739791, 24744383
24744686, 24752618, 24757934, 24759556, 24760407, 24763196, 24764085

24766309, 24784414, 24786669, 24791883, 24792678, 24793511, 24796092
24797119, 24798481, 24800423, 24801152, 24802934, 24808504, 24811725
24812047, 24817447, 24818566, 24827228, 24827654, 24831514, 24835919
24841671, 24843188, 24844549, 24844841, 24845157, 24848746, 24848923
24850622, 24907917, 24908063, 24908321, 24911709, 24912588, 24920582
24921478, 24922704, 24923080, 24923215, 24923338, 24923790, 24924667
24926999, 24929210, 24938784, 24940060, 24942749, 24953434, 24957555
24960044, 24960809, 24965426, 24966594, 24966788, 24967993, 24968162
24976007, 24978100, 25022574, 25027852, 25028996, 25029022, 25029423
25031502, 25032818, 25034396, 25036006, 25036474, 25042823, 25044977
25045228, 25050160, 25051465, 25051628, 25054064, 25057811, 25058080
25060506, 25062592, 25063971, 25065563, 25072986, 25077278, 25078611
25086233, 25087436, 25091141, 25092777, 25093872, 25095982, 25098160
25099339, 25099497, 25099758, 25100063, 25100579, 25103996, 25107662
25110233, 25114561, 25115178, 25120284, 25120668, 25120742, 25121089
25123585, 25124363, 25129925, 25130312, 25140197, 25145163, 25145215
25150925, 25159176, 25162645, 25164293, 25166187, 25171041, 25171084
25173124, 25175723, 25176408, 25178032, 25178101, 25178179, 25179774
25182817, 25184453, 25184555, 25186079, 25189723, 25191872, 25192044
25192528, 25192729, 25195901, 25199585, 25200101, 25201454, 25202355
25203656, 25205368, 25205954, 25206864, 25207410, 25209912, 25210268
25210499, 25210690, 25211628, 25219450, 25223839, 25224242, 25225795
25226665, 25227381, 25230870, 25230945, 25237577, 25240188, 25240590
25241448, 25241625, 25244807, 25248384, 25250109, 25251648, 25257085
25259611, 25262869, 25263960, 25265499, 25269133, 25283790, 25287072
25288078, 25293659, 25296876, 25299227, 25299807, 25300427, 25303284
25303756, 25305405, 25307368, 25309116, 25313154, 25313411, 25316758
25317989, 25320555, 25323525, 25328093, 25328518, 25329664, 25335249
25335360, 25335790, 25337332, 25337640, 25348567, 25348956, 25353983
25356118, 25357142, 25360661, 25362958, 25367588, 25367721, 25382812
25383204, 25384462, 25386748, 25388573, 25388896, 25392535, 25393714
25395696, 25397936, 25398306, 25404117, 25404202, 25405100, 25405687
25405813, 25410017, 25410180, 25410802, 25410877, 25411036, 25415713
25416731, 25417050, 25417056, 25417958, 25425005, 25425451, 25425760
25427662, 25429959, 25430120, 25433696, 25435038, 25437699, 25440818
25442559, 25444961, 25445168, 25451531, 25452452, 25455795, 25457409
25459958, 25462714, 25463844, 25472112, 25472885, 25476125, 25476149
25477657, 25478885, 25479164, 25481087, 25482971, 25486384, 25489342
25489367, 25489607, 25492379, 25498930, 25498994, 25516250, 25524955
25528838, 25530080, 25530814, 25535668, 25536819, 25537470, 25539063
25540738, 25546580, 25546608, 25547901, 25551676, 25553616, 25554787
25555252, 25557886, 25558986, 25560487, 25560538, 25561296, 25569149
25569504, 25570929, 25573623, 25575348, 25575369, 25575628, 25576115
25579458, 25579761, 25591394, 25594901, 25597525, 25598473, 25599425

25600342, 25600421, 25601999, 25602488, 25603923, 25606091, 25607726
25612095, 25614866, 25616268, 25616359, 25616417, 25616645, 25631933
25633101, 25634317, 25634348, 25635149, 25638456, 25639019, 25643818
25643889, 25643931, 25646373, 25647325, 25648731, 25653109, 25654459
25654936, 25655390, 25655966, 25659655, 25660847, 25661819, 25662088
25662101, 25662524, 25663488, 25667973, 25669791, 25670786, 25671354
25672640, 25674386, 25680221, 25685152, 25686739, 25687460, 25691904
25694206, 25695903, 25696520, 25699321, 25700654, 25709368, 25710420
25715167, 25717371, 25722055, 25722608, 25722720, 25723097, 25723158
25728085, 25729507, 25730014, 25734963, 25736747, 25739065, 25740844
25741955, 25743479, 25747569, 25749273, 25752755, 25754606, 25756945
25757697, 25757748, 25760195, 25762221, 25764020, 25766822, 25768681
25772669, 25774077, 25775213, 25775444, 25780343, 25783447, 25784002
25785331, 25785441, 25788879, 25789041, 25789277, 25789579, 25790353
25792911, 25795865, 25797092, 25797124, 25797305, 25800464, 25802510
25803364, 25803545, 25807997, 25809524, 25810263, 25810704, 25811105
25811650, 25812390, 25813931, 25818707, 25822410, 25823532, 25823754
25824372, 25825910, 25826740, 25830492, 25832935, 25834581, 25835365
25838361, 25838755, 25852885, 25856821, 25858672, 25861398, 25865785
25866948, 25870579, 25871177, 25871639, 25871753, 25872127, 25872389
25873336, 25874050, 25874678, 25881255, 25882264, 25883438, 25885148
25888073, 25888984, 25890002, 25890046, 25890056, 25890673, 25890782
25894239, 25895224, 25897615, 25898228, 25904273, 25904490, 25905130
25906117, 25906886, 25908728, 25911724, 25914276, 25919622, 25932524
25932728, 25933494, 25941836, 25942868, 25943271, 25945130, 25947799
25951571, 25953857, 25954022, 25954054, 25957038, 25963024, 25964954
25967544, 25967985, 25970731, 25971286, 25972417, 25973152, 25975723
25977302, 25980605, 25980770, 25981498, 25982666, 25986062, 25990907
25995938, 25997810, 26006257, 26007010, 26019148, 26023042, 26024732
26024784, 26025681, 26029075, 26029777, 26029780, 26032573, 26034119
26036748, 26037215, 26038086, 26039623, 26040483, 26045732, 26051656
26078437, 26078493, 26080410, 26083298, 26087754, 26088426, 26088836
26089669, 26090767, 26090893, 26091640, 26091786, 26095327, 26095405
26096382, 26108080, 26108337, 26110259, 26110632, 26111842, 26112621
26115103, 26121990, 26123175, 26124078, 26130486, 26137367, 26137416
26138085, 26145560, 26149904, 26153372, 26153977, 26168933, 26169341
26169345, 26170659, 26170715, 26176002, 26187943, 26189861, 26198757
26198926, 26201113, 26203182, 26223039, 26237338, 26237431, 26237773
26238195, 26242031, 26242677, 26243698, 26244115, 26245237, 26248143
26249718, 26256131, 26257953, 26259265, 26261327, 26263328, 26263721
26268756, 26269790, 26271001, 26274660, 26275023, 26275415, 26277439
26281476, 26285062, 26285933, 26301540, 26308650, 26309047, 26317991
26318200, 26318627, 26323308, 26324206, 26324769, 26325856, 26327418
26327624, 26327775, 26330994, 26331743, 26333141, 26334602, 26336977

26338953, 26351334, 26351996, 26352615, 26353617, 26354844, 26356098
26358670, 26359091, 26362155, 26362821, 26366517, 26367012, 26367460
26371725, 26373967, 26374791, 26375052, 26375250, 26375330, 26380097
26385189, 26386858, 26388538, 26396790, 26398675, 26399626, 26399691
26399839, 26405036, 26406387, 26407408, 26410240, 26412540, 26418088
26420561, 26421667, 26422277, 26423085, 26426526, 26426967, 26430323
26430737, 26434436, 26434999, 26435073, 26436168, 26438612, 26439748
26440142, 26440169, 26440749, 26441345, 26442308, 26444601, 26444887
26446098, 26451793, 26452606, 26474662, 26474703, 26475419, 26476090
26476244, 26478970, 26479173, 26482376, 26486365, 26492666, 26492866
26493289, 26498354, 26513067, 26513709, 26521043, 26522439, 26523432
26526726, 26526799, 26536320, 26537307, 26542135, 26542236, 26542835
26544823, 26545688, 26546070, 26546664, 26546754, 26548363, 26556014
26558437, 26569225, 26570134, 26575788, 26580633, 26582460, 26584641
26588069, 26597140, 26599395, 26608137, 26608238, 26609942, 26615291
26615690, 26617804, 26623652, 26626879, 26629381, 26633355, 26633558
26635897, 26637273, 26637824, 26639167, 26641610, 26641852, 26650226
26650540, 26654363, 26658759, 26659182, 26669550, 26680105, 26712331
26714486, 26714910, 26716835, 26717528, 26724511, 26725687, 26727397
26729494, 26729611, 26740700, 26743240, 26744595, 26745002, 26751106
26751171, 26755171, 26758193, 26764561, 26765212, 26768025, 26775602
26784509, 26790923, 26794786, 26797591, 26798411, 26798514, 26798516
26802503, 26816582, 26820076, 26822314, 26822620, 26824833, 26828994
26829845, 26830694, 26832296, 26833932, 26837569, 26837702, 26840654
26844406, 26844870, 26849779, 26855406, 26855855, 26871815, 26875822
26883456, 26895149, 26896659, 26898563, 26907236, 26907327, 26908788
26909100, 26909504, 26910716, 26911000, 26923777, 26939314, 26943004
26944190, 26947373, 26958896, 26963310, 26966616, 26966916, 26967713
26968670, 26969321, 26970175, 26970717, 26981902, 26983259, 26985002
26986173, 26992964, 26999139, 27000158, 27000702, 27006120, 27006664
27009164, 27013146, 27015449, 27028251, 27032785, 27033520, 27033652
27034890, 27036163, 27037839, 27038986, 27039712, 27044169, 27044297
27045634, 27052607, 27056711, 27058530, 27060167, 27060859, 27061736
27072923, 27073314, 27079140, 27079651, 27084613, 27087426, 27090765
27092508, 27093423, 27097854, 27100800, 27101105, 27105900, 27106179
27110878, 27115422, 27117822, 27119621, 27119861, 27122162, 27124624
27125872, 27133662, 27134734, 27135647, 27135993, 27138325, 27142120
27142373, 27142529, 27144928, 27151826, 27153641, 27160922, 27161071
27162390, 27162405, 27163928, 27165231, 27169796, 27170305, 27181537
27181897, 27185188, 27195935, 27199245, 27200959, 27202015, 27203055
27207110, 27207634, 27208795, 27213224, 27216046, 27217412, 27223075
27229389, 27231051, 27234962, 27236722, 27242226, 27244337, 27244999
27248917, 27249531, 27250547, 27251690, 27254335, 27255377, 27256000
27258578, 27259307, 27262945, 27264464, 27266245, 27274456, 27274536

27275533, 27276231, 27283960, 27284499, 27285244, 27288638, 27292213
27293599, 27302711, 27302730, 27303287, 27303938, 27304410, 27304906
27305039, 27308088, 27314206, 27314390, 27314697, 27320576, 27321179
27329612, 27333106, 27334316, 27338912, 27338946, 27339115, 27345231
27346709, 27348081, 27349393, 27350267, 27351628, 27359178, 27364854
27365014, 27367194, 27369515, 27370965, 27375542, 27381498, 27383281
27386467, 27392968, 27393570, 27394703, 27395416, 27396624, 27396672
27396813, 27397048, 27400416, 27400598, 27404573, 27404668, 27405645
27416997, 27423251, 27424405, 27426363, 27432062, 27432826, 27433385
27433870, 27434193, 27439835, 27441326, 27442041, 27443406, 27445727
27452046, 27457891, 27459593, 27459948, 27461740, 27466597, 27468303
27486805, 27487919, 27489107, 27493674, 27494663, 27501373, 27501413
27502420, 27504770, 27505229, 27508985, 27510959, 27525909, 27529661
27533780, 27533819, 27534509, 27539876, 27540613, 27544973, 27548131
27554074, 27555481, 27558861, 27560602, 27562488, 27565906, 27567477
27576342, 27576354, 27587905, 27588271, 27589260, 27593501, 27595973
27601118, 27601441, 27607563, 27611612, 27613080, 27613530, 27613554
27615649, 27617978, 27620808, 27623159, 27629756, 27629928, 27632114
27634676, 27634991, 27642235, 27645231, 27657712, 27658186, 27666312
27671633, 27680669, 27686599, 27687880, 27688036, 27688099, 27688692
27691920, 27691939, 27693416, 27693713, 27695063, 27698953, 27700466
27704237, 27709046, 27710072, 27717210, 27719000, 27726780, 27729678
27739006, 27740424, 27745728, 27748954, 27751755, 27757567, 27757888
27758544, 27758653, 27758972, 27759077, 27769361, 27779886, 27793533
27799032, 27801337, 27818389, 27819881, 27824540, 27824543, 27825241
27828794, 27828892, 27829295, 27833672, 27834551, 27834569, 27835925
27837219, 27839353, 27839616, 27846298, 27846499, 27847259, 27850112
27855490, 27861226, 27873412, 27882176, 27886087, 27897759, 27898015
27902561, 27908396, 27909478, 27927431, 27929287, 27929509, 27931299
27935493, 27940876, 27945870, 27951817, 27952586, 27959048, 27959594
27964513, 27966472, 27967484, 27983174, 27986817, 27994325, 27995215
27995248, 27997875, 27998003, 27999073, 27999638, 28000269, 28007516
28019592, 28022101, 28023081, 28023399, 28023482, 28024793, 28025414
28026866, 28033429, 28040776, 28043157, 28045903, 28066655, 28067846
28071549, 28072383, 28072567, 28073470, 28074713, 28079127, 28090453
28092783, 28098040, 28098160, 28099662, 28104176, 28108003, 28111583
28120036, 28120951, 28124631, 28125601, 28125947, 28129791, 28140658
28157786, 28164480, 28165439, 28171079, 28174827, 28180464, 28181021
28184554, 28188330, 28190796, 28194173, 28199085, 28201419, 28204262
28209985, 28215510, 28218832, 28220398, 28223871, 28226179, 28229360
28236305, 28238264, 28242712, 28250929, 28256164, 28271119, 28276054
28279837, 28281094, 28282606, 28287484, 28290434, 28294563, 28302049
28305001, 28305362, 28305607, 28309406, 28319114, 28320399, 28330714
28330971, 28350595, 28354603, 28357401, 28361221, 28365111, 28369092

28371123, 28373960, 28375383, 28378446, 28384353, 28386259, 28388910
28389153, 28390273, 28391210, 28394726, 28396445, 28397317, 28401116
28402823, 28420042, 28420457, 28423598, 28432129, 28434028, 28435902
28437315, 28439086, 28454215, 28454242, 28468312, 28468493, 28481149
28483184, 28489150, 28501075, 28502098, 28502343, 28503038, 28507324
28508053, 28508557, 28512336, 28521330, 28522441, 28528349, 28530171
28535127, 28535272, 28537715, 28538439, 28542455, 28545134, 28546290
28547068, 28547478, 28564479, 28566241, 28571483, 28572407, 28572834
28578164, 28578945, 28585411, 28587723, 28589509, 28600233, 28602253
28606598, 28608211, 28612674, 28614372, 28617631, 28617959, 28621470
28622202, 28627255, 28636676, 28639299, 28642899, 28644756, 28678804
28690694, 28691965, 28692103, 28692275, 28697526, 28697806, 28703812
28708023, 28709063, 28710469, 28710734, 28714988, 28715655, 28728272
28730044, 28730253, 28734355, 28740708, 28742555, 28749289, 28749724
28758090, 28758722, 28774416, 28776431, 28777174, 28791725, 28797711
28803345, 28808314, 28817449, 28819640, 28820669, 28821847, 28827682
28830691, 28831971, 28835937, 28836716, 28838066, 28844866, 28847136
28849751, 28852325, 28852691, 28855922, 28856060, 28856172, 28863263
28863487, 28867992, 28887305, 28889730, 28891984, 28905390, 28910498
28915870, 28927452, 28945922, 28948554, 28949888, 28951026, 28951382
28956908, 28959493, 28960211, 28965095, 28965787, 28986231, 28986257
28987439, 28991884, 28993295, 28993590, 29002488, 29006527, 29007321
29007353, 29009513, 29013832, 29024054, 29026309, 29026582, 29027694
29032276, 29039510, 29040739, 29044086, 29044954, 29048498, 29048728
29050886, 29060216, 29061016, 29115857, 29125374, 29154725, 29158680
29163567, 29170232, 29173817, 29179097, 29182517, 29182901, 29189889
29198092, 29200700, 29203604, 29213320, 29213351, 29213893, 29224605
29224710, 29237575, 29247712, 29249289, 29250230, 29250317, 29254623
29260956, 29278684, 29296257, 29301463, 29307638, 29312889, 29337294
29338348, 29339155, 29342099, 29343086, 29343156, 29343861, 29347943
29353821, 29372069, 29372460, 29375355, 29375984, 29376346, 29378913
29379978, 29383695, 29388020, 29398488, 29399336, 29405462, 29409149
29409455, 29415774, 29418165, 29420254, 29426241, 29434301, 29436454
29437712, 29450812, 29452251, 29454978, 29463047, 29464779, 29472618
29477015, 29483626, 29483672, 29483723, 29483771, 29500257, 29500963
29501218, 29504682, 29511611, 29524985, 29530515, 29536342, 29538631
29542449, 29542580, 29548592, 29549071, 29559395, 29564592, 29580394
29591343, 29608023, 29614575, 29614987, 29621961, 29625065, 29626154
29629430, 29633753, 29637526, 29637560, 29645349, 29651520, 29656843
29667994, 29676089, 29678163, 29685137, 29687220, 29688867, 29689697
29690625, 29703195, 29705793, 29707896, 29717901, 29719146, 29724063
29726695, 29741319, 29766435, 29767177, 29769901, 29774362, 29782211
29791152, 29794174, 29794462, 29796916, 29807964, 29813494, 29815341
29817278, 29822714, 29825525, 29836659, 29841687, 29844131, 29846645

29853485, 29865188, 29869404, 29869906, 29875459, 29876358, 29881050
29881575, 29884958, 29893132, 29902299, 29902311, 29914449, 29930457
29933718, 29941062, 29942554, 29944035, 29944159, 29944660, 29951620
29951759, 29961353, 29962927, 29962939, 29965888, 29991257, 29997937
29997959, 30008125, 30018017, 30018903, 30031027, 30039959, 30064268
30068871, 30076253, 30078934, 30086166, 30088912, 30092280, 30098251
30099302, 30114477, 30116203, 30117469, 30120608, 30125995, 30128047
30131286, 30139392, 30147928, 30150731, 30160625, 30163243, 30164714
30173113, 30177597, 30179644, 30186706, 30189023, 30193736, 30196358
30200680, 30200758, 30215130, 30218044, 30218317, 30223712, 30225443
30239480, 30241567, 30244787, 30246179, 30247305, 30252098, 30252156
30253255, 30265523, 30265615, 30272329, 30281591, 30282501, 30283932
30293345, 30305880, 30312094, 30312568, 30316897, 30320029, 30325407
30331356, 30342878, 30345926, 30352623, 30355490, 30357897, 30364613
30365745, 30368482, 30368668, 30372081, 30374739, 30377692, 30381207
30384121, 30384152, 30387666, 30391272, 30397100, 30402386, 30403763
30408515, 30413137, 30416034, 30421204, 30431274, 30441687, 30443393
30453442, 30458593, 30460922, 30464250, 30464655, 30473634, 30474774
30475115, 30476768, 30485255, 30489582, 30496957, 30497057, 30498824
30501574, 30503943, 30509277, 30510527, 30517516, 30522998, 30528547
30528704, 30532811, 30533198, 30534662, 30578221, 30581448, 30582500
30606345, 30613937, 30623138, 30624864, 30635302, 30652853, 30654409
30662736, 30668407, 30671813, 30679595, 30679771, 30681462, 30698289
30741263, 30749644, 30755348, 30758943, 30783551, 30803210, 30809087
30814266, 30814285, 30815852, 30816938, 30822919, 30826474, 30855101
30856358, 30866988, 30887501, 30891760, 30904672, 30905638, 30914674
30919804, 30922870, 30937340, 30964194, 30968208, 30980615, 30985027
30987088, 30994996, 30998759, 31001455, 31004719, 31013127, 31022858
31028986, 31061482, 31100172, 31104809, 31106577, 31109506, 31115502
31156383, 31172207, 31182793, 31192039, 31194264, 31200845, 31201001
31215438, 31228670, 31233170, 31254535, 31257826, 31258101, 31302499
31306248, 31306261, 31309867, 31315876, 31326608, 31331354, 31335037
31335142, 31341859, 31343752, 31347532, 31377487, 31393600, 31408636
31430722, 31501139, 31508450, 31525783, 31527103, 31544097, 31570161
31600023, 31628311, 31637680, 31658464, 31658943, 31668061, 31668872
31696577, 31711889, 31718134, 31726483, 31748000, 31749740, 31771858
31786838, 31816631, 31836113, 31862611, 31867037, 31886745, 31897786
31905033, 31909295, 31945038, 31986836, 31997805, 32028155, 32089820
32095380, 32105135, 32119339, 32153619, 32162748, 32165759, 32186646
32190132, 32190190, 32190284, 32191451, 32222473, 32234161, 32245850
32246090, 32296941, 32312131, 32327201, 32327208, 32335769, 32359044
32368789, 32368792, 32404638, 32425124, 32426251, 32436757, 32442404
32478429, 32494298, 32505009, 32509606, 32523206, 32676350, 32704765
32720458, 32725484, 32786309, 32858446, 32889434, 32892883, 33034103

Version 12.2.0.1.ru-2021-04.rur-2021-04.r1

Version 12.2.0.1.ru-2021-04.rur-2021-04.r1 includes the following:

- Patch [32507738](#): DATABASE APR 2021 RELEASE UPDATE 12.2.0.1.210420
- Patch [32473172](#): OJVM RELEASE UPDATE 12.2.0.1.210420
- Patch [32327201](#): RDBMS - DSTV36 UPDATE - TZDATA2020E
- Patch [29213893](#): DBMS_STATS FAILING WITH ERROR ORA-01422 WHEN GATHERING STATS FOR USER\$ TABLE
- Patch [28730253](#): SUPPORT NEW ERA REIWA FOR JAPANESE IMPERIAL CALENDAR
- Patch [26352615](#): SPILLOVER AUDIT FILES CANNOT BE FOUND ORA-46372
- PreUpgrade Jar: preupgrade_12201_cbuild_24_lf.zip

Combined patches for version 12.2.0.1.ru-2021-04.rur-2021-04.r1, released April 2021

Bugs fixed:

```
7391838, 8480838, 8932139, 8975044, 12763598, 13554903, 14221306
14690846, 15931756, 16002385, 16438495, 16727454, 16942578, 17027695
17533661, 17947871, 17958365, 18308268, 18521691, 18594510, 18774543
18878420, 18986501, 19072655, 19211433, 19285025, 19327292, 19526548
19614243, 19647894, 19649997, 19702201, 19721304, 20003668, 20087519
20118035, 20120236, 20324049, 20436508, 20532077, 20549013, 20588486
20591151, 20617383, 20620169, 20736227, 20756305, 20866970, 20917487
20976443, 21070321, 21089435, 21095391, 21143725, 21147908, 21159907
21178363, 21186167, 21197098, 21216226, 21320338, 21355390, 21433452
21479706, 21517767, 21520266, 21547051, 21638600, 21744603, 21788462
21837606, 21882528, 21935698, 21962287, 21981529, 21985256, 22007324
22070226, 22070473, 22070853, 22072543, 22087683, 22104866, 22107360
22174392, 22179537, 22282748, 22310426, 22347493, 22363790, 22364044
22367053, 22379010, 22446455, 22454940, 22468255, 22495673, 22503283
22503297, 22504793, 22522515, 22530986, 22564336, 22568728, 22581771
22594071, 22599050, 22628825, 22645009, 22645496, 22654475, 22700845
22726044, 22729345, 22820798, 22826067, 22843979, 22845846, 22864303
```


22898198, 22921674, 22939829, 22950945, 22970869, 22981722, 23018676
23019710, 23026585, 23035249, 23055900, 23056058, 23061453, 23065002
23066146, 23080557, 23104033, 23105538, 23109325, 23110523, 23125560
23126545, 23127945, 23143074, 23151677, 23168363, 23169712, 23177923
23179662, 23184263, 23197730, 23234232, 23237091, 23249829, 23271203
23278750, 23281269, 23282973, 23300142, 23306590, 23308065, 23310101
23312077, 23328639, 23333567, 23336559, 23342170, 23481673, 23491861
23499004, 23499160, 23521523, 23527363, 23533647, 23548817, 23567857
23572982, 23581777, 23588722, 23599216, 23600861, 23602213, 23614158
23627427, 23645516, 23665623, 23709062, 23715460, 23715518, 23730961
23733981, 23735292, 23738304, 23741944, 23743596, 23746128, 23749454
23761724, 23763462, 24006569, 24010030, 24289874, 24289895, 24294174
24303148, 24307571, 24308349, 24326444, 24326846, 24328857, 24330708
24332831, 24334708, 24336249, 24337882, 24341675, 24343905, 24345420
24346821, 24348685, 24350620, 24352981, 24355111, 24357348, 24368004
24371491, 24373528, 24373756, 24374976, 24376875, 24376878, 24383086
24385983, 24401351, 24403922, 24409977, 24415926, 24416451, 24421668
24423416, 24425056, 24425998, 24432875, 24435982, 24437162, 24440612
24440648, 24443539, 24445571, 24457597, 24460392, 24461826, 24467122
24468470, 24470606, 24471079, 24471473, 24473736, 24480567, 24484749
24485034, 24485161, 24485174, 24485619, 24486059, 24486237, 24509056
24516314, 24530364, 24534401, 24554533, 24555417, 24556862, 24556967
24560906, 24563422, 24570214, 24570598, 24573817, 24578718, 24578797
24588377, 24589081, 24589590, 24591506, 24593740, 24595699, 24596874
24600330, 24609592, 24609996, 24611527, 24616637, 24617969, 24623975
24624166, 24642495, 24654629, 24655717, 24664211, 24668398, 24669189
24669730, 24674197, 24674955, 24676172, 24677696, 24680959, 24687075
24689376, 24692973, 24693010, 24693290, 24697323, 24699619, 24701840
24710696, 24713381, 24714096, 24717183, 24717859, 24718260, 24719799
24735430, 24737064, 24737403, 24737581, 24737954, 24739791, 24744383
24744686, 24752618, 24757934, 24759556, 24760407, 24763196, 24764085
24766309, 24784414, 24786669, 24791883, 24792678, 24793511, 24796092
24797119, 24798481, 24800423, 24801152, 24802934, 24808504, 24811725
24812047, 24817447, 24818566, 24827228, 24827654, 24831514, 24835919
24841671, 24843188, 24844549, 24844841, 24845157, 24848746, 24848923
24850622, 24907917, 24908063, 24908321, 24911709, 24912588, 24920582
24921478, 24922704, 24923080, 24923215, 24923338, 24923790, 24924667
24926999, 24929210, 24938784, 24940060, 24942749, 24953434, 24957555
24960044, 24960809, 24965426, 24966594, 24966788, 24967993, 24968162
24976007, 24978100, 25022574, 25027852, 25028996, 25029022, 25029423
25031502, 25032818, 25034396, 25036006, 25036474, 25042823, 25044977
25045228, 25050160, 25051465, 25051628, 25054064, 25057811, 25058080
25060506, 25062592, 25063971, 25065563, 25072986, 25077278, 25078611
25086233, 25087436, 25091141, 25092777, 25093872, 25095982, 25098160

25099339, 25099497, 25099758, 25100063, 25100579, 25103996, 25107662
25110233, 25114561, 25115178, 25120284, 25120668, 25120742, 25121089
25123585, 25124363, 25129925, 25130312, 25140197, 25145163, 25145215
25150925, 25159176, 25162645, 25164293, 25166187, 25171041, 25171084
25173124, 25175723, 25176408, 25178032, 25178101, 25178179, 25179774
25182817, 25184453, 25184555, 25186079, 25189723, 25191872, 25192044
25192528, 25192729, 25195901, 25199585, 25200101, 25201454, 25202355
25203656, 25205368, 25205954, 25206864, 25207410, 25209912, 25210268
25210499, 25210690, 25211628, 25219450, 25223839, 25224242, 25225795
25226665, 25227381, 25230870, 25230945, 25237577, 25240188, 25240590
25241448, 25241625, 25244807, 25248384, 25250109, 25251648, 25257085
25259611, 25262869, 25263960, 25265499, 25269133, 25283790, 25287072
25288078, 25293659, 25296876, 25299227, 25299807, 25300427, 25303284
25303756, 25305405, 25307368, 25309116, 25313154, 25313411, 25316758
25317989, 25320555, 25323525, 25328093, 25328518, 25329664, 25335249
25335360, 25335790, 25337332, 25337640, 25348567, 25348956, 25353983
25356118, 25357142, 25360661, 25362958, 25367588, 25367721, 25382812
25383204, 25384462, 25386748, 25388573, 25388896, 25392535, 25393714
25395696, 25397936, 25398306, 25404117, 25404202, 25405100, 25405687
25405813, 25410017, 25410180, 25410802, 25410877, 25411036, 25415713
25416731, 25417050, 25417056, 25417958, 25425005, 25425451, 25425760
25427662, 25429959, 25430120, 25433696, 25435038, 25437699, 25440818
25442559, 25444961, 25445168, 25451531, 25452452, 25455795, 25457409
25459958, 25462714, 25463844, 25472112, 25472885, 25476125, 25476149
25477657, 25478885, 25479164, 25481087, 25482971, 25486384, 25489342
25489367, 25489607, 25492379, 25498930, 25498994, 25516250, 25524955
25528838, 25530080, 25530814, 25535668, 25536819, 25537470, 25539063
25540738, 25546580, 25546608, 25547901, 25551676, 25553616, 25554787
25555252, 25557886, 25558986, 25560487, 25560538, 25561296, 25569149
25569504, 25570929, 25573623, 25575348, 25575369, 25575628, 25576115
25579458, 25579761, 25591394, 25594901, 25597525, 25598473, 25599425
25600342, 25600421, 25601999, 25602488, 25603923, 25606091, 25607726
25612095, 25614866, 25616268, 25616359, 25616417, 25616645, 25631933
25633101, 25634317, 25634348, 25635149, 25638456, 25639019, 25643818
25643889, 25643931, 25646373, 25647325, 25648731, 25653109, 25654459
25654936, 25655390, 25655966, 25659655, 25660847, 25661819, 25662088
25662101, 25662524, 25663488, 25667973, 25669791, 25670786, 25671354
25672640, 25674386, 25680221, 25685152, 25686739, 25687460, 25691904
25694206, 25695903, 25696520, 25699321, 25700654, 25709368, 25710420
25715167, 25717371, 25722055, 25722608, 25722720, 25723097, 25723158
25728085, 25729507, 25730014, 25734963, 25736747, 25739065, 25740844
25741955, 25743479, 25747569, 25749273, 25752755, 25754606, 25756945
25757697, 25757748, 25760195, 25762221, 25764020, 25766822, 25768681
25772669, 25774077, 25775213, 25775444, 25780343, 25783447, 25784002

25785331, 25785441, 25788879, 25789041, 25789277, 25789579, 25790353
25792911, 25795865, 25797092, 25797124, 25797305, 25800464, 25802510
25803364, 25803545, 25807997, 25809524, 25810263, 25810704, 25811105
25811650, 25812390, 25813931, 25818707, 25822410, 25823532, 25823754
25824372, 25825910, 25826740, 25830492, 25832935, 25834581, 25835365
25838361, 25838755, 25852885, 25856821, 25858672, 25861398, 25865785
25866948, 25870579, 25871177, 25871639, 25871753, 25872127, 25872389
25873336, 25874050, 25874678, 25881255, 25882264, 25883438, 25885148
25888073, 25888984, 25890002, 25890046, 25890056, 25890673, 25890782
25894239, 25895224, 25897615, 25898228, 25904273, 25904490, 25905130
25906117, 25906886, 25908728, 25911724, 25914276, 25919622, 25932524
25932728, 25933494, 25941836, 25942868, 25943271, 25945130, 25947799
25951571, 25953857, 25954022, 25954054, 25957038, 25963024, 25964954
25967544, 25967985, 25970731, 25971286, 25972417, 25973152, 25975723
25977302, 25980605, 25980770, 25981498, 25982666, 25986062, 25990907
25995938, 25997810, 26006257, 26007010, 26019148, 26023042, 26024732
26024784, 26025681, 26029075, 26029777, 26029780, 26032573, 26034119
26036748, 26037215, 26038086, 26039623, 26040483, 26045732, 26051656
26078437, 26078493, 26080410, 26083298, 26087754, 26088426, 26088836
26089669, 26090767, 26090893, 26091640, 26091786, 26095327, 26095405
26096382, 26108080, 26108337, 26110259, 26110632, 26111842, 26112621
26115103, 26121990, 26124078, 26130486, 26137367, 26137416, 26138085
26145560, 26149904, 26153372, 26153977, 26168933, 26169341, 26169345
26170659, 26170715, 26176002, 26187943, 26189861, 26198757, 26198926
26201113, 26203182, 26223039, 26237338, 26237431, 26237773, 26238195
26242031, 26242677, 26243698, 26244115, 26245237, 26248143, 26249718
26256131, 26257953, 26259265, 26261327, 26263328, 26263721, 26268756
26269790, 26271001, 26274660, 26275023, 26275415, 26277439, 26281476
26285062, 26285933, 26301540, 26308650, 26309047, 26317991, 26318200
26318627, 26323308, 26324206, 26324769, 26325856, 26327418, 26327624
26327775, 26330994, 26331743, 26333141, 26334602, 26336977, 26338953
26351334, 26351996, 26352615, 26353617, 26354844, 26356098, 26358670
26359091, 26362155, 26362821, 26366517, 26367012, 26367460, 26371725
26373967, 26374791, 26375052, 26375250, 26375330, 26380097, 26385189
26386858, 26388538, 26396790, 26398675, 26399626, 26399691, 26399839
26405036, 26406387, 26407408, 26410240, 26412540, 26418088, 26420561
26421667, 26422277, 26423085, 26426526, 26426967, 26430323, 26430737
26434436, 26434999, 26435073, 26436168, 26438612, 26439748, 26440142
26440169, 26440749, 26441345, 26442308, 26444601, 26444887, 26446098
26451793, 26452606, 26474662, 26474703, 26475419, 26476090, 26476244
26478970, 26479173, 26482376, 26486365, 26492666, 26492866, 26493289
26498354, 26513067, 26513709, 26521043, 26522439, 26523432, 26526726
26526799, 26536320, 26537307, 26542135, 26542236, 26542835, 26544823
26545688, 26546070, 26546664, 26546754, 26548363, 26556014, 26558437

26569225, 26570134, 26575788, 26580633, 26582460, 26584641, 26588069
26597140, 26599395, 26608137, 26608238, 26609942, 26615291, 26615690
26617804, 26623652, 26626879, 26629381, 26633355, 26633558, 26635897
26637273, 26637824, 26639167, 26641610, 26641852, 26650226, 26650540
26654363, 26658759, 26659182, 26669550, 26680105, 26712331, 26714486
26714910, 26716835, 26717528, 26724511, 26725687, 26727397, 26729494
26729611, 26740700, 26743240, 26744595, 26745002, 26751106, 26751171
26755171, 26758193, 26764561, 26765212, 26768025, 26775602, 26784509
26790923, 26794786, 26797591, 26798411, 26798514, 26798516, 26802503
26816582, 26820076, 26822314, 26822620, 26824833, 26828994, 26829845
26830694, 26832296, 26833932, 26837569, 26837702, 26840654, 26844406
26844870, 26849779, 26855855, 26871815, 26875822, 26883456, 26895149
26896659, 26898563, 26907236, 26907327, 26908788, 26909100, 26909504
26910716, 26911000, 26923777, 26939314, 26943004, 26944190, 26947373
26958896, 26963310, 26966616, 26966916, 26967713, 26968670, 26969321
26970175, 26970717, 26981902, 26983259, 26985002, 26986173, 26992964
26999139, 27000158, 27000702, 27006120, 27006664, 27009164, 27013146
27015449, 27028251, 27032785, 27033520, 27033652, 27034890, 27036163
27037839, 27038986, 27039712, 27044169, 27044297, 27045634, 27052607
27056711, 27058530, 27060167, 27060859, 27061736, 27072923, 27073314
27079140, 27079651, 27084613, 27087426, 27090765, 27092508, 27093423
27097854, 27100800, 27101105, 27105900, 27106179, 27110878, 27115422
27117822, 27119621, 27119861, 27122162, 27124624, 27125872, 27133662
27134734, 27135647, 27135993, 27138325, 27142120, 27142373, 27142529
27144928, 27151826, 27153641, 27160922, 27161071, 27162390, 27162405
27163928, 27165231, 27169796, 27170305, 27181537, 27181897, 27185188
27195935, 27199245, 27200959, 27202015, 27203055, 27207110, 27207634
27208795, 27213224, 27216046, 27217412, 27223075, 27229389, 27231051
27234962, 27236722, 27242226, 27244337, 27244999, 27248917, 27249531
27250547, 27251690, 27254335, 27255377, 27256000, 27258578, 27259307
27262945, 27264464, 27266245, 27274456, 27274536, 27275533, 27276231
27283960, 27284499, 27285244, 27288638, 27292213, 27293599, 27302711
27302730, 27303287, 27303938, 27304410, 27304906, 27305039, 27308088
27314206, 27314390, 27314697, 27320576, 27321179, 27329612, 27333106
27334316, 27338912, 27338946, 27339115, 27345231, 27346709, 27348081
27349393, 27350267, 27351628, 27359178, 27364854, 27365014, 27367194
27369515, 27370965, 27375542, 27381498, 27383281, 27386467, 27392968
27393570, 27394703, 27395416, 27396624, 27396672, 27396813, 27397048
27400416, 27400598, 27404573, 27404668, 27405645, 27416997, 27423251
27424405, 27426363, 27432062, 27432826, 27433385, 27433870, 27434193
27439835, 27441326, 27442041, 27443406, 27445727, 27452046, 27457891
27459593, 27459948, 27461740, 27466597, 27468303, 27486805, 27487919
27489107, 27493674, 27494663, 27501373, 27501413, 27502420, 27504770
27505229, 27508985, 27510959, 27525909, 27529661, 27533780, 27533819

27534509, 27539876, 27540613, 27544973, 27548131, 27554074, 27555481
27558861, 27560602, 27562488, 27565906, 27567477, 27576342, 27576354
27587905, 27588271, 27589260, 27593501, 27595973, 27601118, 27601441
27607563, 27611612, 27613080, 27613530, 27613554, 27615649, 27617978
27620808, 27623159, 27629756, 27629928, 27632114, 27634676, 27634991
27642235, 27645231, 27657712, 27658186, 27666312, 27671633, 27680669
27686599, 27687880, 27688036, 27688099, 27688692, 27691920, 27691939
27693416, 27693713, 27695063, 27698953, 27700466, 27704237, 27709046
27710072, 27717210, 27719000, 27726780, 27729678, 27739006, 27740424
27745728, 27748954, 27751755, 27757567, 27757888, 27758544, 27758653
27758972, 27759077, 27769361, 27779886, 27793533, 27799032, 27801337
27818389, 27819881, 27824540, 27824543, 27825241, 27828794, 27828892
27829295, 27833672, 27834551, 27834569, 27835925, 27837219, 27839353
27839616, 27846298, 27846499, 27847259, 27850112, 27855490, 27861226
27873412, 27882176, 27886087, 27897759, 27898015, 27902561, 27908396
27909478, 27927431, 27929287, 27929509, 27931299, 27935493, 27940876
27945870, 27951817, 27952586, 27959048, 27959594, 27964513, 27966472
27967484, 27983174, 27986817, 27994325, 27995215, 27995248, 27997875
27998003, 27999073, 27999638, 28000269, 28007516, 28019592, 28022101
28023081, 28023399, 28023482, 28024793, 28025414, 28026866, 28033429
28040776, 28043157, 28045903, 28066655, 28067846, 28071549, 28072383
28072567, 28073470, 28074713, 28079127, 28090453, 28092783, 28098040
28098160, 28099662, 28104176, 28108003, 28111583, 28120036, 28120951
28124631, 28125601, 28125947, 28129791, 28140658, 28157786, 28164480
28165439, 28171079, 28174827, 28180464, 28181021, 28184554, 28188330
28190796, 28194173, 28199085, 28201419, 28204262, 28209985, 28215510
28218832, 28220398, 28223871, 28226179, 28229360, 28236305, 28238264
28242712, 28250929, 28256164, 28271119, 28276054, 28279837, 28281094
28282606, 28287484, 28290434, 28294563, 28302049, 28305001, 28305362
28305607, 28309406, 28319114, 28320399, 28330714, 28330971, 28350595
28354603, 28357401, 28361221, 28365111, 28369092, 28371123, 28373960
28375383, 28378446, 28384353, 28386259, 28388910, 28389153, 28390273
28391210, 28394726, 28396445, 28397317, 28401116, 28402823, 28420042
28420457, 28423598, 28432129, 28434028, 28435902, 28437315, 28439086
28454215, 28454242, 28468312, 28468493, 28481149, 28483184, 28489150
28501075, 28502098, 28502343, 28503038, 28507324, 28508053, 28508557
28512336, 28521330, 28522441, 28528349, 28530171, 28535127, 28535272
28537715, 28538439, 28542455, 28545134, 28546290, 28547068, 28547478
28564479, 28566241, 28571483, 28572407, 28572834, 28578164, 28578945
28585411, 28587723, 28589509, 28600233, 28602253, 28606598, 28608211
28612674, 28614372, 28617631, 28617959, 28621470, 28622202, 28627255
28636676, 28639299, 28642899, 28678804, 28690694, 28691965, 28692103
28692275, 28697526, 28697806, 28703812, 28708023, 28709063, 28710469
28710734, 28714988, 28715655, 28728272, 28730044, 28730253, 28734355

28740708, 28742555, 28749289, 28749724, 28758090, 28758722, 28774416
28776431, 28777174, 28791725, 28797711, 28803345, 28808314, 28817449
28819640, 28820669, 28821847, 28827682, 28830691, 28831971, 28835937
28836716, 28838066, 28844866, 28847136, 28849751, 28852325, 28852691
28855922, 28856060, 28856172, 28863263, 28863487, 28867992, 28887305
28889730, 28891984, 28905390, 28910498, 28915870, 28927452, 28945922
28948554, 28949888, 28951026, 28951382, 28956908, 28959493, 28960211
28965095, 28965787, 28986231, 28986257, 28987439, 28991884, 28993295
28993590, 29002488, 29006527, 29007321, 29007353, 29009513, 29013832
29024054, 29026309, 29026582, 29027694, 29032276, 29039510, 29040739
29044086, 29044954, 29048498, 29048728, 29050886, 29060216, 29061016
29115857, 29125374, 29154725, 29158680, 29163567, 29170232, 29173817
29179097, 29182517, 29182901, 29189889, 29198092, 29200700, 29203604
29213320, 29213351, 29213893, 29224605, 29224710, 29237575, 29247712
29249289, 29250230, 29250317, 29254623, 29260956, 29278684, 29296257
29301463, 29307638, 29312889, 29337294, 29338348, 29339155, 29343086
29343156, 29343861, 29347943, 29353821, 29372069, 29372460, 29375355
29375984, 29376346, 29378913, 29379978, 29383695, 29388020, 29398488
29399336, 29405462, 29409149, 29409455, 29415774, 29418165, 29420254
29426241, 29434301, 29436454, 29437712, 29450812, 29452251, 29454978
29463047, 29464779, 29472618, 29477015, 29483626, 29483672, 29483723
29483771, 29500257, 29500963, 29501218, 29504682, 29511611, 29524985
29530515, 29536342, 29538631, 29542449, 29542580, 29548592, 29549071
29559395, 29564592, 29580394, 29591343, 29608023, 29614575, 29614987
29621961, 29625065, 29626154, 29629430, 29633753, 29637526, 29637560
29645349, 29651520, 29656843, 29667994, 29676089, 29678163, 29685137
29687220, 29688867, 29689697, 29690625, 29703195, 29705793, 29707896
29717901, 29719146, 29724063, 29726695, 29741319, 29766435, 29767177
29769901, 29774362, 29782211, 29791152, 29794174, 29794462, 29796916
29807964, 29813494, 29815341, 29817278, 29822714, 29825525, 29836659
29841687, 29844131, 29846645, 29853485, 29865188, 29869404, 29869906
29875459, 29876358, 29881050, 29881575, 29884958, 29893132, 29902299
29902311, 29914449, 29930457, 29933718, 29941062, 29942554, 29944035
29944159, 29944660, 29951620, 29951759, 29961353, 29962927, 29962939
29965888, 29991257, 29997937, 30008125, 30018017, 30018903, 30031027
30039959, 30064268, 30068871, 30076253, 30078934, 30086166, 30088912
30092280, 30098251, 30099302, 30114477, 30116203, 30120608, 30125995
30128047, 30131286, 30139392, 30147928, 30150731, 30160625, 30163243
30164714, 30173113, 30177597, 30179644, 30186706, 30189023, 30193736
30196358, 30200680, 30200758, 30215130, 30218044, 30218317, 30223712
30225443, 30239480, 30241567, 30244787, 30246179, 30247305, 30252098
30252156, 30253255, 30265523, 30265615, 30272329, 30281591, 30282501
30283932, 30293345, 30305880, 30312094, 30312568, 30316897, 30320029
30325407, 30331356, 30342878, 30345926, 30352623, 30355490, 30357897

30364613, 30365745, 30368482, 30368668, 30372081, 30374739, 30377692
30381207, 30384121, 30384152, 30387666, 30391272, 30397100, 30402386
30403763, 30408515, 30413137, 30416034, 30421204, 30431274, 30441687
30443393, 30453442, 30458593, 30460922, 30464250, 30464655, 30473634
30474774, 30475115, 30476768, 30485255, 30489582, 30496957, 30497057
30498824, 30501574, 30503943, 30509277, 30510527, 30517516, 30522998
30528547, 30528704, 30532811, 30533198, 30534662, 30578221, 30581448
30582500, 30606345, 30613937, 30623138, 30624864, 30635302, 30652853
30654409, 30662736, 30668407, 30671813, 30679595, 30679771, 30681462
30698289, 30741263, 30749644, 30755348, 30758943, 30783551, 30803210
30809087, 30814266, 30814285, 30815852, 30816938, 30822919, 30826474
30855101, 30856358, 30866988, 30887501, 30904672, 30905638, 30914674
30919804, 30922870, 30937340, 30964194, 30968208, 30980615, 30985027
30987088, 30994996, 30998759, 31001455, 31004719, 31013127, 31022858
31028986, 31061482, 31100172, 31104809, 31106577, 31109506, 31115502
31156383, 31172207, 31182793, 31192039, 31194264, 31200845, 31201001
31215438, 31228670, 31233170, 31254535, 31257826, 31258101, 31302499
31306248, 31306261, 31309867, 31315876, 31326608, 31331354, 31335037
31335142, 31341859, 31343752, 31347532, 31377487, 31393600, 31408636
31430722, 31501139, 31508450, 31525783, 31527103, 31544097, 31570161
31600023, 31628311, 31637680, 31658464, 31658943, 31668061, 31668872
31696577, 31711889, 31718134, 31726483, 31748000, 31749740, 31771858
31786838, 31816631, 31836113, 31862611, 31867037, 31886745, 31897786
31905033, 31909295, 31945038, 31986836, 31997805, 32089820, 32105135
32162748, 32165759, 32186646, 32222473, 32234161, 32246090, 32296941
32327201, 32478429, 32505009, 32523206

Version 12.2.0.1.ru-2021-01.rur-2021-01.r1

Version 12.2.0.1.ru-2021-01.rur-2021-01.r1 includes the following:

- Patch [32228578](#): DATABASE JAN 2021 RELEASE UPDATE 12.2.0.1.210119
- Patch [32119931](#): OJVM RELEASE UPDATE 12.2.0.1.210119
- Patch [31335037](#): RDBMS - DSTV35 UPDATE - TZDATA2020A
- Patch [31335142](#): DSTV35 UPDATE - TZDATA2020A - NEED OJVM FIX
- Patch [29213893](#): DBMS_STATS FAILING WITH ERROR ORA-01422 WHEN GATHERING STATS FOR USER\$ TABLE
- PreUpgrade Jar: preupgrade_12201_cbuild_23_lf.zip
- Java Cryptography Extension (JCE): Unlimited Strength Jurisdiction Policy Files for JVM version 8

- Support for managing advisor tasks using procedures in the `rdsadmin.rdsadmin_util` package

For more information, see [Managing advisor tasks](#) in the *Amazon RDS User Guide*.

Combined patches for version 12.2.0.1.ru-2021-01.rur-2021-01.r1, released January 2021

Bugs fixed:

7391838, 8480838, 8932139, 8975044, 12763598, 13554903, 14221306
14690846, 15931756, 16002385, 16438495, 16727454, 16942578, 17027695
17533661, 17947871, 17958365, 18308268, 18521691, 18594510, 18774543
18878420, 18986501, 19072655, 19211433, 19285025, 19327292, 19526548
19614243, 19647894, 19649997, 19702201, 19721304, 20003668, 20087519
20118035, 20120236, 20324049, 20436508, 20532077, 20549013, 20588486
20591151, 20617383, 20620169, 20736227, 20756305, 20866970, 20917487
20976443, 21070321, 21089435, 21095391, 21143725, 21147908, 21159907
21178363, 21186167, 21197098, 21216226, 21320338, 21355390, 21433452
21479706, 21517767, 21520266, 21547051, 21638600, 21744603, 21788462
21837606, 21882528, 21935698, 21962287, 21981529, 21985256, 22007324
22070226, 22070473, 22070853, 22072543, 22087683, 22104866, 22107360
22174392, 22179537, 22282748, 22310426, 22347493, 22363790, 22364044
22367053, 22379010, 22446455, 22454940, 22468255, 22495673, 22503283
22503297, 22504793, 22522515, 22530986, 22564336, 22568728, 22581771
22594071, 22599050, 22628825, 22645009, 22645496, 22654475, 22700845
22726044, 22729345, 22820798, 22826067, 22843979, 22845846, 22864303
22898198, 22921674, 22939829, 22950945, 22970869, 22981722, 23018676
23019710, 23026585, 23035249, 23055900, 23056058, 23061453, 23065002
23066146, 23080557, 23104033, 23105538, 23109325, 23110523, 23125560
23126545, 23127945, 23143074, 23151677, 23168363, 23169712, 23177923
23179662, 23184263, 23197730, 23234232, 23237091, 23249829, 23271203
23278750, 23281269, 23282973, 23300142, 23306590, 23308065, 23310101
23312077, 23328639, 23333567, 23336559, 23342170, 23481673, 23491861
23499004, 23499160, 23521523, 23527363, 23533647, 23548817, 23567857
23572982, 23581777, 23588722, 23599216, 23600861, 23602213, 23614158
23645516, 23665623, 23709062, 23715460, 23715518, 23730961, 23733981
23735292, 23738304, 23741944, 23743596, 23746128, 23749454, 23761724
23763462, 24006569, 24010030, 24289874, 24289895, 24294174, 24303148
24307571, 24308349, 24326444, 24326846, 24328857, 24330708, 24332831
24334708, 24336249, 24337882, 24341675, 24343905, 24345420, 24346821

24348685, 24350620, 24352981, 24355111, 24357348, 24368004, 24371491
24373528, 24373756, 24374976, 24376875, 24376878, 24383086, 24385983
24401351, 24403922, 24409977, 24415926, 24416451, 24421668, 24423416
24425056, 24425998, 24432875, 24435982, 24437162, 24440612, 24440648
24443539, 24445571, 24457597, 24460392, 24461826, 24467122, 24468470
24470606, 24471079, 24471473, 24473736, 24484749, 24485034, 24485161
24485174, 24485619, 24486059, 24486237, 24509056, 24516314, 24530364
24534401, 24554533, 24555417, 24556862, 24556967, 24560906, 24563422
24570214, 24570598, 24573817, 24578718, 24578797, 24588377, 24589081
24589590, 24591506, 24593740, 24595699, 24596874, 24600330, 24609592
24609996, 24611527, 24616637, 24617969, 24623975, 24624166, 24642495
24654629, 24655717, 24664211, 24668398, 24669189, 24669730, 24674197
24674955, 24676172, 24677696, 24680959, 24687075, 24689376, 24692973
24693010, 24693290, 24697323, 24699619, 24701840, 24710696, 24713381
24714096, 24717183, 24717859, 24718260, 24719799, 24735430, 24737064
24737403, 24737581, 24737954, 24739791, 24744383, 24744686, 24752618
24757934, 24759556, 24760407, 24763196, 24764085, 24766309, 24784414
24786669, 24791883, 24792678, 24793511, 24796092, 24797119, 24798481
24800423, 24801152, 24802934, 24808504, 24811725, 24812047, 24817447
24818566, 24827228, 24827654, 24831514, 24835919, 24841671, 24843188
24844549, 24844841, 24845157, 24848746, 24848923, 24850622, 24907917
24908063, 24908321, 24911709, 24912588, 24920582, 24921478, 24922704
24923080, 24923215, 24923338, 24923790, 24924667, 24926999, 24929210
24938784, 24940060, 24942749, 24953434, 24957555, 24960044, 24960809
24965426, 24966594, 24966788, 24967993, 24968162, 24976007, 24978100
25022574, 25027852, 25028996, 25029022, 25029423, 25031502, 25032818
25034396, 25036006, 25036474, 25042823, 25044977, 25045228, 25050160
25051465, 25051628, 25054064, 25057811, 25058080, 25060506, 25062592
25063971, 25065563, 25072986, 25077278, 25078611, 25086233, 25087436
25091141, 25092777, 25093872, 25095982, 25098160, 25099339, 25099497
25099758, 25100063, 25100579, 25103996, 25107662, 25110233, 25114561
25115178, 25120284, 25120668, 25120742, 25121089, 25123585, 25124363
25129925, 25130312, 25140197, 25145163, 25145215, 25150925, 25159176
25162645, 25164293, 25166187, 25171041, 25171084, 25173124, 25175723
25176408, 25178032, 25178101, 25178179, 25179774, 25182817, 25184453
25184555, 25186079, 25189723, 25191872, 25192044, 25192528, 25192729
25195901, 25199585, 25200101, 25201454, 25202355, 25203656, 25205368
25205954, 25206864, 25207410, 25209912, 25210268, 25210499, 25210690
25211628, 25219450, 25223839, 25224242, 25225795, 25226665, 25227381
25230870, 25230945, 25237577, 25240188, 25240590, 25241448, 25241625
25244807, 25248384, 25250109, 25251648, 25257085, 25259611, 25262869
25263960, 25265499, 25269133, 25283790, 25287072, 25293659, 25296876
25299227, 25299807, 25300427, 25303284, 25303756, 25305405, 25307368
25309116, 25313154, 25313411, 25316758, 25317989, 25320555, 25323525

25328093, 25328518, 25329664, 25335249, 25335360, 25335790, 25337332
25337640, 25348567, 25348956, 25353983, 25356118, 25357142, 25360661
25362958, 25367588, 25367721, 25382812, 25383204, 25384462, 25386748
25388573, 25388896, 25392535, 25393714, 25395696, 25397936, 25398306
25404117, 25404202, 25405100, 25405687, 25405813, 25410017, 25410180
25410802, 25410877, 25411036, 25415713, 25416731, 25417050, 25417056
25417958, 25425005, 25425451, 25425760, 25427662, 25429959, 25430120
25433696, 25435038, 25437699, 25440818, 25442559, 25444961, 25445168
25451531, 25452452, 25455795, 25457409, 25459958, 25462714, 25463844
25472112, 25472885, 25476125, 25476149, 25477657, 25478885, 25479164
25481087, 25482971, 25486384, 25489342, 25489367, 25489607, 25492379
25498930, 25498994, 25516250, 25524955, 25528838, 25530080, 25530814
25535668, 25536819, 25537470, 25539063, 25540738, 25546580, 25546608
25547901, 25551676, 25553616, 25554787, 25555252, 25557886, 25558986
25560487, 25560538, 25561296, 25569149, 25569504, 25570929, 25573623
25575348, 25575369, 25575628, 25576115, 25579458, 25579761, 25591394
25594901, 25597525, 25598473, 25599425, 25600342, 25600421, 25601999
25602488, 25603923, 25606091, 25607726, 25612095, 25614866, 25616268
25616359, 25616417, 25616645, 25631933, 25633101, 25634317, 25634348
25635149, 25638456, 25639019, 25643818, 25643889, 25643931, 25646373
25647325, 25648731, 25653109, 25654459, 25654936, 25655390, 25655966
25659655, 25660847, 25661819, 25662088, 25662101, 25662524, 25663488
25667973, 25669791, 25670786, 25671354, 25672640, 25674386, 25680221
25685152, 25686739, 25687460, 25691904, 25694206, 25695903, 25696520
25699321, 25700654, 25709368, 25710420, 25715167, 25717371, 25722055
25722608, 25722720, 25723097, 25723158, 25728085, 25729507, 25730014
25734963, 25736747, 25739065, 25740844, 25741955, 25743479, 25747569
25749273, 25752755, 25754606, 25756945, 25757697, 25757748, 25760195
25762221, 25764020, 25766822, 25768681, 25772669, 25774077, 25775213
25775444, 25780343, 25783447, 25784002, 25785331, 25785441, 25788879
25789041, 25789277, 25789579, 25790353, 25792911, 25795865, 25797092
25797124, 25797305, 25800464, 25802510, 25803364, 25803545, 25807997
25809524, 25810263, 25810704, 25811105, 25811650, 25812390, 25813931
25818707, 25822410, 25823532, 25823754, 25824372, 25825910, 25826740
25830492, 25832935, 25834581, 25835365, 25838361, 25838755, 25852885
25856821, 25858672, 25861398, 25865785, 25866948, 25870579, 25871177
25871639, 25871753, 25872127, 25872389, 25873336, 25874050, 25874678
25881255, 25882264, 25883438, 25885148, 25888073, 25888984, 25890002
25890046, 25890056, 25890673, 25890782, 25894239, 25895224, 25897615
25898228, 25904273, 25904490, 25905130, 25906117, 25906886, 25908728
25911724, 25914276, 25919622, 25932524, 25932728, 25933494, 25941836
25942868, 25943271, 25945130, 25947799, 25951571, 25953857, 25954022
25954054, 25957038, 25963024, 25964954, 25967544, 25967985, 25970731
25971286, 25972417, 25973152, 25975723, 25977302, 25980605, 25980770

25981498, 25982666, 25986062, 25990907, 25995938, 25997810, 26006257
26007010, 26019148, 26023042, 26024732, 26024784, 26025681, 26029075
26029777, 26029780, 26032573, 26034119, 26036748, 26037215, 26038086
26039623, 26040483, 26045732, 26051656, 26078437, 26078493, 26080410
26083298, 26087754, 26088426, 26088836, 26089669, 26090767, 26090893
26091640, 26091786, 26095327, 26095405, 26096382, 26108080, 26108337
26110259, 26110632, 26111842, 26112621, 26115103, 26121990, 26124078
26130486, 26137367, 26137416, 26138085, 26145560, 26149904, 26153372
26153977, 26168933, 26169341, 26169345, 26170659, 26170715, 26176002
26187943, 26189861, 26198757, 26198926, 26201113, 26203182, 26223039
26237338, 26237431, 26237773, 26238195, 26242031, 26242677, 26243698
26244115, 26245237, 26248143, 26249718, 26256131, 26257953, 26259265
26261327, 26263328, 26263721, 26268756, 26269790, 26271001, 26274660
26275023, 26275415, 26277439, 26281476, 26285062, 26285933, 26301540
26308650, 26309047, 26317991, 26318200, 26318627, 26323308, 26324206
26324769, 26325856, 26327418, 26327624, 26327775, 26330994, 26331743
26333141, 26334602, 26336977, 26338953, 26351334, 26351996, 26353617
26354844, 26356098, 26358670, 26359091, 26362155, 26362821, 26366517
26367012, 26367460, 26371725, 26373967, 26374791, 26375052, 26375250
26375330, 26380097, 26385189, 26386858, 26388538, 26396790, 26398675
26399626, 26399691, 26399839, 26405036, 26406387, 26407408, 26410240
26412540, 26418088, 26420561, 26421667, 26422277, 26423085, 26426526
26426967, 26430323, 26430737, 26434436, 26434999, 26435073, 26436168
26438612, 26439748, 26440142, 26440169, 26440749, 26441345, 26442308
26444601, 26444887, 26446098, 26451793, 26452606, 26474662, 26474703
26475419, 26476090, 26476244, 26478970, 26479173, 26482376, 26486365
26492666, 26492866, 26493289, 26498354, 26513067, 26513709, 26521043
26522439, 26523432, 26526726, 26526799, 26536320, 26537307, 26542135
26542236, 26542835, 26544823, 26545688, 26546070, 26546664, 26546754
26548363, 26556014, 26558437, 26569225, 26570134, 26575788, 26580633
26582460, 26584641, 26588069, 26597140, 26599395, 26608137, 26608238
26609942, 26615291, 26615690, 26617804, 26623652, 26626879, 26629381
26633355, 26633558, 26635897, 26637273, 26637824, 26639167, 26641610
26641852, 26650226, 26650540, 26654363, 26658759, 26659182, 26669550
26680105, 26712331, 26714486, 26714910, 26716835, 26717528, 26724511
26725687, 26727397, 26729494, 26729611, 26740700, 26743240, 26744595
26745002, 26751106, 26751171, 26755171, 26758193, 26764561, 26765212
26768025, 26775602, 26784509, 26790923, 26794786, 26797591, 26798411
26798514, 26798516, 26802503, 26816582, 26820076, 26822314, 26822620
26824833, 26828994, 26829845, 26830694, 26832296, 26833932, 26837569
26837702, 26840654, 26844406, 26844870, 26849779, 26855855, 26871815
26875822, 26883456, 26895149, 26896659, 26898563, 26907236, 26907327
26908788, 26909100, 26909504, 26910716, 26911000, 26923777, 26939314
26943004, 26944190, 26947373, 26958896, 26963310, 26966616, 26966916

26967713, 26968670, 26969321, 26970175, 26970717, 26981902, 26983259
26985002, 26986173, 26992964, 26999139, 27000158, 27000702, 27006120
27006664, 27009164, 27013146, 27015449, 27028251, 27032785, 27033520
27033652, 27034890, 27036163, 27037839, 27038986, 27039712, 27044169
27044297, 27045634, 27052607, 27056711, 27058530, 27060167, 27060859
27061736, 27072923, 27073314, 27079140, 27079651, 27084613, 27087426
27090765, 27092508, 27093423, 27097854, 27100800, 27101105, 27105900
27106179, 27110878, 27115422, 27117822, 27119621, 27119861, 27122162
27124624, 27125872, 27133662, 27134734, 27135647, 27135993, 27138325
27142120, 27142373, 27142529, 27144928, 27151826, 27153641, 27160922
27161071, 27162390, 27162405, 27163928, 27165231, 27169796, 27170305
27181537, 27181897, 27185188, 27195935, 27199245, 27200959, 27202015
27203055, 27207110, 27207634, 27208795, 27213224, 27216046, 27217412
27223075, 27229389, 27231051, 27234962, 27236722, 27242226, 27244337
27244999, 27248917, 27249531, 27250547, 27251690, 27254335, 27255377
27256000, 27258578, 27259307, 27262945, 27264464, 27266245, 27274456
27274536, 27275533, 27276231, 27283960, 27284499, 27285244, 27288638
27292213, 27293599, 27302711, 27302730, 27303287, 27303938, 27304410
27304906, 27305039, 27308088, 27314206, 27314390, 27314697, 27320576
27321179, 27329612, 27333106, 27334316, 27338912, 27338946, 27339115
27345231, 27346709, 27348081, 27349393, 27350267, 27351628, 27359178
27364854, 27365014, 27367194, 27369515, 27370965, 27375542, 27381498
27383281, 27386467, 27392968, 27393570, 27394703, 27395416, 27396624
27396672, 27396813, 27397048, 27400416, 27400598, 27404573, 27404668
27405645, 27416997, 27423251, 27424405, 27426363, 27432062, 27432826
27433385, 27433870, 27434193, 27439835, 27441326, 27442041, 27445727
27452046, 27457891, 27459593, 27459948, 27461740, 27466597, 27468303
27486805, 27487919, 27489107, 27493674, 27494663, 27501373, 27501413
27502420, 27504770, 27505229, 27508985, 27510959, 27525909, 27529661
27533780, 27533819, 27534509, 27539876, 27540613, 27544973, 27548131
27554074, 27555481, 27558861, 27560602, 27562488, 27565906, 27567477
27576342, 27576354, 27587905, 27588271, 27589260, 27593501, 27595973
27601118, 27601441, 27607563, 27611612, 27613080, 27613530, 27613554
27615649, 27617978, 27620808, 27623159, 27629756, 27629928, 27632114
27634676, 27634991, 27642235, 27645231, 27657712, 27658186, 27666312
27671633, 27680669, 27686599, 27687880, 27688036, 27688099, 27688692
27691920, 27691939, 27693416, 27693713, 27695063, 27698953, 27700466
27704237, 27709046, 27710072, 27717210, 27719000, 27726780, 27729678
27739006, 27740424, 27745728, 27748954, 27751755, 27757567, 27757888
27758544, 27758653, 27758972, 27759077, 27769361, 27779886, 27793533
27799032, 27801337, 27818389, 27819881, 27824540, 27824543, 27825241
27828794, 27828892, 27829295, 27833672, 27834551, 27834569, 27835925
27837219, 27839353, 27839616, 27846298, 27846499, 27847259, 27850112
27855490, 27861226, 27873412, 27882176, 27886087, 27897759, 27898015

27902561, 27908396, 27909478, 27927431, 27929287, 27929509, 27931299
27935493, 27940876, 27945870, 27951817, 27952586, 27959048, 27959594
27964513, 27966472, 27967484, 27983174, 27986817, 27994325, 27995215
27995248, 27997875, 27998003, 27999073, 27999638, 28000269, 28007516
28019592, 28022101, 28023081, 28023399, 28023482, 28024793, 28025414
28026866, 28033429, 28040776, 28043157, 28045903, 28066655, 28067846
28071549, 28072383, 28072567, 28073470, 28074713, 28079127, 28090453
28092783, 28098040, 28098160, 28099662, 28104176, 28108003, 28111583
28120036, 28120951, 28124631, 28125601, 28125947, 28129791, 28140658
28157786, 28164480, 28165439, 28171079, 28174827, 28180464, 28181021
28184554, 28188330, 28190796, 28194173, 28199085, 28201419, 28204262
28209985, 28215510, 28218832, 28220398, 28223871, 28226179, 28229360
28236305, 28238264, 28242712, 28250929, 28256164, 28271119, 28276054
28279837, 28281094, 28282606, 28287484, 28290434, 28294563, 28302049
28305001, 28305362, 28305607, 28309406, 28319114, 28320399, 28330714
28330971, 28350595, 28354603, 28357401, 28361221, 28365111, 28369092
28371123, 28373960, 28375383, 28378446, 28384353, 28386259, 28388910
28389153, 28390273, 28391210, 28394726, 28396445, 28397317, 28401116
28402823, 28420042, 28420457, 28423598, 28432129, 28434028, 28435902
28437315, 28439086, 28454215, 28454242, 28468312, 28468493, 28481149
28483184, 28489150, 28501075, 28502098, 28502343, 28503038, 28507324
28508053, 28508557, 28512336, 28521330, 28522441, 28528349, 28530171
28535127, 28535272, 28537715, 28538439, 28542455, 28545134, 28546290
28547068, 28547478, 28564479, 28566241, 28571483, 28572407, 28572834
28578164, 28578945, 28585411, 28587723, 28589509, 28600233, 28602253
28606598, 28608211, 28612674, 28614372, 28617631, 28617959, 28621470
28622202, 28627255, 28636676, 28639299, 28642899, 28678804, 28690694
28691965, 28692103, 28692275, 28697526, 28697806, 28703812, 28708023
28709063, 28710469, 28710734, 28714988, 28715655, 28728272, 28730044
28734355, 28740708, 28742555, 28749289, 28749724, 28758090, 28758722
28774416, 28776431, 28777174, 28791725, 28797711, 28803345, 28808314
28817449, 28819640, 28820669, 28821847, 28827682, 28830691, 28831971
28835937, 28836716, 28838066, 28844866, 28847136, 28849751, 28852325
28852691, 28855922, 28856060, 28856172, 28863263, 28863487, 28867992
28887305, 28889730, 28891984, 28905390, 28910498, 28915870, 28927452
28945922, 28948554, 28949888, 28951026, 28951382, 28956908, 28959493
28960211, 28965095, 28965787, 28986231, 28986257, 28987439, 28991884
28993295, 28993590, 29002488, 29006527, 29007321, 29007353, 29009513
29013832, 29024054, 29026309, 29026582, 29027694, 29032276, 29039510
29040739, 29044086, 29044954, 29048498, 29048728, 29050886, 29060216
29061016, 29115857, 29125374, 29154725, 29158680, 29163567, 29170232
29173817, 29179097, 29182517, 29182901, 29189889, 29198092, 29200700
29203604, 29213320, 29213351, 29213893, 29224605, 29224710, 29237575
29247712, 29249289, 29250230, 29250317, 29254623, 29260956, 29278684

29296257, 29301463, 29307638, 29312889, 29337294, 29338348, 29339155
29343086, 29343156, 29343861, 29347943, 29353821, 29372069, 29372460
29375355, 29375984, 29376346, 29378913, 29379978, 29383695, 29388020
29398488, 29399336, 29405462, 29409149, 29409455, 29418165, 29420254
29426241, 29434301, 29436454, 29437712, 29450812, 29452251, 29454978
29463047, 29464779, 29472618, 29477015, 29483626, 29483672, 29483723
29483771, 29500257, 29500963, 29501218, 29504682, 29511611, 29524985
29530515, 29536342, 29538631, 29542449, 29542580, 29548592, 29549071
29559395, 29564592, 29580394, 29591343, 29608023, 29614575, 29614987
29621961, 29625065, 29626154, 29629430, 29633753, 29637526, 29637560
29645349, 29651520, 29656843, 29667994, 29676089, 29678163, 29685137
29687220, 29688867, 29690625, 29703195, 29705793, 29707896, 29717901
29719146, 29724063, 29726695, 29741319, 29766435, 29767177, 29769901
29774362, 29782211, 29791152, 29794174, 29794462, 29796916, 29807964
29813494, 29815341, 29817278, 29822714, 29825525, 29836659, 29841687
29844131, 29846645, 29853485, 29865188, 29869404, 29869906, 29875459
29876358, 29881050, 29881575, 29884958, 29893132, 29902299, 29902311
29914449, 29930457, 29941062, 29942554, 29944035, 29944159, 29944660
29951620, 29951759, 29961353, 29962927, 29962939, 29965888, 29991257
29997937, 30008125, 30018017, 30018903, 30031027, 30039959, 30064268
30068871, 30076253, 30078934, 30086166, 30088912, 30092280, 30098251
30099302, 30114477, 30116203, 30120608, 30125995, 30131286, 30139392
30147928, 30150731, 30160625, 30163243, 30164714, 30173113, 30177597
30179644, 30186706, 30189023, 30193736, 30196358, 30200680, 30200758
30215130, 30218044, 30218317, 30223712, 30225443, 30239480, 30241567
30244787, 30246179, 30247305, 30252098, 30252156, 30253255, 30265523
30265615, 30272329, 30281591, 30282501, 30283932, 30293345, 30305880
30312094, 30312568, 30316897, 30320029, 30325407, 30331356, 30342878
30345926, 30352623, 30355490, 30357897, 30364613, 30365745, 30368482
30368668, 30372081, 30374739, 30377692, 30381207, 30384121, 30384152
30387666, 30391272, 30397100, 30402386, 30403763, 30408515, 30413137
30416034, 30421204, 30431274, 30441687, 30443393, 30453442, 30458593
30460922, 30464250, 30464655, 30473634, 30474774, 30475115, 30476768
30485255, 30496957, 30497057, 30498824, 30501574, 30503943, 30509277
30510527, 30517516, 30522998, 30528547, 30528704, 30532811, 30533198
30534662, 30578221, 30581448, 30582500, 30606345, 30613937, 30623138
30624864, 30635302, 30652853, 30654409, 30662736, 30668407, 30671813
30679595, 30679771, 30681462, 30698289, 30741263, 30749644, 30755348
30758943, 30783551, 30803210, 30809087, 30814266, 30814285, 30815852
30816938, 30826474, 30855101, 30856358, 30866988, 30887501, 30904672
30905638, 30914674, 30919804, 30922870, 30937340, 30964194, 30968208
30980615, 30985027, 30987088, 30994996, 30998759, 31001455, 31004719
31013127, 31022858, 31028986, 31061482, 31100172, 31104809, 31106577
31109506, 31115502, 31156383, 31172207, 31182793, 31192039, 31194264

31200845, 31201001, 31215438, 31228670, 31254535, 31258101, 31302499
31306248, 31306261, 31309867, 31315876, 31326608, 31331354, 31335037
31335142, 31341859, 31343752, 31347532, 31377487, 31393600, 31408636
31430722, 31501139, 31508450, 31525783, 31544097, 31570161, 31600023
31637680, 31658464, 31668061, 31668872, 31711889, 31718134, 31749740
31771858, 31786838, 31816631, 31867037, 31905033, 31986836, 31997805
32089820, 32165759, 32186646, 32234161, 32296941

Version 12.2.0.1.ru-2020-10.rur-2020-10.r1

Version 12.2.0.1.ru-2020-10.rur-2020-10.r1 includes the following:

- Patch [31741641](#): Database Oct 2020 Release Update : 12.2.0.1.201020 (31741641)
- Patch [31668898](#): OJVM RELEASE UPDATE 12.2.0.1.201020 (31668898)
- Patch [31335037](#): RDBMS - DSTV35 UPDATE - TZDATA2020A
- Patch [31335142](#): DSTV35 UPDATE - TZDATA2020A - NEED OJVM FIX
- Patch [29213893](#): DBMS_STATS FAILING WITH ERROR ORA-01422 WHEN GATHERING STATS FOR USER\$ TABLE
- PreUpgrade Jar: preupgrade_12201_cbuild_23_lf.zip
- Support for setting and unsetting system diagnostic events using procedures in the `rdsadmin.rdsadmin_util` package

For more information, see [Setting and unsetting system diagnostic events](#) in the *Amazon RDS User Guide*.

- Support for the procedure `rdsadmin_util.truncate_apply$_cdr_info` described in [Integrated REPLICAT slow due to query on sys."_DBA_APPLY_CDR_INFO"](#) in the *Amazon RDS User Guide*.

Combined patches for version 12.2.0.1.ru-2020-10.rur-2020-10.r1, released October 2020

Bugs fixed:

7391838, 8480838, 8932139, 8975044, 12763598, 13554903, 14221306
14690846, 15931756, 16002385, 16438495, 16727454, 16942578, 17027695

17533661, 17947871, 17958365, 18308268, 18521691, 18594510, 18774543
18878420, 18986501, 19072655, 19211433, 19285025, 19327292, 19526548
19614243, 19647894, 19649997, 19702201, 19721304, 20003668, 20087519
20118035, 20120236, 20324049, 20436508, 20532077, 20549013, 20588486
20591151, 20617383, 20620169, 20736227, 20756305, 20866970, 20917487
20976443, 21070321, 21089435, 21095391, 21143725, 21147908, 21159907
21178363, 21186167, 21197098, 21216226, 21320338, 21355390, 21433452
21479706, 21517767, 21520266, 21547051, 21638600, 21744603, 21788462
21837606, 21882528, 21935698, 21962287, 21981529, 21985256, 22007324
22070226, 22070473, 22070853, 22072543, 22087683, 22104866, 22107360
22174392, 22179537, 22282748, 22310426, 22347493, 22363790, 22364044
22367053, 22379010, 22446455, 22454940, 22468255, 22495673, 22503283
22503297, 22504793, 22522515, 22530986, 22564336, 22568728, 22581771
22594071, 22599050, 22628825, 22645009, 22645496, 22654475, 22700845
22726044, 22729345, 22826067, 22843979, 22845846, 22864303, 22898198
22921674, 22939829, 22950945, 22970869, 22981722, 23018676, 23019710
23026585, 23035249, 23055900, 23056058, 23061453, 23065002, 23066146
23080557, 23104033, 23105538, 23109325, 23110523, 23125560, 23126545
23127945, 23143074, 23151677, 23168363, 23169712, 23177923, 23179662
23184263, 23197730, 23234232, 23237091, 23249829, 23271203, 23278750
23281269, 23282973, 23300142, 23306590, 23308065, 23310101, 23312077
23328639, 23333567, 23336559, 23342170, 23481673, 23491861, 23499004
23499160, 23521523, 23527363, 23533647, 23548817, 23567857, 23572982
23581777, 23588722, 23599216, 23600861, 23602213, 23614158, 23645516
23665623, 23709062, 23715460, 23715518, 23730961, 23733981, 23735292
23738304, 23741944, 23743596, 23746128, 23749454, 23761724, 23763462
24006569, 24010030, 24289874, 24289895, 24294174, 24303148, 24307571
24308349, 24326444, 24326846, 24328857, 24330708, 24332831, 24334708
24336249, 24337882, 24341675, 24343905, 24345420, 24346821, 24348685
24350620, 24352981, 24355111, 24357348, 24368004, 24371491, 24373528
24373756, 24374976, 24376875, 24376878, 24383086, 24385983, 24401351
24403922, 24409977, 24415926, 24416451, 24421668, 24423416, 24425056
24425998, 24432875, 24435982, 24437162, 24440612, 24440648, 24443539
24445571, 24457597, 24460392, 24461826, 24467122, 24468470, 24470606
24471079, 24471473, 24473736, 24484749, 24485034, 24485161, 24485174
24485619, 24486059, 24486237, 24509056, 24516314, 24530364, 24534401
24554533, 24555417, 24556862, 24556967, 24560906, 24563422, 24570214
24570598, 24573817, 24578718, 24578797, 24588377, 24589081, 24589590
24591506, 24593740, 24595699, 24596874, 24600330, 24609592, 24609996
24611527, 24616637, 24617969, 24623975, 24624166, 24642495, 24654629
24655717, 24664211, 24668398, 24669189, 24669730, 24674197, 24674955
24676172, 24677696, 24680959, 24687075, 24689376, 24692973, 24693010
24693290, 24697323, 24699619, 24701840, 24710696, 24713381, 24714096
24717183, 24717859, 24718260, 24719799, 24735430, 24737064, 24737403

24737581, 24737954, 24739791, 24744383, 24744686, 24752618, 24757934
24759556, 24760407, 24763196, 24764085, 24766309, 24784414, 24786669
24791883, 24792678, 24793511, 24796092, 24797119, 24798481, 24800423
24801152, 24802934, 24808504, 24811725, 24812047, 24817447, 24818566
24827228, 24827654, 24831514, 24835919, 24841671, 24843188, 24844549
24844841, 24845157, 24848746, 24848923, 24850622, 24907917, 24908063
24908321, 24911709, 24912588, 24920582, 24921478, 24922704, 24923080
24923215, 24923338, 24923790, 24924667, 24926999, 24929210, 24938784
24940060, 24942749, 24953434, 24957555, 24960044, 24960809, 24965426
24966594, 24966788, 24967993, 24968162, 24976007, 24978100, 25022574
25027852, 25028996, 25029022, 25029423, 25031502, 25032818, 25034396
25036006, 25036474, 25042823, 25044977, 25045228, 25050160, 25051465
25051628, 25054064, 25057811, 25058080, 25060506, 25062592, 25063971
25065563, 25072986, 25077278, 25078611, 25086233, 25087436, 25091141
25092777, 25093872, 25095982, 25098160, 25099339, 25099497, 25099758
25100063, 25100579, 25103996, 25107662, 25110233, 25114561, 25115178
25120284, 25120668, 25120742, 25121089, 25123585, 25124363, 25129925
25130312, 25140197, 25145163, 25145215, 25150925, 25159176, 25162645
25164293, 25166187, 25171041, 25171084, 25173124, 25175723, 25176408
25178032, 25178101, 25178179, 25179774, 25182817, 25184453, 25184555
25186079, 25189723, 25191872, 25192044, 25192528, 25192729, 25195901
25199585, 25200101, 25201454, 25202355, 25203656, 25205368, 25205954
25206864, 25207410, 25209912, 25210268, 25210499, 25210690, 25211628
25219450, 25223839, 25224242, 25225795, 25226665, 25227381, 25230870
25230945, 25237577, 25240188, 25240590, 25241448, 25241625, 25244807
25248384, 25250109, 25251648, 25257085, 25259611, 25262869, 25263960
25265499, 25269133, 25283790, 25287072, 25293659, 25296876, 25299227
25299807, 25300427, 25303284, 25303756, 25305405, 25307368, 25309116
25313154, 25313411, 25316758, 25317989, 25320555, 25323525, 25328093
25328518, 25329664, 25335249, 25335360, 25335790, 25337332, 25337640
25348567, 25348956, 25353983, 25356118, 25357142, 25360661, 25362958
25367588, 25367721, 25382812, 25383204, 25384462, 25386748, 25388573
25388896, 25392535, 25393714, 25395696, 25397936, 25398306, 25404117
25404202, 25405100, 25405687, 25405813, 25410017, 25410180, 25410802
25410877, 25411036, 25415713, 25416731, 25417050, 25417056, 25417958
25425005, 25425451, 25425760, 25427662, 25429959, 25430120, 25433696
25435038, 25437699, 25440818, 25442559, 25444961, 25445168, 25451531
25452452, 25455795, 25457409, 25459958, 25462714, 25463844, 25472112
25472885, 25476125, 25476149, 25477657, 25478885, 25479164, 25481087
25482971, 25486384, 25489342, 25489367, 25489607, 25492379, 25498930
25498994, 25516250, 25524955, 25528838, 25530080, 25530814, 25535668
25536819, 25537470, 25539063, 25540738, 25546580, 25546608, 25547901
25551676, 25553616, 25554787, 25555252, 25557886, 25558986, 25560487
25560538, 25561296, 25569149, 25569504, 25570929, 25573623, 25575348

25575369, 25575628, 25576115, 25579458, 25579761, 25591394, 25594901
25597525, 25598473, 25599425, 25600342, 25600421, 25601999, 25602488
25603923, 25606091, 25607726, 25612095, 25614866, 25616268, 25616359
25616417, 25616645, 25631933, 25633101, 25634317, 25634348, 25635149
25638456, 25639019, 25643818, 25643889, 25643931, 25646373, 25647325
25648731, 25653109, 25654459, 25654936, 25655390, 25655966, 25659655
25660847, 25661819, 25662088, 25662101, 25662524, 25663488, 25667973
25669791, 25670786, 25671354, 25672640, 25674386, 25680221, 25685152
25686739, 25687460, 25691904, 25694206, 25695903, 25696520, 25699321
25700654, 25709368, 25710420, 25715167, 25717371, 25722055, 25722608
25722720, 25723097, 25723158, 25728085, 25729507, 25730014, 25734963
25736747, 25739065, 25740844, 25741955, 25743479, 25747569, 25749273
25752755, 25754606, 25756945, 25757697, 25757748, 25760195, 25762221
25764020, 25766822, 25768681, 25772669, 25774077, 25775213, 25775444
25780343, 25783447, 25784002, 25785331, 25785441, 25788879, 25789041
25789277, 25789579, 25790353, 25792911, 25795865, 25797092, 25797124
25797305, 25800464, 25802510, 25803364, 25803545, 25807997, 25809524
25810263, 25810704, 25811105, 25811650, 25812390, 25813931, 25818707
25822410, 25823532, 25823754, 25824372, 25825910, 25826740, 25830492
25832935, 25834581, 25835365, 25838361, 25838755, 25852885, 25856821
25858672, 25861398, 25865785, 25866948, 25870579, 25871177, 25871639
25871753, 25872127, 25872389, 25873336, 25874050, 25874678, 25881255
25882264, 25883438, 25885148, 25888073, 25888984, 25890002, 25890046
25890056, 25890673, 25890782, 25894239, 25895224, 25897615, 25898228
25904273, 25904490, 25905130, 25906117, 25906886, 25908728, 25911724
25914276, 25919622, 25932524, 25932728, 25933494, 25941836, 25942868
25943271, 25945130, 25947799, 25951571, 25953857, 25954022, 25954054
25957038, 25963024, 25964954, 25967544, 25967985, 25970731, 25971286
25972417, 25973152, 25975723, 25977302, 25980605, 25980770, 25981498
25982666, 25986062, 25990907, 25995938, 25997810, 26006257, 26007010
26019148, 26023042, 26024732, 26024784, 26025681, 26029075, 26029777
26029780, 26032573, 26034119, 26036748, 26037215, 26038086, 26039623
26040483, 26045732, 26051656, 26078437, 26078493, 26080410, 26083298
26087754, 26088426, 26088836, 26089669, 26090767, 26090893, 26091640
26091786, 26095327, 26095405, 26096382, 26108080, 26108337, 26110259
26110632, 26111842, 26112621, 26115103, 26121990, 26124078, 26130486
26137367, 26137416, 26138085, 26145560, 26149904, 26153372, 26153977
26168933, 26169341, 26169345, 26170659, 26170715, 26176002, 26187943
26189861, 26198757, 26198926, 26201113, 26203182, 26223039, 26237338
26237431, 26237773, 26238195, 26242031, 26242677, 26243698, 26244115
26245237, 26248143, 26249718, 26256131, 26257953, 26259265, 26261327
26263328, 26263721, 26268756, 26269790, 26271001, 26274660, 26275023
26275415, 26277439, 26281476, 26285062, 26285933, 26301540, 26308650
26309047, 26317991, 26318200, 26318627, 26323308, 26324206, 26324769

26325856, 26327418, 26327624, 26327775, 26330994, 26331743, 26333141
26334602, 26336977, 26338953, 26351334, 26351996, 26353617, 26354844
26356098, 26358670, 26359091, 26362155, 26362821, 26366517, 26367012
26367460, 26371725, 26373967, 26374791, 26375052, 26375250, 26375330
26380097, 26385189, 26386858, 26388538, 26396790, 26398675, 26399626
26399691, 26399839, 26405036, 26406387, 26407408, 26410240, 26412540
26418088, 26420561, 26421667, 26422277, 26423085, 26426526, 26426967
26430323, 26430737, 26434436, 26434999, 26435073, 26436168, 26438612
26439748, 26440142, 26440169, 26440749, 26441345, 26442308, 26444601
26444887, 26446098, 26452606, 26474662, 26474703, 26475419, 26476090
26476244, 26478970, 26479173, 26482376, 26486365, 26492666, 26492866
26493289, 26498354, 26513067, 26513709, 26521043, 26522439, 26523432
26526726, 26526799, 26536320, 26537307, 26542135, 26542236, 26542835
26544823, 26545688, 26546070, 26546664, 26546754, 26548363, 26556014
26558437, 26569225, 26570134, 26575788, 26580633, 26582460, 26584641
26588069, 26597140, 26599395, 26608137, 26608238, 26609942, 26615291
26615690, 26617804, 26623652, 26626879, 26629381, 26633355, 26633558
26635897, 26637273, 26637824, 26639167, 26641610, 26641852, 26650226
26650540, 26654363, 26658759, 26659182, 26669550, 26680105, 26712331
26714486, 26714910, 26716835, 26717528, 26724511, 26725687, 26727397
26729494, 26729611, 26740700, 26743240, 26744595, 26745002, 26751106
26751171, 26755171, 26758193, 26764561, 26765212, 26768025, 26775602
26784509, 26790923, 26794786, 26797591, 26798411, 26798514, 26798516
26802503, 26816582, 26820076, 26822314, 26822620, 26824833, 26828994
26829845, 26830694, 26832296, 26833932, 26837569, 26837702, 26840654
26844406, 26844870, 26849779, 26855855, 26871815, 26875822, 26883456
26895149, 26896659, 26898563, 26907236, 26907327, 26908788, 26909100
26909504, 26910716, 26911000, 26923777, 26939314, 26943004, 26944190
26947373, 26958896, 26963310, 26966616, 26966916, 26967713, 26968670
26969321, 26970175, 26970717, 26981902, 26983259, 26985002, 26986173
26992964, 26999139, 27000158, 27000702, 27006120, 27006664, 27009164
27013146, 27015449, 27028251, 27032785, 27033520, 27033652, 27034890
27036163, 27037839, 27038986, 27039712, 27044169, 27044297, 27045634
27052607, 27056711, 27058530, 27060167, 27060859, 27061736, 27072923
27073314, 27079140, 27079651, 27084613, 27087426, 27090765, 27092508
27093423, 27097854, 27100800, 27101105, 27105900, 27106179, 27110878
27115422, 27117822, 27119621, 27119861, 27122162, 27124624, 27125872
27133662, 27134734, 27135647, 27135993, 27138325, 27142120, 27142373
27142529, 27144928, 27151826, 27153641, 27160922, 27161071, 27162390
27162405, 27163928, 27165231, 27169796, 27170305, 27181537, 27181897
27185188, 27195935, 27199245, 27200959, 27202015, 27203055, 27207110
27207634, 27208795, 27213224, 27216046, 27217412, 27223075, 27229389
27231051, 27234962, 27236722, 27242226, 27244337, 27244999, 27248917
27249531, 27250547, 27251690, 27254335, 27255377, 27256000, 27258578

27259307, 27262945, 27264464, 27266245, 27274456, 27274536, 27275533
27276231, 27283960, 27284499, 27285244, 27288638, 27292213, 27293599
27302711, 27302730, 27303287, 27303938, 27304410, 27304906, 27305039
27308088, 27314206, 27314390, 27314697, 27320576, 27321179, 27329612
27333106, 27334316, 27338912, 27338946, 27339115, 27345231, 27346709
27348081, 27349393, 27350267, 27351628, 27359178, 27364854, 27365014
27367194, 27369515, 27370965, 27375542, 27381498, 27383281, 27386467
27392968, 27393570, 27394703, 27395416, 27396624, 27396672, 27396813
27397048, 27400416, 27400598, 27404573, 27404668, 27405645, 27416997
27423251, 27424405, 27426363, 27432062, 27432826, 27433385, 27433870
27434193, 27439835, 27441326, 27442041, 27445727, 27452046, 27457891
27459593, 27459948, 27461740, 27466597, 27468303, 27486805, 27487919
27489107, 27493674, 27494663, 27501373, 27501413, 27502420, 27504770
27505229, 27508985, 27510959, 27525909, 27529661, 27533780, 27533819
27534509, 27539876, 27540613, 27544973, 27548131, 27554074, 27555481
27558861, 27560602, 27562488, 27565906, 27567477, 27576342, 27576354
27587905, 27588271, 27589260, 27593501, 27595973, 27601118, 27601441
27607563, 27611612, 27613080, 27613530, 27613554, 27615649, 27617978
27620808, 27623159, 27629756, 27629928, 27632114, 27634676, 27634991
27642235, 27645231, 27657712, 27658186, 27666312, 27671633, 27680669
27686599, 27687880, 27688036, 27688099, 27688692, 27691920, 27691939
27693416, 27693713, 27695063, 27698953, 27700466, 27704237, 27709046
27710072, 27717210, 27719000, 27726780, 27729678, 27739006, 27740424
27745728, 27748954, 27751755, 27757567, 27757888, 27758544, 27758653
27758972, 27759077, 27769361, 27779886, 27793533, 27799032, 27801337
27818389, 27819881, 27824540, 27824543, 27825241, 27828794, 27828892
27829295, 27833672, 27834551, 27834569, 27835925, 27837219, 27839353
27839616, 27846298, 27846499, 27847259, 27850112, 27855490, 27861226
27873412, 27882176, 27886087, 27897759, 27898015, 27902561, 27908396
27909478, 27927431, 27929287, 27929509, 27931299, 27935493, 27940876
27945870, 27951817, 27952586, 27959048, 27959594, 27964513, 27966472
27967484, 27983174, 27986817, 27994325, 27995215, 27995248, 27997875
27998003, 27999073, 27999638, 28000269, 28019592, 28022101, 28023081
28023399, 28023482, 28024793, 28025414, 28026866, 28033429, 28040776
28043157, 28045903, 28066655, 28067846, 28071549, 28072383, 28072567
28073470, 28074713, 28079127, 28090453, 28092783, 28098040, 28098160
28099662, 28104176, 28108003, 28111583, 28120036, 28120951, 28124631
28125601, 28125947, 28129791, 28140658, 28157786, 28164480, 28165439
28171079, 28174827, 28180464, 28181021, 28184554, 28188330, 28190796
28194173, 28199085, 28201419, 28204262, 28209985, 28215510, 28218832
28220398, 28223871, 28226179, 28229360, 28236305, 28238264, 28242712
28250929, 28256164, 28271119, 28276054, 28279837, 28281094, 28282606
28287484, 28290434, 28294563, 28302049, 28305001, 28305362, 28305607
28309406, 28319114, 28320399, 28330714, 28330971, 28350595, 28354603

28357401, 28361221, 28365111, 28369092, 28371123, 28373960, 28375383
28378446, 28384353, 28386259, 28388910, 28389153, 28390273, 28391210
28394726, 28396445, 28397317, 28401116, 28402823, 28420042, 28420457
28423598, 28432129, 28434028, 28435902, 28437315, 28439086, 28454215
28454242, 28468312, 28468493, 28481149, 28483184, 28489150, 28501075
28502098, 28502343, 28503038, 28507324, 28508053, 28508557, 28512336
28521330, 28522441, 28528349, 28530171, 28535127, 28535272, 28537715
28538439, 28542455, 28545134, 28546290, 28547068, 28547478, 28564479
28566241, 28571483, 28572407, 28572834, 28578164, 28578945, 28585411
28587723, 28589509, 28600233, 28602253, 28606598, 28608211, 28612674
28614372, 28617631, 28617959, 28621470, 28622202, 28627255, 28636676
28639299, 28642899, 28678804, 28690694, 28691965, 28692103, 28692275
28697526, 28697806, 28703812, 28708023, 28709063, 28710469, 28710734
28714988, 28715655, 28728272, 28730044, 28734355, 28740708, 28742555
28749289, 28749724, 28758090, 28758722, 28774416, 28776431, 28777174
28791725, 28797711, 28803345, 28808314, 28817449, 28819640, 28820669
28821847, 28827682, 28830691, 28831971, 28835937, 28836716, 28838066
28844866, 28847136, 28849751, 28852325, 28852691, 28855922, 28856060
28856172, 28863263, 28863487, 28867992, 28887305, 28889730, 28891984
28905390, 28910498, 28915870, 28927452, 28945922, 28948554, 28949888
28951026, 28951382, 28956908, 28959493, 28960211, 28965095, 28965787
28986231, 28986257, 28987439, 28991884, 28993295, 28993590, 29002488
29006527, 29007321, 29007353, 29009513, 29013832, 29024054, 29026309
29026582, 29027694, 29032276, 29039510, 29040739, 29044086, 29044954
29048498, 29048728, 29050886, 29060216, 29061016, 29115857, 29125374
29154725, 29158680, 29163567, 29170232, 29173817, 29179097, 29182517
29182901, 29189889, 29198092, 29200700, 29203604, 29213320, 29213351
29213893, 29224605, 29224710, 29237575, 29247712, 29249289, 29250230
29250317, 29254623, 29260956, 29278684, 29296257, 29301463, 29307638
29312889, 29337294, 29338348, 29339155, 29343086, 29343156, 29343861
29347943, 29353821, 29372069, 29372460, 29375355, 29375984, 29376346
29378913, 29379978, 29383695, 29388020, 29398488, 29399336, 29405462
29409149, 29409455, 29418165, 29420254, 29426241, 29434301, 29436454
29437712, 29450812, 29452251, 29454978, 29463047, 29464779, 29472618
29477015, 29483626, 29483672, 29483723, 29483771, 29500257, 29500963
29501218, 29504682, 29511611, 29524985, 29530515, 29536342, 29538631
29542449, 29542580, 29548592, 29549071, 29559395, 29564592, 29580394
29591343, 29608023, 29614575, 29614987, 29621961, 29625065, 29626154
29629430, 29633753, 29637526, 29637560, 29645349, 29651520, 29656843
29667994, 29676089, 29678163, 29685137, 29687220, 29688867, 29690625
29703195, 29705793, 29707896, 29717901, 29719146, 29724063, 29726695
29741319, 29766435, 29767177, 29769901, 29774362, 29782211, 29791152
29794174, 29794462, 29807964, 29813494, 29815341, 29817278, 29822714
29825525, 29836659, 29841687, 29844131, 29846645, 29853485, 29865188

29869404, 29869906, 29875459, 29876358, 29881050, 29881575, 29884958
29893132, 29902299, 29902311, 29914449, 29930457, 29941062, 29942554
29944035, 29944159, 29944660, 29951620, 29951759, 29961353, 29962927
29962939, 29965888, 29991257, 29997937, 30008125, 30018017, 30018903
30031027, 30039959, 30064268, 30068871, 30076253, 30078934, 30086166
30088912, 30092280, 30098251, 30099302, 30114477, 30116203, 30120608
30125995, 30131286, 30139392, 30147928, 30150731, 30160625, 30163243
30164714, 30173113, 30177597, 30179644, 30186706, 30189023, 30193736
30196358, 30200680, 30200758, 30215130, 30218044, 30218317, 30223712
30225443, 30239480, 30241567, 30244787, 30246179, 30247305, 30252098
30252156, 30253255, 30265523, 30265615, 30272329, 30281591, 30282501
30283932, 30293345, 30305880, 30312094, 30312568, 30316897, 30320029
30325407, 30331356, 30342878, 30352623, 30355490, 30357897, 30364613
30365745, 30368482, 30368668, 30372081, 30374739, 30381207, 30384121
30384152, 30387666, 30391272, 30397100, 30402386, 30403763, 30408515
30413137, 30416034, 30421204, 30431274, 30441687, 30443393, 30453442
30458593, 30460922, 30464250, 30464655, 30473634, 30474774, 30475115
30476768, 30485255, 30496957, 30497057, 30498824, 30501574, 30503943
30509277, 30510527, 30517516, 30522998, 30528547, 30528704, 30532811
30533198, 30534662, 30578221, 30581448, 30582500, 30606345, 30613937
30623138, 30624864, 30635302, 30652853, 30654409, 30662736, 30668407
30671813, 30679595, 30679771, 30681462, 30698289, 30741263, 30749644
30755348, 30758943, 30783551, 30803210, 30814266, 30814285, 30815852
30816938, 30855101, 30856358, 30866988, 30887501, 30904672, 30905638
30914674, 30919804, 30922870, 30937340, 30964194, 30968208, 30980615
30985027, 30987088, 30994996, 30998759, 31001455, 31004719, 31013127
31022858, 31028986, 31061482, 31100172, 31104809, 31106577, 31109506
31115502, 31156383, 31172207, 31182793, 31192039, 31194264, 31200845
31201001, 31215438, 31228670, 31254535, 31258101, 31302499, 31306248
31306261, 31309867, 31315876, 31326608, 31331354, 31335037, 31335142
31341859, 31343752, 31347532, 31393600, 31430722, 31508450, 31544097
31570161, 31600023, 31658464, 31668061, 31668872, 31718134, 31771858
31867037, 31905033

Version 12.2.0.1.ru-2020-07.rur-2020-07.r1

Version 12.2.0.1.ru-2020-07.rur-2020-07.r1 includes the following:

- Patch [31312468](#): Database Jul 2020 Release Update 12.2.0.1.200714
- Patch [31219919](#): OJVM RELEASE UPDATE: 12.2.0.1.200714
- Patch [31335037](#): DSTV35 for RDBMS (TZDATA2020A)

- Patch [31335142](#): DSTV35 for OJVM (TZDATA2020A)
- Patch [29213893](#): DBMS_STATS FAILING WITH ERROR ORA-01422 WHEN GATHERING STATS FOR USER\$ TABLE
- PreUpgrade Jar: preupgrade_12201_cbuild_23_lf.zip

Combined patches for version 12.2.0.1.ru-2020-07.rur-2020-07.r1, released July 2020

Bugs fixed:

7391838, 8480838, 8932139, 8975044, 12763598, 13554903, 14221306
 14690846, 15931756, 16002385, 16438495, 16727454, 16942578, 17027695
 17533661, 17947871, 18308268, 18521691, 18594510, 18774543, 18878420
 18986501, 19072655, 19211433, 19285025, 19327292, 19526548, 19614243
 19647894, 19649997, 19702201, 19721304, 20003668, 20087519, 20118035
 20120236, 20324049, 20436508, 20532077, 20549013, 20588486, 20591151
 20617383, 20620169, 20736227, 20756305, 20866970, 20976443, 21070321
 21089435, 21095391, 21143725, 21147908, 21159907, 21178363, 21186167
 21197098, 21216226, 21320338, 21433452, 21479706, 21517767, 21520266
 21547051, 21638600, 21744603, 21788462, 21837606, 21882528, 21935698
 21981529, 21985256, 22007324, 22070226, 22070473, 22070853, 22072543
 22087683, 22104866, 22107360, 22174392, 22179537, 22282748, 22310426
 22347493, 22363790, 22364044, 22367053, 22379010, 22446455, 22454940
 22495673, 22503283, 22503297, 22504793, 22522515, 22530986, 22564336
 22568728, 22581771, 22594071, 22599050, 22628825, 22645009, 22645496
 22654475, 22700845, 22726044, 22729345, 22826067, 22843979, 22845846
 22864303, 22898198, 22921674, 22939829, 22950945, 22970869, 22981722
 23018676, 23019710, 23026585, 23035249, 23055900, 23056058, 23061453
 23065002, 23066146, 23080557, 23104033, 23105538, 23109325, 23110523
 23125560, 23126545, 23127945, 23143074, 23151677, 23168363, 23169712
 23177923, 23179662, 23184263, 23197730, 23234232, 23237091, 23249829
 23271203, 23278750, 23281269, 23300142, 23306590, 23308065, 23310101
 23312077, 23328639, 23333567, 23336559, 23342170, 23481673, 23491861
 23499004, 23499160, 23521523, 23527363, 23533647, 23548817, 23567857
 23572982, 23581777, 23588722, 23599216, 23600861, 23602213, 23614158
 23645516, 23665623, 23709062, 23715460, 23715518, 23730961, 23733981
 23735292, 23738304, 23741944, 23743596, 23746128, 23749454, 23761724
 24006569, 24010030, 24289874, 24289895, 24294174, 24303148, 24307571
 24308349, 24326444, 24326846, 24328857, 24330708, 24332831, 24334708
 24336249, 24337882, 24341675, 24343905, 24345420, 24346821, 24348685

24350620, 24352981, 24355111, 24357348, 24368004, 24371491, 24373528
24373756, 24374976, 24376875, 24376878, 24383086, 24385983, 24401351
24403922, 24409977, 24415926, 24416451, 24421668, 24423416, 24425056
24425998, 24435982, 24437162, 24440648, 24443539, 24457597, 24460392
24461826, 24467122, 24468470, 24470606, 24471079, 24471473, 24473736
24484749, 24485034, 24485161, 24485174, 24485619, 24486059, 24486237
24509056, 24516314, 24530364, 24534401, 24554533, 24555417, 24556862
24556967, 24560906, 24563422, 24570214, 24570598, 24573817, 24578718
24578797, 24588377, 24589081, 24589590, 24591506, 24593740, 24595699
24596874, 24600330, 24609592, 24609996, 24611527, 24616637, 24617969
24623975, 24624166, 24642495, 24654629, 24655717, 24664211, 24668398
24669189, 24669730, 24674197, 24674955, 24676172, 24677696, 24680959
24687075, 24689376, 24692973, 24693010, 24693290, 24697323, 24699619
24701840, 24710696, 24713381, 24714096, 24717183, 24717859, 24718260
24719799, 24735430, 24737064, 24737403, 24737581, 24737954, 24739791
24744383, 24744686, 24752618, 24757934, 24759556, 24760407, 24764085
24766309, 24784414, 24786669, 24791883, 24792678, 24793511, 24796092
24797119, 24798481, 24800423, 24801152, 24802934, 24808504, 24811725
24812047, 24818566, 24827228, 24827654, 24831514, 24835919, 24841671
24843188, 24844549, 24844841, 24845157, 24848746, 24848923, 24850622
24907917, 24908063, 24908321, 24911709, 24912588, 24920582, 24921478
24922704, 24923080, 24923215, 24923338, 24923790, 24924667, 24926999
24929210, 24938784, 24940060, 24942749, 24953434, 24957555, 24960044
24960809, 24965426, 24966594, 24966788, 24967993, 24968162, 24976007
24978100, 25022574, 25027852, 25028996, 25029022, 25029423, 25031502
25032818, 25034396, 25036006, 25036474, 25042823, 25044977, 25045228
25050160, 25051465, 25051628, 25054064, 25057811, 25058080, 25060506
25062592, 25063971, 25065563, 25072986, 25077278, 25078611, 25086233
25087436, 25091141, 25092777, 25093872, 25095982, 25098160, 25099339
25099497, 25099758, 25100063, 25100579, 25103996, 25107662, 25110233
25114561, 25120284, 25120668, 25120742, 25121089, 25123585, 25124363
25129925, 25130312, 25140197, 25145163, 25145215, 25150925, 25159176
25162645, 25164293, 25166187, 25171041, 25171084, 25173124, 25175723
25176408, 25178032, 25178101, 25178179, 25179774, 25182817, 25184453
25184555, 25186079, 25189723, 25191872, 25192044, 25192528, 25192729
25195901, 25199585, 25200101, 25201454, 25202355, 25203656, 25205954
25206864, 25207410, 25209912, 25210268, 25210499, 25210690, 25211628
25219450, 25223839, 25224242, 25225795, 25226665, 25227381, 25230870
25230945, 25237577, 25240188, 25240590, 25241448, 25241625, 25244807
25248384, 25250109, 25251648, 25257085, 25259611, 25262869, 25263960
25265499, 25269133, 25283790, 25287072, 25293659, 25296876, 25299227
25299807, 25300427, 25303284, 25303756, 25305405, 25307368, 25309116
25313154, 25313411, 25316758, 25317989, 25320555, 25323525, 25328093
25328518, 25329664, 25335249, 25335360, 25335790, 25337332, 25337640

25348956, 25353983, 25356118, 25357142, 25360661, 25362958, 25367588
25367721, 25382812, 25383204, 25384462, 25386748, 25388573, 25388896
25392535, 25393714, 25395696, 25397936, 25398306, 25404202, 25405100
25405687, 25405813, 25410017, 25410180, 25410802, 25410877, 25411036
25415713, 25416731, 25417050, 25417056, 25417958, 25425005, 25425451
25425760, 25427662, 25429959, 25430120, 25433696, 25435038, 25437699
25440818, 25442559, 25444961, 25445168, 25451531, 25452452, 25455795
25457409, 25459958, 25462714, 25463844, 25472112, 25472885, 25476125
25476149, 25477657, 25478885, 25479164, 25481087, 25482971, 25486384
25489342, 25489367, 25489607, 25492379, 25498930, 25498994, 25516250
25524955, 25528838, 25530080, 25530814, 25535668, 25536819, 25537470
25539063, 25540738, 25546580, 25546608, 25547901, 25551676, 25553616
25554787, 25555252, 25557886, 25558986, 25560487, 25560538, 25561296
25569149, 25570929, 25573623, 25575348, 25575369, 25575628, 25576115
25579458, 25579761, 25591394, 25594901, 25597525, 25598473, 25599425
25600342, 25600421, 25601999, 25602488, 25603923, 25606091, 25607726
25612095, 25614866, 25616268, 25616359, 25616417, 25616645, 25631933
25633101, 25634317, 25634348, 25635149, 25638456, 25639019, 25643818
25643889, 25643931, 25646373, 25647325, 25648731, 25653109, 25654459
25654936, 25655390, 25655966, 25659655, 25660847, 25661819, 25662088
25662101, 25662524, 25663488, 25667973, 25669791, 25670786, 25671354
25672640, 25674386, 25680221, 25685152, 25686739, 25687460, 25691904
25694206, 25695903, 25696520, 25699321, 25700654, 25709368, 25710420
25715167, 25717371, 25722055, 25722608, 25722720, 25723097, 25723158
25728085, 25729507, 25730014, 25734963, 25736747, 25739065, 25740844
25741955, 25743479, 25747569, 25749273, 25752755, 25754606, 25756945
25757697, 25757748, 25760195, 25762221, 25764020, 25766822, 25768681
25772669, 25774077, 25775213, 25775444, 25780343, 25783447, 25784002
25785331, 25785441, 25788879, 25789041, 25789277, 25789579, 25790353
25792911, 25795865, 25797092, 25797124, 25797305, 25800464, 25802510
25803364, 25803545, 25807997, 25809524, 25810263, 25810704, 25811105
25811650, 25812390, 25813931, 25818707, 25822410, 25823532, 25823754
25824372, 25825910, 25826740, 25830492, 25832935, 25834581, 25835365
25838361, 25838755, 25852885, 25856821, 25858672, 25861398, 25865785
25866948, 25870579, 25871177, 25871639, 25871753, 25872127, 25872389
25873336, 25874050, 25874678, 25881255, 25882264, 25883438, 25885148
25888073, 25888984, 25890002, 25890046, 25890056, 25890673, 25890782
25894239, 25895224, 25897615, 25898228, 25904273, 25904490, 25905130
25906117, 25906886, 25908728, 25911724, 25914276, 25919622, 25932524
25932728, 25933494, 25941836, 25942868, 25943271, 25945130, 25947799
25951571, 25953857, 25954022, 25954054, 25957038, 25963024, 25964954
25967544, 25967985, 25970731, 25971286, 25972417, 25973152, 25975723
25977302, 25980605, 25980770, 25981498, 25982666, 25986062, 25990907
25995938, 25997810, 26006257, 26007010, 26019148, 26023042, 26024732

26024784, 26025681, 26029075, 26029777, 26029780, 26032573, 26034119
26036748, 26037215, 26038086, 26039623, 26040483, 26045732, 26051656
26078437, 26078493, 26080410, 26083298, 26087754, 26088426, 26088836
26089669, 26090767, 26090893, 26091640, 26091786, 26095327, 26095405
26096382, 26108080, 26108337, 26110259, 26110632, 26111842, 26112621
26115103, 26121990, 26124078, 26130486, 26137367, 26137416, 26138085
26145560, 26149904, 26153372, 26153977, 26168933, 26169341, 26169345
26170659, 26170715, 26176002, 26187943, 26189861, 26198757, 26198926
26201113, 26203182, 26223039, 26237338, 26237431, 26237773, 26238195
26242031, 26242677, 26243698, 26244115, 26245237, 26248143, 26249718
26256131, 26257953, 26259265, 26261327, 26263328, 26263721, 26268756
26269790, 26271001, 26274660, 26275023, 26275415, 26277439, 26281476
26285062, 26285933, 26308650, 26309047, 26317991, 26318627, 26323308
26324206, 26324769, 26325856, 26327418, 26327624, 26327775, 26330994
26331743, 26333141, 26334602, 26336977, 26338953, 26351334, 26351996
26353617, 26354844, 26356098, 26358670, 26359091, 26362155, 26362821
26366517, 26367012, 26367460, 26371725, 26373967, 26374791, 26375052
26375250, 26375330, 26380097, 26385189, 26386858, 26388538, 26396790
26398675, 26399626, 26399691, 26405036, 26406387, 26407408, 26410240
26412540, 26418088, 26420561, 26421667, 26422277, 26423085, 26426526
26426967, 26430323, 26430737, 26434436, 26434999, 26435073, 26436168
26438612, 26439748, 26440142, 26440169, 26440749, 26441345, 26442308
26444601, 26444887, 26446098, 26452606, 26474662, 26474703, 26475419
26476090, 26476244, 26478970, 26479173, 26482376, 26486365, 26492866
26493289, 26498354, 26513067, 26513709, 26521043, 26522439, 26523432
26526726, 26526799, 26536320, 26537307, 26542135, 26542236, 26542835
26544823, 26545688, 26546070, 26546664, 26546754, 26548363, 26556014
26558437, 26569225, 26570134, 26575788, 26580633, 26582460, 26584641
26588069, 26597140, 26599395, 26608137, 26608238, 26609942, 26615291
26615690, 26617804, 26623652, 26626879, 26629381, 26633355, 26633558
26635897, 26637273, 26637824, 26639167, 26641610, 26641852, 26650226
26650540, 26654363, 26658759, 26659182, 26669550, 26680105, 26712331
26714486, 26714910, 26717528, 26724511, 26725687, 26727397, 26729494
26729611, 26740700, 26743240, 26744595, 26745002, 26751106, 26751171
26755171, 26758193, 26764561, 26765212, 26768025, 26775602, 26784509
26790923, 26794786, 26797591, 26798411, 26798514, 26798516, 26802503
26816582, 26820076, 26822314, 26822620, 26824833, 26828994, 26829845
26830694, 26832296, 26833932, 26837569, 26837702, 26840654, 26844406
26844870, 26849779, 26871815, 26875822, 26883456, 26895149, 26896659
26898563, 26907236, 26907327, 26908788, 26909100, 26909504, 26910716
26911000, 26923777, 26939314, 26943004, 26944190, 26947373, 26958896
26963310, 26966616, 26966916, 26967713, 26968670, 26969321, 26970175
26970717, 26981902, 26983259, 26985002, 26986173, 26992964, 26999139
27000158, 27000702, 27006120, 27006664, 27009164, 27013146, 27015449

27028251, 27032785, 27033520, 27033652, 27034890, 27036163, 27037839
27038986, 27039712, 27044169, 27044297, 27045634, 27052607, 27056711
27058530, 27060167, 27060859, 27061736, 27072923, 27073314, 27079140
27084613, 27087426, 27090765, 27092508, 27093423, 27097854, 27100800
27101105, 27105900, 27106179, 27110878, 27115422, 27117822, 27119621
27119861, 27122162, 27124624, 27125872, 27133662, 27134734, 27135647
27135993, 27138325, 27142120, 27142373, 27142529, 27144928, 27151826
27153641, 27160922, 27161071, 27162390, 27162405, 27163928, 27165231
27169796, 27170305, 27181537, 27181897, 27185188, 27195935, 27199245
27200959, 27202015, 27203055, 27207110, 27207634, 27208795, 27213224
27216046, 27217412, 27223075, 27229389, 27231051, 27234962, 27236722
27242226, 27244337, 27244999, 27248917, 27249531, 27250547, 27251690
27254335, 27255377, 27256000, 27258578, 27259307, 27262945, 27264464
27266245, 27274456, 27274536, 27275533, 27276231, 27283960, 27284499
27285244, 27288638, 27292213, 27293599, 27302711, 27302730, 27303287
27303938, 27304410, 27304906, 27305039, 27308088, 27314206, 27314390
27314697, 27320576, 27321179, 27329612, 27333106, 27334316, 27338912
27338946, 27339115, 27345231, 27346709, 27348081, 27349393, 27350267
27351628, 27359178, 27364854, 27365014, 27367194, 27369515, 27370965
27375542, 27381498, 27383281, 27386467, 27392968, 27393570, 27394703
27395416, 27396624, 27396672, 27396813, 27397048, 27400416, 27400598
27404573, 27404668, 27405645, 27416997, 27423251, 27424405, 27426363
27432062, 27432826, 27433385, 27433870, 27434193, 27439835, 27441326
27442041, 27445727, 27457891, 27459593, 27459948, 27461740, 27466597
27468303, 27486805, 27487919, 27489107, 27493674, 27494663, 27501373
27501413, 27502420, 27504770, 27505229, 27508985, 27510959, 27525909
27529661, 27533780, 27533819, 27534509, 27539876, 27540613, 27544973
27548131, 27554074, 27555481, 27558861, 27560602, 27562488, 27565906
27567477, 27576342, 27576354, 27587905, 27588271, 27589260, 27593501
27595973, 27601118, 27601441, 27607563, 27611612, 27613080, 27613530
27613554, 27615649, 27617978, 27620808, 27623159, 27629756, 27629928
27632114, 27634676, 27634991, 27642235, 27645231, 27657712, 27658186
27666312, 27671633, 27680669, 27686599, 27687880, 27688036, 27688099
27688692, 27691920, 27691939, 27693416, 27693713, 27695063, 27698953
27700466, 27704237, 27709046, 27710072, 27719000, 27726780, 27729678
27739006, 27740424, 27748954, 27751755, 27757567, 27757888, 27758544
27758653, 27758972, 27759077, 27769361, 27779886, 27793533, 27799032
27801337, 27818389, 27819881, 27824540, 27824543, 27825241, 27828794
27828892, 27829295, 27833672, 27834551, 27834569, 27835925, 27839353
27839616, 27846298, 27846499, 27847259, 27850112, 27855490, 27861226
27873412, 27882176, 27886087, 27897759, 27898015, 27902561, 27908396
27909478, 27927431, 27929287, 27929509, 27931299, 27935493, 27940876
27945870, 27951817, 27952586, 27959048, 27959594, 27964513, 27966472
27967484, 27983174, 27986817, 27994325, 27995215, 27995248, 27997875

27998003, 27999073, 27999638, 28000269, 28019592, 28022101, 28023081
28023399, 28023482, 28024793, 28025414, 28026866, 28033429, 28040776
28043157, 28045903, 28067846, 28071549, 28072383, 28072567, 28073470
28074713, 28079127, 28090453, 28092783, 28098040, 28098160, 28099662
28104176, 28108003, 28111583, 28120036, 28120951, 28124631, 28125601
28125947, 28129791, 28140658, 28157786, 28164480, 28165439, 28171079
28174827, 28180464, 28181021, 28184554, 28188330, 28190796, 28194173
28199085, 28201419, 28204262, 28209985, 28215510, 28218832, 28220398
28223871, 28226179, 28229360, 28236305, 28238264, 28242712, 28250929
28256164, 28271119, 28276054, 28279837, 28281094, 28282606, 28287484
28290434, 28294563, 28302049, 28305001, 28305362, 28305607, 28309406
28319114, 28320399, 28330714, 28330971, 28350595, 28354603, 28357401
28361221, 28365111, 28369092, 28371123, 28373960, 28375383, 28378446
28384353, 28386259, 28388910, 28390273, 28391210, 28396445, 28397317
28401116, 28402823, 28420042, 28420457, 28423598, 28432129, 28434028
28435902, 28437315, 28439086, 28454215, 28454242, 28468312, 28468493
28481149, 28483184, 28489150, 28501075, 28502098, 28502343, 28503038
28507324, 28508053, 28508557, 28512336, 28521330, 28522441, 28528349
28530171, 28535127, 28535272, 28537715, 28538439, 28542455, 28545134
28546290, 28547068, 28547478, 28564479, 28566241, 28571483, 28572407
28572834, 28578164, 28578945, 28585411, 28587723, 28589509, 28600233
28606598, 28608211, 28612674, 28614372, 28617631, 28617959, 28621470
28622202, 28627255, 28636676, 28639299, 28642899, 28678804, 28691965
28692103, 28692275, 28697806, 28703812, 28708023, 28709063, 28710469
28714988, 28715655, 28728272, 28734355, 28740708, 28742555, 28749289
28749724, 28758090, 28758722, 28774416, 28776431, 28777174, 28791725
28797711, 28803345, 28808314, 28817449, 28819640, 28820669, 28821847
28827682, 28830691, 28831971, 28835937, 28836716, 28838066, 28844866
28847136, 28849751, 28852325, 28852691, 28855922, 28856060, 28856172
28863263, 28863487, 28867992, 28887305, 28889730, 28891984, 28905390
28910498, 28915870, 28927452, 28949888, 28951026, 28951382, 28956908
28959493, 28960211, 28965095, 28965787, 28986231, 28986257, 28987439
28991884, 28993295, 28993590, 29002488, 29006527, 29007321, 29007353
29009513, 29013832, 29024054, 29026582, 29027694, 29032276, 29039510
29040739, 29044954, 29048498, 29048728, 29050886, 29060216, 29061016
29115857, 29125374, 29158680, 29163567, 29170232, 29173817, 29179097
29182517, 29182901, 29189889, 29198092, 29200700, 29203604, 29213320
29213893, 29224605, 29237575, 29247712, 29249289, 29250230, 29250317
29254623, 29260956, 29278684, 29296257, 29301463, 29307638, 29312889
29339155, 29343086, 29343156, 29343861, 29347943, 29353821, 29372069
29372460, 29375355, 29375984, 29376346, 29378913, 29379978, 29383695
29388020, 29398488, 29399336, 29405462, 29409149, 29409455, 29420254
29426241, 29434301, 29436454, 29437712, 29450812, 29452251, 29454978
29464779, 29483626, 29483672, 29483723, 29483771, 29500257, 29500963

29501218, 29504682, 29511611, 29524985, 29530515, 29536342, 29538631
29542449, 29542580, 29548592, 29549071, 29559395, 29564592, 29580394
29591343, 29608023, 29614575, 29614987, 29621961, 29625065, 29626154
29629430, 29633753, 29637526, 29637560, 29645349, 29651520, 29656843
29667994, 29676089, 29678163, 29685137, 29687220, 29688867, 29690625
29703195, 29705793, 29707896, 29717901, 29719146, 29724063, 29726695
29766435, 29767177, 29774362, 29782211, 29791152, 29794462, 29807964
29813494, 29815341, 29817278, 29822714, 29825525, 29836659, 29841687
29846645, 29853485, 29865188, 29869404, 29869906, 29875459, 29876358
29881050, 29881575, 29884958, 29893132, 29902299, 29902311, 29914449
29930457, 29944035, 29944660, 29951620, 29951759, 29961353, 29962927
29962939, 29965888, 29991257, 29997937, 30008125, 30018017, 30018903
30031027, 30039959, 30064268, 30068871, 30076253, 30078934, 30086166
30088912, 30092280, 30098251, 30099302, 30114477, 30116203, 30120608
30125995, 30131286, 30139392, 30147928, 30150731, 30160625, 30163243
30164714, 30173113, 30177597, 30179644, 30186706, 30189023, 30193736
30196358, 30200680, 30200758, 30215130, 30218044, 30218317, 30223712
30225443, 30239480, 30241567, 30244787, 30246179, 30247305, 30252098
30252156, 30253255, 30265523, 30272329, 30281591, 30282501, 30283932
30293345, 30305880, 30312094, 30312568, 30316897, 30325407, 30342878
30352623, 30355490, 30357897, 30364613, 30365745, 30368482, 30372081
30374739, 30381207, 30384121, 30384152, 30391272, 30397100, 30402386
30403763, 30408515, 30413137, 30416034, 30431274, 30441687, 30443393
30453442, 30458593, 30460922, 30464655, 30474774, 30475115, 30476768
30485255, 30496957, 30497057, 30501574, 30503943, 30509277, 30510527
30522998, 30528547, 30528704, 30533198, 30534662, 30581448, 30582500
30613937, 30623138, 30624864, 30635302, 30652853, 30654409, 30668407
30671813, 30681462, 30698289, 30741263, 30758943, 30803210, 30814285
30815852, 30816938, 30855101, 30887501, 30904672, 30922870, 30964194
30968208, 30980615, 30987088, 30998759, 31001455, 31004719, 31013127
31022858, 31100172, 31106577, 31156383, 31172207, 31182793, 31200845
31306261, 31335037, 31335142, 31341859, 31393600

Version 12.2.0.1.ru-2020-04.rur-2020-04.r1

Version 12.2.0.1.ru-2020-04.rur-2020-04.r1 includes the following:

- Patch [30886680](#): Database Apr 2020 Release Update 12.2.0.1.200414
- Patch [30805580](#): Oracle JVM Release Update 12.2.0.1.200414
- Patch [29997937](#): DSTv34 for RDBMS (TZDATA2019G)

- Patch [29997959](#): DSTv34 for OJVM (TZDATA2019G)
- PreUpgrade Jar: preupgrade_12201_cbuild_23_lf.zip
- Patch [28730253](#): SUPPORT NEW ERA REIWA FOR JAPANESE IMPERIAL CALENDAR is included in DB PATCH 30138470
- Support for purging the recycle bin

For more information, see [Purging the recycle bin](#) in the *Amazon RDS User Guide*.

- Support for generating performance reports with Automatic Workload Repository (AWR) using the `rdsadmin.rdsadmin_diagnostic_util` package

For more information, see [Generating performance reports with Automatic Workload Repository \(AWR\)](#) in the *Amazon RDS User Guide*.

Combined patches for version 12.2.0.1.ru-2020-04.rur-2020-04.r1, released April 2020

Bugs fixed:

30533198, 30312568, 30086166, 28951026, 28435902, 8480838, 8932139
 12763598, 13554903, 14221306, 14690846, 15931756, 16002385, 16438495
 16727454, 16942578, 17027695, 17533661, 17947871, 18308268, 18521691
 18594510, 18774543, 18878420, 19072655, 19211433, 19285025, 19327292
 19526548, 19614243, 19647894, 19649997, 19702201, 19721304, 20003668
 20087519, 20118035, 20120236, 20324049, 20436508, 20532077, 20549013
 20588486, 20591151, 20617383, 20620169, 20736227, 20756305, 20866970
 20976443, 21089435, 21095391, 21143725, 21147908, 21159907, 21178363
 21186167, 21197098, 21216226, 21320338, 21433452, 21479706, 21517767
 21520266, 21547051, 21638600, 21744603, 21788462, 21837606, 21882528
 21935698, 21981529, 21985256, 22007324, 22070473, 22070853, 22072543
 22087683, 22104866, 22107360, 22174392, 22179537, 22282748, 22310426
 22347493, 22363790, 22364044, 22367053, 22379010, 22446455, 22454940
 22495673, 22503283, 22503297, 22504793, 22522515, 22530986, 22564336
 22568728, 22581771, 22594071, 22599050, 22628825, 22645009, 22645496
 22654475, 22700845, 22726044, 22729345, 22826067, 22843979, 22845846
 22864303, 22898198, 22921674, 22939829, 22950945, 22970869, 22981722
 23018676, 23019710, 23026585, 23035249, 23055900, 23061453, 23065002
 23066146, 23080557, 23104033, 23105538, 23109325, 23110523, 23125560
 23126545, 23127945, 23143074, 23151677, 23168363, 23169712, 23177923
 23179662, 23184263, 23197730, 23234232, 23237091, 23249829, 23271203

23278750, 23300142, 23306590, 23308065, 23310101, 23312077, 23328639
23333567, 23336559, 23342170, 23481673, 23491861, 23499004, 23499160
23521523, 23527363, 23533647, 23548817, 23567857, 23572982, 23581777
23588722, 23599216, 23600861, 23602213, 23645516, 23665623, 23709062
23715460, 23715518, 23730961, 23733981, 23735292, 23738304, 23741944
23743596, 23746128, 23749454, 23761724, 24006569, 24010030, 24289874
24289895, 24294174, 24303148, 24307571, 24308349, 24326444, 24326846
24328857, 24330708, 24332831, 24334708, 24336249, 24337882, 24341675
24343905, 24345420, 24346821, 24348685, 24350620, 24352981, 24355111
24357348, 24368004, 24371491, 24373528, 24373756, 24374976, 24376875
24376878, 24383086, 24385983, 24401351, 24403922, 24409977, 24415926
24416451, 24421668, 24423416, 24425056, 24425998, 24435982, 24437162
24440648, 24443539, 24457597, 24460392, 24461826, 24467122, 24468470
24470606, 24471079, 24471473, 24473736, 24485034, 24485161, 24485174
24486059, 24486237, 24509056, 24516314, 24530364, 24534401, 24554533
24555417, 24556862, 24556967, 24560906, 24563422, 24570214, 24570598
24573817, 24578718, 24578797, 24588377, 24589081, 24589590, 24591506
24593740, 24595699, 24600330, 24609592, 24609996, 24611527, 24616637
24617969, 24623975, 24624166, 24642495, 24654629, 24655717, 24664211
24668398, 24669189, 24674197, 24674955, 24676172, 24677696, 24680959
24687075, 24689376, 24692973, 24693010, 24693290, 24697323, 24699619
24710696, 24713381, 24714096, 24717183, 24717859, 24718260, 24719799
24735430, 24737064, 24737403, 24737581, 24737954, 24739791, 24744383
24744686, 24752618, 24757934, 24759556, 24760407, 24764085, 24766309
24784414, 24786669, 24791883, 24792678, 24793511, 24796092, 24797119
24800423, 24801152, 24802934, 24808504, 24811725, 24812047, 24818566
24827228, 24827654, 24831514, 24835919, 24841671, 24843188, 24844549
24844841, 24845157, 24848746, 24848923, 24850622, 24907917, 24908321
24911709, 24912588, 24920582, 24921478, 24922704, 24923080, 24923215
24923338, 24923790, 24924667, 24926999, 24929210, 24938784, 24940060
24942749, 24953434, 24957555, 24960044, 24960809, 24965426, 24966594
24966788, 24967993, 24968162, 24976007, 24978100, 25022574, 25027852
25028996, 25029022, 25029423, 25031502, 25032818, 25034396, 25036006
25036474, 25042823, 25044977, 25045228, 25050160, 25051465, 25051628
25054064, 25057811, 25058080, 25060506, 25062592, 25063971, 25065563
25072986, 25077278, 25078611, 25086233, 25087436, 25092777, 25093872
25095982, 25098160, 25099339, 25099497, 25099758, 25100063, 25100579
25103996, 25107662, 25110233, 25114561, 25120284, 25120668, 25120742
25121089, 25123585, 25124363, 25129925, 25130312, 25140197, 25145163
25145215, 25150925, 25159176, 25162645, 25164293, 25166187, 25171041
25171084, 25175723, 25176408, 25178032, 25178101, 25178179, 25179774
25182817, 25184453, 25184555, 25186079, 25191872, 25192044, 25192528
25192729, 25195901, 25199585, 25201454, 25202355, 25203656, 25205954
25206864, 25207410, 25209912, 25210268, 25210499, 25210690, 25211628

25219450, 25223839, 25224242, 25225795, 25226665, 25227381, 25230870
25230945, 25237577, 25240188, 25240590, 25241448, 25241625, 25244807
25248384, 25250109, 25251648, 25257085, 25259611, 25262869, 25263960
25265499, 25269133, 25283790, 25287072, 25293659, 25296876, 25299227
25299807, 25300427, 25303284, 25303756, 25305405, 25307368, 25309116
25313154, 25313411, 25316758, 25317989, 25320555, 25323525, 25328093
25328518, 25329664, 25335249, 25335360, 25335790, 25337332, 25337640
25348956, 25353983, 25356118, 25357142, 25360661, 25362958, 25367588
25367721, 25382812, 25383204, 25384462, 25386748, 25388896, 25392535
25393714, 25395696, 25397936, 25398306, 25404202, 25405100, 25405687
25405813, 25410017, 25410180, 25410802, 25410877, 25411036, 25415713
25416731, 25417050, 25417056, 25417958, 25425005, 25425451, 25425760
25427662, 25429959, 25430120, 25433696, 25435038, 25437699, 25440818
25442559, 25444961, 25445168, 25451531, 25455795, 25457409, 25459958
25462714, 25463844, 25472112, 25472885, 25476125, 25476149, 25477657
25478885, 25479164, 25481087, 25482971, 25486384, 25489342, 25489367
25489607, 25492379, 25498930, 25498994, 25516250, 25524955, 25528838
25530080, 25530814, 25535668, 25536819, 25537470, 25539063, 25540738
25546580, 25546608, 25547901, 25551676, 25553616, 25554787, 25555252
25557886, 25558986, 25560487, 25561296, 25569149, 25570929, 25573623
25575348, 25575369, 25575628, 25579458, 25579761, 25591394, 25594901
25597525, 25598473, 25599425, 25600342, 25600421, 25601999, 25602488
25603923, 25606091, 25607726, 25612095, 25614866, 25616268, 25616359
25616417, 25616645, 25631933, 25633101, 25634317, 25634348, 25635149
25638456, 25639019, 25643818, 25643889, 25643931, 25646373, 25647325
25648731, 25653109, 25654459, 25654936, 25655390, 25655966, 25659655
25660847, 25661819, 25662088, 25662101, 25662524, 25663488, 25667973
25669791, 25670786, 25671354, 25672640, 25674386, 25680221, 25685152
25686739, 25687460, 25691904, 25694206, 25695903, 25696520, 25699321
25700654, 25709368, 25710420, 25715167, 25717371, 25722055, 25722608
25722720, 25723097, 25723158, 25728085, 25729507, 25730014, 25734963
25736747, 25739065, 25740844, 25741955, 25743479, 25747569, 25749273
25752755, 25754606, 25756945, 25757697, 25757748, 25760195, 25762221
25764020, 25766822, 25768681, 25772669, 25774077, 25775213, 25775444
25780343, 25783447, 25784002, 25785331, 25785441, 25788879, 25789041
25789277, 25789579, 25790353, 25792911, 25795865, 25797092, 25797124
25797305, 25800464, 25802510, 25803364, 25803545, 25807997, 25809524
25810263, 25810704, 25811650, 25812390, 25813931, 25818707, 25822410
25823532, 25823754, 25825910, 25826740, 25830492, 25832935, 25834581
25835365, 25838361, 25838755, 25852885, 25856821, 25858672, 25861398
25865785, 25870579, 25871177, 25871639, 25871753, 25872127, 25872389
25873336, 25874050, 25874678, 25882264, 25883438, 25885148, 25888073
25888984, 25890056, 25890673, 25890782, 25894239, 25895224, 25897615
25898228, 25904273, 25904490, 25905130, 25906117, 25906886, 25908728

25911724, 25914276, 25919622, 25932524, 25932728, 25933494, 25941836
25943271, 25945130, 25947799, 25951571, 25953857, 25954022, 25954054
25957038, 25963024, 25964954, 25967544, 25967985, 25970731, 25971286
25972417, 25973152, 25975723, 25977302, 25980605, 25980770, 25981498
25982666, 25986062, 25990907, 25995938, 25997810, 26006257, 26007010
26019148, 26024732, 26024784, 26025681, 26029075, 26029777, 26029780
26032573, 26034119, 26036748, 26037215, 26038086, 26039623, 26040483
26045732, 26051656, 26078437, 26078493, 26080410, 26083298, 26087754
26088426, 26088836, 26090767, 26090893, 26091640, 26091786, 26095327
26095405, 26096382, 26108080, 26108337, 26110259, 26110632, 26111842
26112621, 26115103, 26121990, 26124078, 26130486, 26137367, 26137416
26138085, 26145560, 26149904, 26153372, 26153977, 26168933, 26169341
26169345, 26170659, 26170715, 26176002, 26187943, 26189861, 26198757
26198926, 26201113, 26203182, 26223039, 26237338, 26237431, 26237773
26238195, 26242031, 26242677, 26243698, 26244115, 26245237, 26248143
26249718, 26256131, 26257953, 26259265, 26261327, 26263328, 26263721
26268756, 26269790, 26271001, 26274660, 26275023, 26275415, 26277439
26281476, 26285062, 26285933, 26308650, 26309047, 26317991, 26318627
26323308, 26324206, 26324769, 26325856, 26327418, 26327624, 26327775
26330994, 26331743, 26333141, 26336977, 26338953, 26351334, 26351996
26353617, 26358670, 26359091, 26362155, 26362821, 26366517, 26367012
26367460, 26371725, 26373967, 26374791, 26375052, 26375250, 26380097
26385189, 26388538, 26396790, 26398675, 26399626, 26399691, 26405036
26406387, 26407408, 26410240, 26412540, 26418088, 26420561, 26421667
26422277, 26423085, 26426526, 26426967, 26430323, 26430737, 26434436
26434999, 26435073, 26436168, 26438612, 26439748, 26440169, 26440749
26442308, 26444601, 26444887, 26446098, 26452606, 26474662, 26474703
26475419, 26476244, 26478970, 26479173, 26482376, 26486365, 26492866
26493289, 26498354, 26513067, 26513709, 26521043, 26522439, 26523432
26526726, 26526799, 26536320, 26537307, 26542135, 26542236, 26542835
26544823, 26545688, 26546070, 26546664, 26546754, 26548363, 26556014
26558437, 26569225, 26575788, 26580633, 26582460, 26584641, 26588069
26597140, 26599395, 26608137, 26608238, 26609942, 26615291, 26615690
26617804, 26623652, 26626879, 26629381, 26633355, 26633558, 26635897
26637273, 26637824, 26639167, 26641610, 26650226, 26650540, 26654363
26658759, 26659182, 26669550, 26680105, 26712331, 26714486, 26714910
26717528, 26724511, 26725687, 26727397, 26729494, 26729611, 26740700
26744595, 26745002, 26751106, 26751171, 26755171, 26758193, 26764561
26765212, 26768025, 26775602, 26784509, 26790923, 26794786, 26797591
26798411, 26798516, 26802503, 26816582, 26820076, 26822314, 26822620
26824833, 26828994, 26829845, 26833932, 26837569, 26837702, 26840654
26844406, 26844870, 26849779, 26871815, 26875822, 26883456, 26895149
26896659, 26898563, 26907236, 26907327, 26908788, 26909100, 26909504
26910716, 26911000, 26939314, 26943004, 26944190, 26958896, 26963310

26966616, 26966916, 26967713, 26968670, 26969321, 26970175, 26970717
26981902, 26983259, 26985002, 26986173, 26992964, 27000158, 27006120
27006664, 27009164, 27013146, 27028251, 27032785, 27033520, 27033652
27034890, 27036163, 27037839, 27038986, 27039712, 27044169, 27044297
27045634, 27052607, 27056711, 27058530, 27060167, 27060859, 27061736
27072923, 27073314, 27079140, 27084613, 27087426, 27090765, 27092508
27093423, 27097854, 27100800, 27101105, 27105900, 27106179, 27110878
27115422, 27117822, 27119621, 27119861, 27122162, 27124624, 27125872
27133662, 27134734, 27135647, 27135993, 27138325, 27142120, 27142373
27142529, 27144928, 27151826, 27153641, 27160922, 27161071, 27162390
27162405, 27163928, 27165231, 27169796, 27170305, 27181537, 27181897
27185188, 27195935, 27199245, 27200959, 27202015, 27203055, 27207110
27208795, 27213224, 27216046, 27217412, 27223075, 27229389, 27231051
27234962, 27236722, 27242226, 27244337, 27244999, 27248917, 27249531
27250547, 27251690, 27255377, 27256000, 27258578, 27259307, 27262945
27264464, 27266245, 27274456, 27274536, 27275533, 27276231, 27283960
27284499, 27285244, 27288638, 27292213, 27293599, 27302711, 27302730
27303287, 27303938, 27304410, 27304906, 27305039, 27308088, 27314206
27314390, 27314697, 27320576, 27321179, 27329612, 27333106, 27334316
27338912, 27338946, 27339115, 27345231, 27346709, 27348081, 27349393
27350267, 27351628, 27359178, 27364854, 27367194, 27369515, 27370965
27375542, 27381498, 27383281, 27386467, 27393570, 27394703, 27395416
27396624, 27396672, 27396813, 27397048, 27400416, 27400598, 27404573
27404668, 27405645, 27416997, 27423251, 27424405, 27426363, 27432062
27432826, 27433385, 27433870, 27434193, 27439835, 27441326, 27442041
27445727, 27457891, 27459593, 27459948, 27466597, 27468303, 27486805
27487919, 27489107, 27493674, 27494663, 27501373, 27501413, 27502420
27504770, 27505229, 27508985, 27510959, 27525909, 27529661, 27533780
27533819, 27534509, 27540613, 27544973, 27548131, 27554074, 27555481
27558861, 27560602, 27562488, 27565906, 27567477, 27576342, 27576354
27587905, 27588271, 27593501, 27595973, 27601118, 27601441, 27607563
27611612, 27613080, 27613530, 27617978, 27620808, 27623159, 27629756
27632114, 27634676, 27634991, 27645231, 27657712, 27658186, 27666312
27671633, 27680669, 27686599, 27687880, 27688036, 27688099, 27688692
27691920, 27691939, 27693416, 27693713, 27695063, 27698953, 27700466
27704237, 27709046, 27710072, 27719000, 27726780, 27729678, 27739006
27740424, 27748954, 27751755, 27757567, 27757888, 27758544, 27758653
27758972, 27759077, 27769361, 27793533, 27799032, 27801337, 27818389
27819881, 27824540, 27824543, 27825241, 27828794, 27829295, 27833672
27834551, 27834569, 27835925, 27839353, 27846298, 27846499, 27847259
27850112, 27855490, 27861226, 27873412, 27882176, 27886087, 27897759
27898015, 27902561, 27909478, 27927431, 27929287, 27931299, 27935493
27940876, 27945870, 27951817, 27959048, 27959594, 27966472, 27967484
27983174, 27986817, 27994325, 27995215, 27995248, 27997875, 27998003

27999073, 27999638, 28000269, 28022101, 28023081, 28023399, 28023482
28024793, 28025414, 28026866, 28033429, 28040776, 28043157, 28045903
28067846, 28071549, 28072383, 28072567, 28074713, 28079127, 28090453
28098160, 28099662, 28108003, 28111583, 28120036, 28120951, 28124631
28125947, 28129791, 28140658, 28157786, 28164480, 28165439, 28171079
28174827, 28180464, 28181021, 28184554, 28188330, 28190796, 28194173
28199085, 28201419, 28209985, 28215510, 28218832, 28220398, 28223871
28226179, 28229360, 28236305, 28238264, 28242712, 28250929, 28256164
28271119, 28276054, 28279837, 28281094, 28282606, 28290434, 28294563
28302049, 28305001, 28305362, 28309406, 28319114, 28320399, 28330714
28330971, 28354603, 28357401, 28361221, 28365111, 28369092, 28371123
28373960, 28375383, 28378446, 28384353, 28386259, 28388910, 28390273
28391210, 28396445, 28397317, 28401116, 28402823, 28420042, 28420457
28423598, 28432129, 28434028, 28437315, 28439086, 28454215, 28454242
28468312, 28468493, 28481149, 28483184, 28489150, 28501075, 28502343
28503038, 28507324, 28508053, 28508557, 28512336, 28521330, 28522441
28528349, 28530171, 28535127, 28535272, 28537715, 28538439, 28542455
28545134, 28546290, 28547068, 28564479, 28571483, 28572407, 28572834
28578164, 28578945, 28585411, 28587723, 28589509, 28600233, 28608211
28612674, 28617631, 28617959, 28621470, 28622202, 28627255, 28636676
28639299, 28642899, 28678804, 28691965, 28692103, 28692275, 28697806
28708023, 28709063, 28710469, 28714988, 28728272, 28734355, 28740708
28742555, 28749289, 28749724, 28758090, 28758722, 28774416, 28777174
28791725, 28797711, 28803345, 28817449, 28819640, 28820669, 28821847
28830691, 28831971, 28835937, 28836716, 28838066, 28844866, 28849751
28852691, 28855922, 28856060, 28856172, 28863263, 28863487, 28867992
28887305, 28889730, 28891984, 28927452, 28949888, 28951382, 28956908
28959493, 28960211, 28965095, 28965787, 28986231, 28986257, 28987439
28991884, 28993295, 28993590, 29002488, 29006527, 29007321, 29007353
29009513, 29013832, 29024054, 29026582, 29027694, 29032276, 29040739
29048498, 29050886, 29060216, 29061016, 29115857, 29125374, 29158680
29163567, 29170232, 29173817, 29179097, 29182517, 29182901, 29189889
29198092, 29200700, 29203604, 29213320, 29224605, 29237575, 29247712
29249289, 29250230, 29250317, 29260956, 29278684, 29301463, 29339155
29343086, 29343861, 29347943, 29353821, 29372069, 29372460, 29375355
29375984, 29376346, 29378913, 29379978, 29383695, 29388020, 29398488
29399336, 29405462, 29409149, 29409455, 29426241, 29434301, 29436454
29437712, 29450812, 29452251, 29454978, 29464779, 29483626, 29483672
29483723, 29483771, 29500257, 29500963, 29504682, 29511611, 29524985
29530515, 29536342, 29538631, 29542449, 29542580, 29548592, 29549071
29580394, 29614575, 29621961, 29625065, 29626154, 29629430, 29633753
29637526, 29645349, 29651520, 29656843, 29667994, 29676089, 29678163
29685137, 29687220, 29690625, 29703195, 29707896, 29719146, 29724063
29726695, 29767177, 29782211, 29791152, 29794462, 29807964, 29813494

29817278, 29825525, 29836659, 29841687, 29846645, 29853485, 29865188
29869404, 29875459, 29876358, 29881050, 29884958, 29893132, 29902311
29914449, 29944035, 29944660, 29951620, 29961353, 29962927, 29962939
29991257, 30018017, 30031027, 30064268, 30076253, 30078934, 30088912
30098251, 30099302, 30114477, 30120608, 30125995, 30131286, 30147928
30150731, 30163243, 30164714, 30173113, 30177597, 30179644, 30189023
30196358, 30200758, 30215130, 30218044, 30218317, 30223712, 30239480
30241567, 30244787, 30246179, 30247305, 30252098, 30252156, 30253255
30265523, 30272329, 30281591, 30282501, 30283932, 30305880, 30312094
30342878, 30364613, 30365745, 30374739, 30384152, 30402386, 30403763
30408515, 30413137, 30416034, 30431274, 30441687, 30453442, 30458593
30460922, 30475115, 30485255, 30496957, 30497057, 30501574, 30503943
30509277, 30510527, 30582500, 30613937, 30635302, 30654409, 30671813
30741263, 30803210, 30815852, 30968208, 29997959, 29997937, 28852325
28125601, 27015449, 25881255, 25173124, 24701840, 23614158, 29213893
25811105, 25890046, 26023042, 26570134, 27000702, 27461740, 27952586
27642235, 27539876, 28502098, 28915870, 29254623, 29774362, 30160625
30534662, 30855101

Version 12.2.0.1.ru-2020-01.rur-2020-01.r1

Version 12.2.0.1.ru-2020-01.rur-2020-01.r1 includes the following:

- Patch [30593149](#): Database Jan 2020 Release Update: 12.2.0.1.200114
- Patch [30502018](#): OJVM RELEASE UPDATE 12.2.0.1.200114
- Patch [29997937](#): DSTv34 for RDBMS (TZDATA2019G)
- Patch [29997959](#): DSTv34 for OJVM (TZDATA2019G)
- PreUpgrade Jar: preupgrade_12201_cbuid_23_lf.zip
- Patch [28730253](#): SUPPORT NEW ERA REIWA FOR JAPANESE IMPERIAL CALENDAR is included in DB PATCH 30138470

Oracle release update 12.2.0.1.200114, released January 2020

Bugs fixed:

30125995, 8480838, 8932139, 12763598, 13554903, 14221306, 14690846
15931756, 16002385, 16438495, 16727454, 16942578, 17027695, 17533661

17947871, 18308268, 18521691, 18594510, 18774543, 18878420, 19072655
19211433, 19285025, 19327292, 19526548, 19614243, 19647894, 19649997
19702201, 19721304, 20003668, 20087519, 20118035, 20120236, 20324049
20436508, 20532077, 20549013, 20588486, 20591151, 20617383, 20620169
20736227, 20756305, 20866970, 20976443, 21089435, 21095391, 21143725
21147908, 21159907, 21178363, 21186167, 21197098, 21216226, 21320338
21433452, 21479706, 21517767, 21520266, 21547051, 21638600, 21744603
21788462, 21837606, 21882528, 21935698, 21981529, 21985256, 22007324
22070473, 22070853, 22072543, 22087683, 22104866, 22107360, 22174392
22179537, 22282748, 22310426, 22347493, 22363790, 22364044, 22367053
22379010, 22446455, 22454940, 22495673, 22503283, 22503297, 22504793
22522515, 22530986, 22564336, 22568728, 22581771, 22594071, 22599050
22628825, 22645009, 22645496, 22654475, 22700845, 22726044, 22729345
22826067, 22843979, 22845846, 22864303, 22898198, 22921674, 22939829
22950945, 22970869, 22981722, 23019710, 23026585, 23035249, 23055900
23061453, 23065002, 23066146, 23080557, 23104033, 23105538, 23109325
23110523, 23125560, 23126545, 23127945, 23151677, 23169712, 23177923
23179662, 23184263, 23197730, 23234232, 23237091, 23249829, 23271203
23278750, 23300142, 23306590, 23308065, 23310101, 23312077, 23328639
23333567, 23336559, 23342170, 23481673, 23491861, 23499004, 23499160
23521523, 23527363, 23533647, 23548817, 23567857, 23572982, 23581777
23588722, 23599216, 23600861, 23602213, 23645516, 23665623, 23709062
23715460, 23715518, 23730961, 23733981, 23735292, 23738304, 23741944
23743596, 23746128, 23749454, 23761724, 24010030, 24289874, 24294174
24303148, 24307571, 24308349, 24326444, 24326846, 24328857, 24330708
24332831, 24334708, 24336249, 24337882, 24341675, 24343905, 24345420
24346821, 24348685, 24350620, 24352981, 24355111, 24357348, 24368004
24371491, 24373528, 24373756, 24374976, 24376875, 24376878, 24383086
24385983, 24401351, 24403922, 24409977, 24415926, 24416451, 24421668
24423416, 24425056, 24425998, 24435982, 24437162, 24440648, 24443539
24457597, 24460392, 24461826, 24467122, 24468470, 24470606, 24471079
24471473, 24473736, 24485034, 24485161, 24485174, 24486059, 24486237
24509056, 24516314, 24534401, 24554533, 24555417, 24556862, 24556967
24560906, 24563422, 24570214, 24570598, 24573817, 24578718, 24578797
24588377, 24589081, 24589590, 24591506, 24593740, 24595699, 24600330
24609592, 24609996, 24611527, 24616637, 24617969, 24623975, 24624166
24642495, 24654629, 24655717, 24664211, 24668398, 24669189, 24674197
24674955, 24676172, 24677696, 24680959, 24687075, 24689376, 24692973
24693010, 24693290, 24697323, 24699619, 24710696, 24713381, 24714096
24717183, 24717859, 24718260, 24719799, 24735430, 24737064, 24737403
24737581, 24737954, 24739791, 24744383, 24744686, 24752618, 24757934
24759556, 24760407, 24764085, 24766309, 24784414, 24786669, 24792678
24793511, 24796092, 24797119, 24800423, 24801152, 24802934, 24811725
24812047, 24818566, 24827228, 24827654, 24831514, 24835919, 24841671

24843188, 24844549, 24844841, 24845157, 24848746, 24848923, 24850622
24907917, 24908321, 24911709, 24912588, 24921478, 24922704, 24923080
24923215, 24923338, 24923790, 24924667, 24926999, 24929210, 24938784
24940060, 24942749, 24953434, 24957555, 24960044, 24960809, 24965426
24966594, 24966788, 24967993, 24968162, 24976007, 24978100, 25022574
25027852, 25028996, 25029022, 25029423, 25032818, 25034396, 25036006
25036474, 25042823, 25044977, 25045228, 25050160, 25051465, 25051628
25054064, 25057811, 25058080, 25060506, 25062592, 25063971, 25065563
25072986, 25077278, 25078611, 25086233, 25087436, 25092777, 25093872
25095982, 25098160, 25099339, 25099497, 25099758, 25100063, 25100579
25103996, 25107662, 25110233, 25114561, 25120284, 25120668, 25120742
25121089, 25123585, 25124363, 25129925, 25130312, 25140197, 25145163
25145215, 25150925, 25159176, 25162645, 25164293, 25166187, 25171041
25171084, 25175723, 25176408, 25178032, 25178101, 25178179, 25179774
25182817, 25184453, 25184555, 25186079, 25191872, 25192044, 25192528
25192729, 25195901, 25199585, 25201454, 25202355, 25203656, 25205954
25206864, 25207410, 25209912, 25210268, 25210499, 25210690, 25211628
25219450, 25223839, 25224242, 25225795, 25226665, 25227381, 25230870
25230945, 25237577, 25240188, 25240590, 25241448, 25241625, 25244807
25248384, 25250109, 25251648, 25257085, 25259611, 25262869, 25263960
25265499, 25269133, 25283790, 25287072, 25293659, 25296876, 25299227
25299807, 25300427, 25303284, 25303756, 25305405, 25307368, 25309116
25313154, 25313411, 25316758, 25317989, 25320555, 25323525, 25328518
25329664, 25335249, 25335360, 25335790, 25337332, 25337640, 25348956
25353983, 25356118, 25357142, 25360661, 25362958, 25367588, 25367721
25382812, 25383204, 25384462, 25386748, 25388896, 25392535, 25393714
25395696, 25397936, 25398306, 25404202, 25405100, 25405687, 25405813
25410017, 25410180, 25410802, 25410877, 25411036, 25415713, 25417050
25417056, 25417958, 25425451, 25425760, 25427662, 25429959, 25430120
25433696, 25435038, 25437699, 25440818, 25442559, 25444961, 25445168
25451531, 25455795, 25457409, 25459958, 25462714, 25463844, 25472112
25472885, 25476125, 25476149, 25477657, 25478885, 25479164, 25481087
25482971, 25489342, 25489367, 25489607, 25492379, 25498930, 25498994
25516250, 25524955, 25528838, 25530080, 25530814, 25535668, 25536819
25537470, 25539063, 25540738, 25546580, 25546608, 25547901, 25551676
25553616, 25554787, 25555252, 25557886, 25558986, 25560487, 25561296
25569149, 25570929, 25573623, 25575348, 25575369, 25575628, 25579458
25579761, 25591394, 25594901, 25597525, 25598473, 25599425, 25600342
25600421, 25602488, 25603923, 25606091, 25607726, 25612095, 25614866
25616268, 25616359, 25616417, 25616645, 25631933, 25633101, 25634317
25634348, 25635149, 25638456, 25639019, 25643818, 25643889, 25643931
25646373, 25647325, 25648731, 25653109, 25654459, 25654936, 25655390
25655966, 25659655, 25660847, 25661819, 25662088, 25662101, 25662524
25663488, 25669791, 25670786, 25671354, 25672640, 25674386, 25680221

25685152, 25686739, 25687460, 25691904, 25694206, 25695903, 25696520
25699321, 25700654, 25709368, 25710420, 25715167, 25717371, 25722055
25722608, 25722720, 25723158, 25728085, 25729507, 25730014, 25734963
25736747, 25739065, 25741955, 25743479, 25747569, 25749273, 25752755
25754606, 25756945, 25757748, 25760195, 25762221, 25764020, 25766822
25768681, 25772669, 25774077, 25775213, 25775444, 25780343, 25783447
25784002, 25785331, 25785441, 25788879, 25789041, 25789277, 25789579
25790353, 25792911, 25795865, 25797092, 25797124, 25797305, 25800464
25802510, 25803364, 25803545, 25807997, 25810263, 25810704, 25811650
25812390, 25813931, 25818707, 25822410, 25823754, 25825910, 25826740
25830492, 25832935, 25834581, 25835365, 25838361, 25838755, 25852885
25856821, 25858672, 25861398, 25865785, 25870579, 25871177, 25871639
25871753, 25872127, 25872389, 25873336, 25874050, 25874678, 25882264
25883438, 25885148, 25888073, 25888984, 25890056, 25890673, 25890782
25894239, 25895224, 25897615, 25898228, 25904273, 25904490, 25906117
25906886, 25908728, 25911724, 25914276, 25919622, 25932524, 25932728
25933494, 25941836, 25943271, 25945130, 25947799, 25951571, 25953857
25954022, 25954054, 25957038, 25963024, 25964954, 25967544, 25967985
25970731, 25971286, 25973152, 25975723, 25977302, 25980605, 25980770
25981498, 25982666, 25986062, 25990907, 25995938, 25997810, 26006257
26007010, 26019148, 26024732, 26024784, 26025681, 26029075, 26029777
26029780, 26032573, 26034119, 26036748, 26037215, 26038086, 26039623
26040483, 26045732, 26051656, 26078437, 26078493, 26080410, 26083298
26087754, 26088426, 26088836, 26090767, 26090893, 26091640, 26091786
26095327, 26095405, 26096382, 26108080, 26108337, 26110259, 26110632
26111842, 26112621, 26115103, 26121990, 26124078, 26130486, 26137367
26138085, 26145560, 26149904, 26153372, 26153977, 26168933, 26169341
26169345, 26170659, 26170715, 26176002, 26187943, 26189861, 26198757
26198926, 26201113, 26203182, 26223039, 26237338, 26237431, 26237773
26238195, 26242031, 26242677, 26243698, 26244115, 26245237, 26248143
26249718, 26256131, 26257953, 26259265, 26261327, 26263328, 26263721
26268756, 26269790, 26271001, 26274660, 26275023, 26275415, 26277439
26281476, 26285062, 26285933, 26308650, 26309047, 26317991, 26318627
26323308, 26324206, 26324769, 26325856, 26327418, 26327624, 26327775
26330994, 26331743, 26333141, 26336977, 26338953, 26351334, 26353617
26358670, 26359091, 26362155, 26362821, 26366517, 26367012, 26367460
26371725, 26373967, 26374791, 26375052, 26375250, 26380097, 26385189
26388538, 26396790, 26399626, 26399691, 26405036, 26406387, 26407408
26410240, 26412540, 26418088, 26420561, 26421667, 26422277, 26423085
26426526, 26426967, 26430323, 26430737, 26434436, 26434999, 26435073
26436168, 26438612, 26439748, 26440169, 26440749, 26442308, 26444601
26444887, 26446098, 26452606, 26474662, 26474703, 26475419, 26476244
26478970, 26479173, 26482376, 26486365, 26492866, 26493289, 26498354
26513067, 26513709, 26521043, 26522439, 26523432, 26526726, 26526799

26536320, 26537307, 26542135, 26542236, 26542835, 26544823, 26545688
26546070, 26546664, 26546754, 26548363, 26556014, 26558437, 26569225
26575788, 26580633, 26582460, 26584641, 26588069, 26597140, 26599395
26608137, 26608238, 26609942, 26615291, 26615690, 26617804, 26623652
26626879, 26629381, 26633355, 26633558, 26635897, 26637273, 26637824
26639167, 26641610, 26650226, 26650540, 26654363, 26658759, 26659182
26669550, 26680105, 26712331, 26714486, 26714910, 26717528, 26724511
26725687, 26727397, 26729494, 26729611, 26740700, 26744595, 26745002
26751106, 26751171, 26755171, 26758193, 26764561, 26765212, 26768025
26775602, 26784509, 26794786, 26797591, 26798411, 26798516, 26802503
26816582, 26820076, 26822620, 26824833, 26828994, 26829845, 26833932
26837702, 26840654, 26844406, 26844870, 26849779, 26871815, 26875822
26883456, 26895149, 26896659, 26898563, 26907236, 26907327, 26908788
26909100, 26909504, 26910716, 26911000, 26939314, 26943004, 26944190
26958896, 26963310, 26966616, 26966916, 26967713, 26968670, 26969321
26970175, 26970717, 26981902, 26983259, 26985002, 26986173, 26992964
27000158, 27006120, 27006664, 27009164, 27013146, 27028251, 27032785
27033520, 27034890, 27036163, 27037839, 27038986, 27039712, 27044169
27044297, 27045634, 27052607, 27056711, 27058530, 27060167, 27060859
27061736, 27072923, 27073314, 27079140, 27087426, 27090765, 27092508
27093423, 27097854, 27101105, 27105900, 27106179, 27110878, 27115422
27117822, 27119621, 27119861, 27122162, 27124624, 27125872, 27133662
27134734, 27135647, 27135993, 27138325, 27142373, 27142529, 27144928
27151826, 27153641, 27160922, 27161071, 27162390, 27162405, 27163928
27165231, 27169796, 27170305, 27181537, 27181897, 27185188, 27195935
27199245, 27200959, 27202015, 27203055, 27207110, 27208795, 27213224
27216046, 27223075, 27229389, 27231051, 27234962, 27236722, 27242226
27244337, 27244999, 27248917, 27249531, 27250547, 27251690, 27255377
27256000, 27258578, 27259307, 27262945, 27264464, 27266245, 27274456
27274536, 27275533, 27276231, 27283960, 27284499, 27285244, 27288638
27292213, 27293599, 27302711, 27302730, 27303287, 27304410, 27304906
27305039, 27308088, 27314206, 27314390, 27320576, 27321179, 27329612
27333106, 27334316, 27338912, 27338946, 27339115, 27345231, 27346709
27348081, 27349393, 27350267, 27351628, 27359178, 27364854, 27367194
27369515, 27370965, 27375542, 27381498, 27383281, 27386467, 27393570
27394703, 27395416, 27396624, 27396672, 27396813, 27397048, 27400416
27400598, 27404668, 27405645, 27416997, 27423251, 27424405, 27426363
27432062, 27432826, 27433385, 27433870, 27434193, 27439835, 27441326
27442041, 27445727, 27457891, 27459948, 27466597, 27468303, 27486805
27489107, 27493674, 27501373, 27501413, 27502420, 27504770, 27505229
27508985, 27510959, 27525909, 27529661, 27533780, 27533819, 27534509
27540613, 27544973, 27548131, 27554074, 27555481, 27558861, 27560602
27562488, 27565906, 27567477, 27576342, 27576354, 27587905, 27588271
27593501, 27595973, 27601118, 27601441, 27607563, 27611612, 27613080

27613530, 27617978, 27620808, 27623159, 27629756, 27632114, 27634676
27634991, 27657712, 27658186, 27666312, 27671633, 27680669, 27686599
27687880, 27688036, 27688099, 27688692, 27691920, 27691939, 27693416
27693713, 27695063, 27698953, 27700466, 27704237, 27709046, 27710072
27726780, 27729678, 27739006, 27740424, 27748954, 27751755, 27757567
27757888, 27758544, 27758653, 27758972, 27759077, 27769361, 27793533
27799032, 27801337, 27818389, 27819881, 27824540, 27824543, 27825241
27828794, 27829295, 27833672, 27834551, 27834569, 27835925, 27839353
27846298, 27846499, 27847259, 27850112, 27855490, 27861226, 27873412
27882176, 27886087, 27897759, 27898015, 27902561, 27909478, 27927431
27929287, 27931299, 27935493, 27940876, 27945870, 27951817, 27959048
27959594, 27966472, 27967484, 27983174, 27986817, 27994325, 27995215
27995248, 27997875, 27998003, 27999073, 27999638, 28000269, 28022101
28023081, 28023399, 28023482, 28026866, 28033429, 28040776, 28043157
28045903, 28067846, 28071549, 28072567, 28074713, 28079127, 28090453
28098160, 28099662, 28108003, 28111583, 28120036, 28120951, 28124631
28125947, 28129791, 28140658, 28164480, 28165439, 28171079, 28174827
28180464, 28181021, 28184554, 28188330, 28190796, 28194173, 28199085
28201419, 28209985, 28215510, 28218832, 28220398, 28223871, 28226179
28229360, 28236305, 28242712, 28256164, 28271119, 28279837, 28281094
28282606, 28290434, 28294563, 28302049, 28305001, 28305362, 28309406
28319114, 28320399, 28330971, 28354603, 28357401, 28361221, 28365111
28369092, 28371123, 28373960, 28375383, 28378446, 28384353, 28386259
28388910, 28390273, 28391210, 28396445, 28397317, 28401116, 28402823
28420042, 28420457, 28423598, 28432129, 28434028, 28435902, 28437315
28454215, 28454242, 28468312, 28468493, 28481149, 28483184, 28489150
28501075, 28502343, 28507324, 28508053, 28508557, 28512336, 28521330
28522441, 28528349, 28530171, 28535272, 28537715, 28538439, 28542455
28545134, 28546290, 28547068, 28571483, 28572407, 28572834, 28578164
28578945, 28585411, 28587723, 28589509, 28600233, 28612674, 28617631
28617959, 28621470, 28627255, 28636676, 28639299, 28642899, 28678804
28691965, 28692103, 28692275, 28697806, 28708023, 28714988, 28728272
28734355, 28742555, 28749289, 28749724, 28758090, 28758722, 28774416
28777174, 28791725, 28797711, 28803345, 28817449, 28819640, 28820669
28821847, 28830691, 28831971, 28838066, 28844866, 28849751, 28852691
28855922, 28856060, 28856172, 28863487, 28867992, 28887305, 28889730
28891984, 28927452, 28949888, 28951026, 28951382, 28956908, 28959493
28960211, 28965095, 28965787, 28986231, 28986257, 28987439, 28991884
28993590, 29002488, 29006527, 29007353, 29009513, 29013832, 29024054
29027694, 29032276, 29040739, 29050886, 29060216, 29061016, 29115857
29125374, 29158680, 29163567, 29170232, 29173817, 29182901, 29189889
29198092, 29200700, 29213320, 29224605, 29237575, 29250230, 29250317
29260956, 29278684, 29301463, 29339155, 29347943, 29353821, 29372069
29375355, 29375984, 29376346, 29378913, 29379978, 29383695, 29388020

29398488, 29399336, 29405462, 29409149, 29434301, 29436454, 29437712
29450812, 29452251, 29454978, 29464779, 29483626, 29483672, 29483723
29483771, 29500257, 29504682, 29511611, 29530515, 29536342, 29538631
29542449, 29549071, 29626154, 29629430, 29633753, 29637526, 29645349
29651520, 29667994, 29676089, 29678163, 29690625, 29703195, 29707896
29719146, 29724063, 29726695, 29767177, 29782211, 29791152, 29794462
29813494, 29817278, 29825525, 29836659, 29841687, 29846645, 29853485
29865188, 29869404, 29875459, 29884958, 29893132, 29902311, 29914449
29944035, 29944660, 29951620, 29962927, 29962939, 29991257, 30088912
30098251, 30150731, 30164714, 30189023, 30218044, 30223712, 30244787
30252098, 30252156, 30253255, 30281591, 30342878, 30365745, 30402386
30408515, 30453442, 30458593, 30485255

Version 12.2.0.1.ru-2019-10.rur-2019-10.r1

Version 12.2.0.1.ru-2019-10.rur-2019-10.r1 includes the following:

- Patch [30138470](#): DATABASE OCT 2019 RELEASE UPDATE 12.2.0.1.191015
- Patch [30133625](#): OJVM RELEASE UPDATE 12.2.0.1.191015
- Patch [29997937](#): DSTv34 for RDBMS (TZDATA2019G)
- Patch [29997959](#): DSTv34 for OJVM (TZDATA2019G)
- PreUpgrade Jar: preupgrade_12201_cbuild_23_lf.zip
- Patch [28730253](#): SUPPORT NEW ERA REIWA FOR JAPANESE IMPERIAL CALENDAR is included in DB PATCH 30138470
- Support for resizing the temporary tablespace in a read replica

For more information, see [Resizing the temporary tablespace in a read replica](#) in the *Amazon RDS User Guide*.

Oracle release update 12.2.0.1.191015, released October 2019

Bugs fixed:

29013832, 30244787, 30253255, 8480838, 8932139, 12763598, 13554903
14221306, 14690846, 15931756, 16002385, 16438495, 16727454, 16942578
17027695, 17533661, 17947871, 18308268, 18521691, 18594510, 18774543
18878420, 19072655, 19211433, 19285025, 19327292, 19526548, 19614243

19647894, 19649997, 19702201, 19721304, 20003668, 20087519, 20118035
20120236, 20324049, 20436508, 20532077, 20588486, 20591151, 20617383
20620169, 20736227, 20756305, 20866970, 20976443, 21089435, 21095391
21143725, 21147908, 21159907, 21178363, 21186167, 21197098, 21216226
21320338, 21433452, 21479706, 21517767, 21520266, 21547051, 21638600
21744603, 21882528, 21935698, 21981529, 21985256, 22007324, 22070473
22070853, 22072543, 22087683, 22104866, 22107360, 22179537, 22310426
22347493, 22364044, 22367053, 22379010, 22446455, 22495673, 22503283
22503297, 22504793, 22522515, 22530986, 22564336, 22568728, 22581771
22594071, 22599050, 22628825, 22645009, 22654475, 22700845, 22726044
22729345, 22826067, 22843979, 22845846, 22864303, 22898198, 22921674
22939829, 22950945, 22970869, 22981722, 23019710, 23026585, 23035249
23055900, 23061453, 23065002, 23066146, 23080557, 23104033, 23105538
23110523, 23125560, 23126545, 23127945, 23151677, 23169712, 23177923
23179662, 23184263, 23197730, 23234232, 23237091, 23249829, 23271203
23278750, 23300142, 23306590, 23310101, 23312077, 23328639, 23336559
23342170, 23481673, 23491861, 23499004, 23499160, 23521523, 23527363
23533647, 23548817, 23567857, 23572982, 23581777, 23588722, 23599216
23600861, 23602213, 23645516, 23665623, 23709062, 23715460, 23715518
23730961, 23733981, 23735292, 23741944, 23743596, 23746128, 23749454
23761724, 24010030, 24289874, 24294174, 24303148, 24307571, 24308349
24326444, 24326846, 24328857, 24332831, 24334708, 24336249, 24337882
24341675, 24343905, 24345420, 24346821, 24348685, 24350620, 24352981
24355111, 24357348, 24368004, 24371491, 24373528, 24373756, 24374976
24376875, 24376878, 24383086, 24385983, 24401351, 24403922, 24409977
24415926, 24416451, 24421668, 24423416, 24425056, 24425998, 24435982
24437162, 24440648, 24443539, 24457597, 24460392, 24461826, 24467122
24468470, 24470606, 24471079, 24471473, 24473736, 24485034, 24485161
24485174, 24486059, 24486237, 24509056, 24534401, 24554533, 24555417
24556967, 24560906, 24563422, 24570214, 24570598, 24573817, 24578718
24578797, 24589081, 24589590, 24591506, 24593740, 24595699, 24600330
24609592, 24609996, 24611527, 24616637, 24617969, 24623975, 24624166
24642495, 24654629, 24655717, 24664211, 24668398, 24669189, 24674197
24674955, 24676172, 24677696, 24680959, 24687075, 24689376, 24692973
24693290, 24697323, 24699619, 24710696, 24713381, 24714096, 24717183
24717859, 24718260, 24719799, 24735430, 24737064, 24737403, 24737581
24737954, 24739791, 24744383, 24744686, 24757934, 24759556, 24760407
24764085, 24766309, 24786669, 24792678, 24793511, 24796092, 24797119
24800423, 24801152, 24802934, 24811725, 24812047, 24818566, 24827228
24827654, 24831514, 24835919, 24841671, 24843188, 24844549, 24844841
24845157, 24848746, 24848923, 24850622, 24907917, 24908321, 24911709
24912588, 24922704, 24923080, 24923215, 24923338, 24923790, 24924667
24926999, 24929210, 24938784, 24940060, 24942749, 24953434, 24957555
24960044, 24965426, 24966594, 24966788, 24967993, 24968162, 24976007

24978100, 25022574, 25027852, 25028996, 25029022, 25029423, 25032818
25034396, 25036006, 25036474, 25042823, 25044977, 25045228, 25050160
25051465, 25051628, 25057811, 25058080, 25060506, 25062592, 25063971
25065563, 25072986, 25078611, 25086233, 25087436, 25092777, 25093872
25095982, 25098160, 25099339, 25099497, 25099758, 25100063, 25100579
25103996, 25107662, 25110233, 25114561, 25120284, 25120668, 25120742
25121089, 25123585, 25124363, 25129925, 25130312, 25140197, 25145163
25145215, 25150925, 25159176, 25162645, 25164293, 25166187, 25171041
25171084, 25175723, 25176408, 25178032, 25178101, 25178179, 25179774
25182817, 25184453, 25184555, 25186079, 25191872, 25192044, 25192528
25192729, 25195901, 25199585, 25201454, 25202355, 25203656, 25206864
25207410, 25209912, 25210268, 25210499, 25211628, 25223839, 25224242
25225795, 25226665, 25227381, 25230870, 25230945, 25237577, 25240188
25240590, 25241448, 25241625, 25244807, 25248384, 25251648, 25257085
25259611, 25262869, 25263960, 25265499, 25283790, 25287072, 25293659
25296876, 25299227, 25299807, 25300427, 25303284, 25303756, 25305405
25307368, 25309116, 25313154, 25313411, 25316758, 25317989, 25320555
25323525, 25328518, 25329664, 25335249, 25335360, 25335790, 25337332
25337640, 25348956, 25353983, 25356118, 25357142, 25360661, 25362958
25367588, 25367721, 25382812, 25383204, 25384462, 25386748, 25388896
25392535, 25393714, 25395696, 25397936, 25398306, 25404202, 25405100
25405687, 25405813, 25410017, 25410180, 25410802, 25410877, 25411036
25415713, 25417050, 25417056, 25417958, 25425451, 25425760, 25427662
25429959, 25430120, 25433696, 25435038, 25437699, 25440818, 25442559
25444961, 25445168, 25451531, 25455795, 25457409, 25459958, 25462714
25463844, 25472112, 25476149, 25477657, 25478885, 25479164, 25482971
25489342, 25489367, 25489607, 25492379, 25498930, 25498994, 25516250
25524955, 25528838, 25530080, 25530814, 25535668, 25536819, 25537470
25539063, 25540738, 25546580, 25546608, 25547901, 25551676, 25553616
25554787, 25555252, 25557886, 25558986, 25560487, 25561296, 25569149
25570929, 25575348, 25575369, 25575628, 25579458, 25579761, 25594901
25597525, 25598473, 25599425, 25600342, 25600421, 25602488, 25603923
25606091, 25607726, 25612095, 25614866, 25616268, 25616359, 25616417
25616645, 25631933, 25633101, 25634317, 25634348, 25635149, 25638456
25639019, 25643818, 25643889, 25643931, 25646373, 25647325, 25648731
25653109, 25654459, 25654936, 25655390, 25655966, 25659655, 25660847
25661819, 25662088, 25662101, 25662524, 25663488, 25669791, 25670786
25671354, 25672640, 25674386, 25680221, 25685152, 25686739, 25687460
25691904, 25694206, 25695903, 25696520, 25699321, 25700654, 25709368
25710420, 25715167, 25717371, 25722055, 25722608, 25722720, 25723158
25728085, 25729507, 25734963, 25736747, 25739065, 25741955, 25743479
25747569, 25749273, 25752755, 25754606, 25756945, 25757748, 25760195
25762221, 25764020, 25766822, 25768681, 25772669, 25774077, 25775213
25780343, 25783447, 25784002, 25785331, 25785441, 25788879, 25789041

25789277, 25789579, 25790353, 25792911, 25795865, 25797092, 25797124
25797305, 25800464, 25802510, 25803545, 25807997, 25810263, 25810704
25811650, 25813931, 25818707, 25822410, 25823754, 25825910, 25826740
25830492, 25832935, 25834581, 25835365, 25838361, 25838755, 25852885
25856821, 25858672, 25861398, 25865785, 25870579, 25871177, 25871639
25871753, 25872127, 25872389, 25873336, 25874050, 25874678, 25882264
25883438, 25885148, 25888073, 25888984, 25890056, 25890673, 25890782
25894239, 25895224, 25897615, 25904273, 25904490, 25906117, 25906886
25908728, 25911724, 25914276, 25919622, 25932524, 25932728, 25933494
25941836, 25943271, 25945130, 25947799, 25951571, 25953857, 25954022
25954054, 25957038, 25963024, 25964954, 25967544, 25967985, 25970731
25971286, 25973152, 25975723, 25977302, 25980605, 25980770, 25981498
25982666, 25986062, 25990907, 25995938, 25997810, 26006257, 26007010
26019148, 26024732, 26024784, 26025681, 26029075, 26029777, 26029780
26032573, 26034119, 26036748, 26037215, 26038086, 26039623, 26040483
26045732, 26051656, 26078437, 26078493, 26080410, 26083298, 26088426
26088836, 26090767, 26091640, 26091786, 26095327, 26095405, 26096382
26108080, 26108337, 26110259, 26110632, 26111842, 26112621, 26115103
26121990, 26124078, 26130486, 26137367, 26138085, 26149904, 26153372
26153977, 26168933, 26169341, 26169345, 26170659, 26170715, 26176002
26187943, 26189861, 26198757, 26198926, 26201113, 26203182, 26223039
26237338, 26237431, 26237773, 26238195, 26242031, 26242677, 26243698
26244115, 26245237, 26248143, 26249718, 26256131, 26257953, 26259265
26261327, 26263328, 26263721, 26268756, 26269790, 26271001, 26275023
26275415, 26277439, 26281476, 26285062, 26285933, 26308650, 26309047
26317991, 26318627, 26323308, 26324206, 26324769, 26327624, 26330994
26331743, 26333141, 26336977, 26338953, 26351334, 26353617, 26358670
26359091, 26362155, 26362821, 26366517, 26367012, 26367460, 26371725
26374791, 26375052, 26375250, 26380097, 26385189, 26388538, 26396790
26399626, 26399691, 26406387, 26407408, 26412540, 26418088, 26420561
26421667, 26422277, 26423085, 26426526, 26426967, 26430323, 26430737
26434436, 26434999, 26435073, 26436168, 26438612, 26439748, 26440169
26440749, 26442308, 26444601, 26444887, 26446098, 26452606, 26474662
26474703, 26475419, 26476244, 26478970, 26479173, 26482376, 26486365
26492866, 26493289, 26498354, 26513067, 26513709, 26521043, 26522439
26523432, 26526726, 26526799, 26536320, 26537307, 26542135, 26542236
26544823, 26545688, 26546070, 26546664, 26546754, 26548363, 26556014
26558437, 26569225, 26575788, 26580633, 26582460, 26584641, 26597140
26599395, 26608137, 26608238, 26609942, 26615291, 26615690, 26617804
26623652, 26626879, 26629381, 26633355, 26633558, 26635897, 26637273
26637824, 26639167, 26641610, 26650226, 26654363, 26658759, 26659182
26680105, 26712331, 26714486, 26714910, 26717528, 26724511, 26725687
26727397, 26729494, 26729611, 26740700, 26744595, 26745002, 26751106
26751171, 26755171, 26758193, 26764561, 26765212, 26768025, 26775602

26784509, 26794786, 26797591, 26798411, 26798516, 26802503, 26816582
26820076, 26822620, 26828994, 26829845, 26833932, 26837702, 26840654
26844406, 26844870, 26849779, 26871815, 26875822, 26883456, 26895149
26896659, 26898563, 26907327, 26908788, 26909100, 26909504, 26910716
26911000, 26939314, 26943004, 26944190, 26958896, 26963310, 26966616
26966916, 26967713, 26969321, 26970175, 26970717, 26981902, 26983259
26985002, 26986173, 26992964, 27000158, 27006120, 27006664, 27009164
27013146, 27028251, 27032785, 27033520, 27034890, 27037839, 27038986
27039712, 27044297, 27052607, 27058530, 27060167, 27060859, 27061736
27072923, 27073314, 27079140, 27087426, 27090765, 27092508, 27093423
27097854, 27101105, 27105900, 27106179, 27110878, 27115422, 27117822
27119621, 27122162, 27124624, 27125872, 27133662, 27134734, 27135647
27135993, 27138325, 27142373, 27142529, 27144928, 27151826, 27153641
27160922, 27161071, 27162390, 27162405, 27163928, 27165231, 27169796
27170305, 27181537, 27181897, 27185188, 27199245, 27200959, 27202015
27207110, 27208795, 27213224, 27216046, 27223075, 27229389, 27231051
27236722, 27242226, 27244337, 27248917, 27249531, 27250547, 27251690
27255377, 27256000, 27258578, 27259307, 27262945, 27264464, 27266245
27274456, 27274536, 27275533, 27276231, 27283960, 27284499, 27285244
27288638, 27292213, 27293599, 27302711, 27302730, 27303287, 27304410
27304906, 27305039, 27308088, 27314206, 27314390, 27320576, 27321179
27329612, 27333106, 27334316, 27338912, 27338946, 27339115, 27345231
27346709, 27348081, 27349393, 27350267, 27351628, 27359178, 27364854
27367194, 27369515, 27370965, 27375542, 27381498, 27383281, 27386467
27393570, 27394703, 27395416, 27396624, 27396672, 27396813, 27397048
27400416, 27400598, 27404668, 27405645, 27416997, 27423251, 27424405
27426363, 27432062, 27432826, 27433385, 27433870, 27434193, 27439835
27441326, 27442041, 27445727, 27457891, 27459948, 27466597, 27468303
27493674, 27501373, 27501413, 27502420, 27504770, 27505229, 27508985
27510959, 27525909, 27533780, 27533819, 27534509, 27540613, 27544973
27548131, 27554074, 27555481, 27558861, 27560602, 27562488, 27565906
27567477, 27576342, 27576354, 27588271, 27593501, 27595973, 27601118
27601441, 27607563, 27611612, 27613080, 27613530, 27617978, 27620808
27623159, 27629756, 27632114, 27634676, 27634991, 27658186, 27666312
27671633, 27680669, 27686599, 27687880, 27688036, 27688099, 27688692
27691920, 27691939, 27693416, 27693713, 27695063, 27698953, 27700466
27704237, 27709046, 27710072, 27726780, 27740424, 27748954, 27751755
27757567, 27757888, 27758544, 27758653, 27758972, 27759077, 27793533
27799032, 27801337, 27824540, 27824543, 27825241, 27829295, 27833672
27834551, 27834569, 27835925, 27839353, 27846298, 27846499, 27847259
27850112, 27855490, 27861226, 27873412, 27882176, 27886087, 27898015
27902561, 27931299, 27935493, 27940876, 27945870, 27951817, 27959048
27959594, 27966472, 27967484, 27983174, 27986817, 27994325, 27995215
27995248, 27997875, 27998003, 27999073, 27999638, 28000269, 28022101

28023081, 28023399, 28023482, 28026866, 28033429, 28040776, 28043157
28045903, 28067846, 28072567, 28074713, 28090453, 28099662, 28108003
28111583, 28120036, 28120951, 28124631, 28125947, 28129791, 28140658
28165439, 28171079, 28174827, 28180464, 28181021, 28184554, 28188330
28194173, 28199085, 28201419, 28215510, 28218832, 28220398, 28223871
28226179, 28229360, 28236305, 28242712, 28256164, 28271119, 28279837
28281094, 28282606, 28290434, 28294563, 28302049, 28305001, 28305362
28319114, 28320399, 28354603, 28357401, 28361221, 28365111, 28369092
28371123, 28378446, 28384353, 28390273, 28391210, 28396445, 28401116
28420042, 28420457, 28423598, 28432129, 28434028, 28435902, 28437315
28454242, 28468312, 28481149, 28483184, 28489150, 28501075, 28502343
28507324, 28508053, 28508557, 28521330, 28522441, 28528349, 28535272
28537715, 28542455, 28545134, 28547068, 28571483, 28572834, 28578164
28585411, 28587723, 28600233, 28612674, 28617631, 28617959, 28621470
28627255, 28636676, 28678804, 28691965, 28692103, 28692275, 28697806
28708023, 28714988, 28728272, 28742555, 28749289, 28749724, 28758722
28774416, 28791725, 28803345, 28817449, 28819640, 28820669, 28831971
28849751, 28852691, 28855922, 28856060, 28856172, 28867992, 28889730
28891984, 28951026, 28951382, 28956908, 28960211, 28965787, 28986231
28987439, 28991884, 28993590, 29002488, 29006527, 29009513, 29024054
29027694, 29032276, 29125374, 29158680, 29163567, 29189889, 29198092
29200700, 29213320, 29224605, 29250230, 29250317, 29301463, 29339155
29347943, 29353821, 29376346, 29378913, 29379978, 29388020, 29405462
29409149, 29436454, 29437712, 29483672, 29483723, 29500257, 29511611
29542449, 29633753, 29637526, 29645349, 29676089, 29690625, 29707896
29724063, 29767177, 29782211, 29813494, 29836659, 29893132, 29902311
30088912, 30189023

Version 12.2.0.1.ru-2019-07.rur-2019-07.r1

Version 12.2.0.1.ru-2019-07.rur-2019-07.r1 includes the following:

- Patch [29757449](#): DATABASE JUL 2019 RELEASE UPDATE 12.2.0.1.190716
- Patch [29774415](#): OJVM RELEASE UPDATE 12.2.0.1.190716
- Patch [28125601](#): DSTv33 for RDBMS (TZDATA2018G)
- Patch [28127287](#): DSTv33 for OJVM (TZDATA2018G)
- PreUpgrade Jar: preupgrade_12201_cbuild_22_lf.zip
- Patch [29213893](#): DBMS_STATS FAILING WITH ERROR ORA-01422 WHEN GATHERING STATS FOR USER\$ TABLE

- Patch [28730253](#): SUPPORT NEW ERA REIWA FOR JAPANESE IMPERIAL CALENDAR

Oracle release update 12.2.0.1.190716, released July 2019

Bugs fixed:

8480838, 8932139, 12763598, 13554903, 14221306, 14690846, 15931756
16002385, 16438495, 16727454, 16942578, 17027695, 17533661, 17947871
18308268, 18521691, 18594510, 18774543, 18878420, 19072655, 19211433
19285025, 19327292, 19526548, 19614243, 19647894, 19649997, 19702201
19721304, 20003668, 20087519, 20118035, 20120236, 20324049, 20436508
20532077, 20588486, 20591151, 20617383, 20620169, 20736227, 20756305
20866970, 20976443, 21089435, 21095391, 21143725, 21147908, 21159907
21178363, 21186167, 21197098, 21216226, 21320338, 21433452, 21479706
21517767, 21520266, 21547051, 21638600, 21744603, 21882528, 21981529
21985256, 22007324, 22070473, 22070853, 22072543, 22087683, 22104866
22179537, 22310426, 22347493, 22364044, 22367053, 22379010, 22446455
22495673, 22503283, 22503297, 22504793, 22522515, 22530986, 22564336
22568728, 22581771, 22594071, 22599050, 22628825, 22645009, 22654475
22700845, 22726044, 22729345, 22826067, 22843979, 22845846, 22864303
22898198, 22950945, 22970869, 22981722, 23019710, 23026585, 23035249
23055900, 23061453, 23065002, 23066146, 23080557, 23104033, 23105538
23110523, 23125560, 23126545, 23127945, 23151677, 23169712, 23177923
23179662, 23184263, 23197730, 23234232, 23237091, 23249829, 23271203
23278750, 23300142, 23306590, 23310101, 23312077, 23328639, 23336559
23481673, 23491861, 23499004, 23499160, 23521523, 23527363, 23533647
23548817, 23567857, 23572982, 23581777, 23588722, 23599216, 23600861
23602213, 23645516, 23665623, 23709062, 23715460, 23715518, 23730961
23733981, 23735292, 23741944, 23746128, 23749454, 23761724, 24010030
24289874, 24294174, 24303148, 24307571, 24308349, 24326444, 24326846
24328857, 24332831, 24334708, 24336249, 24337882, 24341675, 24343905
24345420, 24346821, 24348685, 24350620, 24352981, 24355111, 24357348
24368004, 24371491, 24373528, 24373756, 24374976, 24376875, 24376878
24385983, 24401351, 24403922, 24409977, 24415926, 24416451, 24421668
24423416, 24425056, 24425998, 24435982, 24437162, 24443539, 24457597
24460392, 24461826, 24467122, 24468470, 24470606, 24471079, 24471473
24473736, 24485034, 24485161, 24485174, 24486059, 24486237, 24509056
24534401, 24554533, 24555417, 24556967, 24560906, 24563422, 24570214
24570598, 24573817, 24578718, 24578797, 24589081, 24589590, 24591506
24593740, 24595699, 24600330, 24609592, 24609996, 24611527, 24616637
24617969, 24623975, 24624166, 24642495, 24654629, 24655717, 24664211
24668398, 24669189, 24674197, 24674955, 24676172, 24677696, 24680959

24689376, 24692973, 24693290, 24697323, 24699619, 24710696, 24713381
24714096, 24717183, 24717859, 24718260, 24719799, 24735430, 24737064
24737403, 24737581, 24744383, 24744686, 24757934, 24759556, 24760407
24764085, 24766309, 24786669, 24792678, 24793511, 24796092, 24797119
24800423, 24801152, 24802934, 24811725, 24812047, 24827228, 24827654
24831514, 24835919, 24841671, 24843188, 24844549, 24844841, 24845157
24848746, 24848923, 24850622, 24907917, 24908321, 24911709, 24912588
24922704, 24923080, 24923215, 24923338, 24923790, 24924667, 24926999
24929210, 24938784, 24940060, 24942749, 24953434, 24957555, 24960044
24965426, 24966594, 24966788, 24967993, 24968162, 24976007, 24978100
25022574, 25027852, 25028996, 25029022, 25029423, 25032818, 25034396
25036474, 25042823, 25044977, 25045228, 25050160, 25051465, 25051628
25057811, 25058080, 25062592, 25063971, 25065563, 25072986, 25078611
25086233, 25087436, 25092777, 25093872, 25098160, 25099339, 25099497
25099758, 25100063, 25100579, 25103996, 25107662, 25110233, 25114561
25120284, 25120668, 25120742, 25121089, 25123585, 25124363, 25129925
25140197, 25145163, 25145215, 25150925, 25159176, 25162645, 25164293
25166187, 25171041, 25171084, 25175723, 25176408, 25178032, 25178101
25178179, 25179774, 25182817, 25184555, 25186079, 25191872, 25192044
25192528, 25192729, 25199585, 25201454, 25202355, 25203656, 25206864
25207410, 25209912, 25210268, 25210499, 25211628, 25223839, 25224242
25225795, 25226665, 25227381, 25230870, 25230945, 25237577, 25240188
25240590, 25241448, 25241625, 25244807, 25248384, 25251648, 25257085
25259611, 25262869, 25263960, 25265499, 25283790, 25287072, 25293659
25296876, 25299227, 25299807, 25300427, 25303756, 25305405, 25307368
25309116, 25313154, 25313411, 25316758, 25317989, 25320555, 25323525
25328518, 25329664, 25335249, 25335360, 25335790, 25337332, 25337640
25348956, 25353983, 25356118, 25357142, 25360661, 25362958, 25367588
25367721, 25382812, 25383204, 25384462, 25386748, 25388896, 25392535
25395696, 25397936, 25398306, 25404202, 25405100, 25405687, 25405813
25410017, 25410180, 25410802, 25410877, 25411036, 25415713, 25417050
25417056, 25417958, 25425451, 25425760, 25427662, 25429959, 25430120
25433696, 25435038, 25437699, 25440818, 25442559, 25444961, 25445168
25451531, 25455795, 25457409, 25459958, 25462714, 25463844, 25472112
25476149, 25477657, 25478885, 25479164, 25482971, 25489342, 25489367
25489607, 25492379, 25498930, 25498994, 25516250, 25524955, 25528838
25530080, 25530814, 25535668, 25536819, 25537470, 25539063, 25540738
25546580, 25546608, 25547901, 25551676, 25553616, 25554787, 25555252
25557886, 25558986, 25560487, 25561296, 25569149, 25570929, 25575348
25575369, 25575628, 25579458, 25579761, 25594901, 25597525, 25598473
25599425, 25600342, 25600421, 25602488, 25603923, 25606091, 25607726
25612095, 25614866, 25616268, 25616359, 25616417, 25616645, 25631933
25633101, 25634317, 25634348, 25635149, 25638456, 25639019, 25643818
25643889, 25643931, 25646373, 25647325, 25648731, 25653109, 25654459

25654936, 25655390, 25655966, 25659655, 25660847, 25661819, 25662088
25662101, 25662524, 25663488, 25669791, 25670786, 25671354, 25672640
25674386, 25680221, 25685152, 25686739, 25687460, 25691904, 25694206
25695903, 25699321, 25700654, 25709368, 25710420, 25715167, 25717371
25722055, 25722608, 25722720, 25723158, 25728085, 25729507, 25734963
25736747, 25739065, 25741955, 25743479, 25747569, 25749273, 25752755
25754606, 25757748, 25760195, 25762221, 25764020, 25766822, 25768681
25772669, 25774077, 25775213, 25780343, 25783447, 25784002, 25785331
25785441, 25788879, 25789041, 25789277, 25789579, 25790353, 25792911
25795865, 25797092, 25797124, 25797305, 25800464, 25802510, 25803545
25807997, 25810263, 25810704, 25811650, 25813931, 25818707, 25822410
25823754, 25825910, 25826740, 25830492, 25832935, 25834581, 25835365
25838361, 25838755, 25852885, 25856821, 25858672, 25861398, 25865785
25870579, 25871177, 25871639, 25871753, 25872127, 25872389, 25873336
25874050, 25874678, 25882264, 25883438, 25885148, 25888073, 25888984
25890056, 25890673, 25894239, 25895224, 25897615, 25904273, 25904490
25906117, 25906886, 25908728, 25911724, 25914276, 25919622, 25932524
25932728, 25933494, 25941836, 25943271, 25945130, 25947799, 25951571
25953857, 25954022, 25954054, 25957038, 25963024, 25964954, 25967544
25967985, 25970731, 25971286, 25973152, 25975723, 25977302, 25980605
25980770, 25981498, 25982666, 25986062, 25990907, 25995938, 25997810
26006257, 26007010, 26019148, 26024732, 26024784, 26025681, 26029075
26029777, 26029780, 26032573, 26034119, 26036748, 26037215, 26038086
26039623, 26040483, 26045732, 26051656, 26078437, 26078493, 26080410
26083298, 26088426, 26088836, 26090767, 26091640, 26091786, 26095327
26095405, 26096382, 26108080, 26108337, 26110259, 26110632, 26111842
26112621, 26115103, 26121990, 26124078, 26137367, 26138085, 26149904
26153977, 26168933, 26169341, 26169345, 26170659, 26170715, 26176002
26187943, 26189861, 26198757, 26198926, 26201113, 26203182, 26223039
26237338, 26237431, 26237773, 26238195, 26242031, 26243698, 26244115
26245237, 26248143, 26249718, 26256131, 26257953, 26259265, 26261327
26263328, 26263721, 26268756, 26269790, 26271001, 26275023, 26275415
26277439, 26281476, 26285062, 26285933, 26308650, 26309047, 26317991
26318627, 26323308, 26324206, 26324769, 26327624, 26330994, 26331743
26333141, 26336977, 26338953, 26351334, 26353617, 26358670, 26359091
26362155, 26362821, 26366517, 26367012, 26367460, 26371725, 26374791
26375052, 26375250, 26380097, 26385189, 26388538, 26396790, 26399626
26399691, 26406387, 26407408, 26412540, 26418088, 26420561, 26421667
26422277, 26423085, 26426526, 26426967, 26430323, 26430737, 26434436
26434999, 26435073, 26436168, 26438612, 26439748, 26440169, 26440749
26442308, 26444601, 26444887, 26446098, 26452606, 26474662, 26474703
26475419, 26476244, 26478970, 26479173, 26482376, 26486365, 26492866
26493289, 26498354, 26513067, 26513709, 26521043, 26522439, 26523432
26526726, 26526799, 26536320, 26537307, 26542135, 26542236, 26544823

26545688, 26546070, 26546664, 26546754, 26548363, 26556014, 26569225
26575788, 26580633, 26582460, 26584641, 26597140, 26599395, 26608137
26608238, 26609942, 26615291, 26615690, 26617804, 26623652, 26626879
26629381, 26633355, 26633558, 26635897, 26637273, 26637824, 26639167
26641610, 26650226, 26654363, 26658759, 26659182, 26680105, 26712331
26714486, 26714910, 26717528, 26725687, 26727397, 26729494, 26729611
26740700, 26744595, 26745002, 26751106, 26751171, 26755171, 26758193
26764561, 26765212, 26775602, 26784509, 26794786, 26797591, 26798516
26802503, 26816582, 26820076, 26822620, 26828994, 26829845, 26833932
26837702, 26840654, 26844406, 26844870, 26849779, 26875822, 26883456
26895149, 26896659, 26898563, 26907327, 26908788, 26909100, 26909504
26911000, 26939314, 26943004, 26944190, 26958896, 26963310, 26966616
26966916, 26967713, 26969321, 26970175, 26970717, 26981902, 26983259
26985002, 26986173, 26992964, 27006120, 27006664, 27009164, 27013146
27028251, 27032785, 27034890, 27037839, 27038986, 27039712, 27044297
27052607, 27058530, 27060167, 27060859, 27061736, 27073314, 27079140
27087426, 27090765, 27092508, 27093423, 27097854, 27101105, 27105900
27106179, 27110878, 27115422, 27117822, 27119621, 27122162, 27124624
27125872, 27133662, 27134734, 27135647, 27135993, 27138325, 27142373
27142529, 27151826, 27153641, 27161071, 27162390, 27162405, 27163928
27165231, 27169796, 27170305, 27181537, 27181897, 27199245, 27200959
27207110, 27208795, 27213224, 27216046, 27223075, 27229389, 27231051
27236722, 27242226, 27244337, 27248917, 27249531, 27250547, 27251690
27255377, 27256000, 27258578, 27259307, 27262945, 27266245, 27274456
27274536, 27275533, 27276231, 27283960, 27284499, 27285244, 27288638
27292213, 27293599, 27302711, 27302730, 27303287, 27304410, 27305039
27308088, 27314206, 27314390, 27320576, 27321179, 27329612, 27333106
27334316, 27338912, 27338946, 27339115, 27345231, 27346709, 27348081
27349393, 27350267, 27351628, 27359178, 27364854, 27367194, 27370965
27375542, 27381498, 27386467, 27394703, 27395416, 27396624, 27396672
27396813, 27397048, 27400416, 27400598, 27404668, 27405645, 27416997
27423251, 27424405, 27426363, 27432062, 27433870, 27434193, 27439835
27441326, 27442041, 27445727, 27457891, 27466597, 27468303, 27493674
27501373, 27501413, 27502420, 27504770, 27505229, 27508985, 27510959
27525909, 27533819, 27534509, 27540613, 27544973, 27548131, 27554074
27555481, 27558861, 27560602, 27562488, 27565906, 27567477, 27576342
27593501, 27595973, 27607563, 27611612, 27613080, 27613530, 27617978
27620808, 27629756, 27634676, 27634991, 27658186, 27666312, 27671633
27680669, 27686599, 27687880, 27688036, 27688099, 27688692, 27691920
27691939, 27693416, 27693713, 27695063, 27698953, 27700466, 27704237
27709046, 27710072, 27726780, 27740424, 27748954, 27751755, 27757567
27757888, 27758972, 27759077, 27793533, 27799032, 27801337, 27824540
27824543, 27825241, 27829295, 27833672, 27834551, 27835925, 27846298
27846499, 27847259, 27855490, 27861226, 27882176, 27898015, 27931299

27940876, 27945870, 27951817, 27959048, 27959594, 27966472, 27986817
27994325, 27995215, 27995248, 27997875, 27998003, 27999073, 27999638
28000269, 28022101, 28023081, 28023399, 28023482, 28026866, 28033429
28040776, 28045903, 28067846, 28072567, 28074713, 28090453, 28099662
28108003, 28111583, 28120036, 28120951, 28124631, 28129791, 28140658
28165439, 28171079, 28174827, 28180464, 28181021, 28184554, 28188330
28194173, 28199085, 28201419, 28218832, 28220398, 28223871, 28226179
28229360, 28236305, 28271119, 28279837, 28282606, 28290434, 28302049
28305001, 28305362, 28320399, 28354603, 28357401, 28361221, 28365111
28378446, 28390273, 28396445, 28420042, 28420457, 28423598, 28432129
28434028, 28437315, 28454242, 28468312, 28483184, 28489150, 28501075
28502343, 28507324, 28508053, 28508557, 28522441, 28528349, 28535272
28545134, 28547068, 28571483, 28572834, 28578164, 28587723, 28600233
28612674, 28617631, 28617959, 28621470, 28627255, 28636676, 28691965
28692275, 28708023, 28728272, 28742555, 28749289, 28758722, 28774416
28803345, 28819640, 28849751, 28852691, 28856060, 28891984, 28951382
28956908, 28960211, 28965787, 28986231, 28987439, 28991884, 28993590
29006527, 29024054, 29027694, 29032276, 29125374, 29158680, 29189889
29200700, 29224605, 29250230, 29301463, 29339155, 29347943, 29376346
29378913, 29379978, 29388020, 29405462, 29436454, 29437712, 29511611
29542449, 29676089, 29690625, 29813494, 29836659

Version 12.2.0.1.ru-2019-04.rur-2019-04.r1

Version 12.2.0.1.ru-2019-04.rur-2019-04.r1 includes the following:

- Patch [29314339](#): Database Apr 2019 Release Update: 12.2.0.1.190416
- Patch [29249637](#): OJVM RELEASE UPDATE: 12.2.0.1.190416
- Patch [28852325](#): DSTv33 for RDBMS (TZDATA2018G)
- Patch [28852334](#): DSTv33 for OJVM (TZDATA2018G)
- PreUpgrade Jar: preupgrade_12201_cbuild_21_lf.zip
- Patch [28423598](#): GOLDENGATE AUTH CAUSES ACTIVE DG TO BE UNUSABLE UNTIL BOUNCE
- Patch [28730253](#): SUPPORT NEW ERA REIWA FOR JAPANESE IMPERIAL CALENDAR
- Support for the package `rdsadmin_dbms_goldengate_auth`, which provides GRANT privileges needed by a GoldenGate administrator account

For more information, see [Grant account privileges on the source DB](#) in the *Amazon RDS User Guide*.

Oracle release update 12.2.0.1.190416, released April 2019

Bugs fixed:

26362155, 28023399, 25741955, 25873336, 26966616, 27097854, 28617631
28742555, 29006527, 8480838, 8932139, 12763598, 13554903, 14221306
14690846, 15931756, 16002385, 16438495, 16727454, 16942578, 17027695
17533661, 17947871, 18308268, 18521691, 18594510, 18774543, 18878420
19072655, 19211433, 19285025, 19327292, 19526548, 19614243, 19647894
19649997, 19702201, 19721304, 20003668, 20087519, 20118035, 20120236
20324049, 20436508, 20532077, 20591151, 20617383, 20620169, 20736227
20756305, 20866970, 20976443, 21089435, 21095391, 21143725, 21147908
21159907, 21178363, 21186167, 21197098, 21216226, 21320338, 21433452
21479706, 21520266, 21547051, 21638600, 21744603, 21882528, 21981529
21985256, 22007324, 22070853, 22072543, 22087683, 22104866, 22179537
22347493, 22364044, 22367053, 22379010, 22446455, 22495673, 22503283
22503297, 22504793, 22530986, 22564336, 22568728, 22581771, 22594071
22599050, 22628825, 22645009, 22654475, 22700845, 22726044, 22729345
22826067, 22843979, 22845846, 22864303, 22898198, 22950945, 22970869
22981722, 23019710, 23026585, 23035249, 23055900, 23061453, 23065002
23066146, 23080557, 23104033, 23105538, 23110523, 23125560, 23126545
23127945, 23151677, 23179662, 23184263, 23197730, 23234232, 23237091
23249829, 23271203, 23278750, 23300142, 23310101, 23312077, 23328639
23336559, 23481673, 23491861, 23499004, 23499160, 23521523, 23527363
23533647, 23548817, 23567857, 23572982, 23581777, 23588722, 23599216
23600861, 23602213, 23645516, 23665623, 23709062, 23715460, 23715518
23730961, 23733981, 23735292, 23741944, 23746128, 23749454, 23761724
24010030, 24289874, 24294174, 24303148, 24307571, 24308349, 24326444
24326846, 24328857, 24332831, 24334708, 24336249, 24337882, 24341675
24343905, 24345420, 24346821, 24348685, 24350620, 24352981, 24368004
24371491, 24373756, 24374976, 24376875, 24376878, 24385983, 24401351
24403922, 24415926, 24421668, 24423416, 24425056, 24425998, 24435982
24437162, 24443539, 24457597, 24460392, 24461826, 24467122, 24468470
24470606, 24471473, 24473736, 24485034, 24485161, 24485174, 24486059
24486237, 24509056, 24534401, 24554533, 24555417, 24556967, 24560906
24563422, 24570214, 24570598, 24573817, 24578718, 24578797, 24589081
24589590, 24593740, 24595699, 24600330, 24609592, 24609996, 24611527
24616637, 24617969, 24623975, 24624166, 24642495, 24654629, 24655717
24664211, 24668398, 24669189, 24674197, 24674955, 24676172, 24677696
24680959, 24689376, 24692973, 24693290, 24697323, 24699619, 24710696
24713381, 24714096, 24717183, 24717859, 24718260, 24719799, 24735430
24737064, 24737403, 24737581, 24744383, 24744686, 24757934, 24759556

24760407, 24764085, 24766309, 24786669, 24792678, 24793511, 24796092
24797119, 24800423, 24801152, 24802934, 24811725, 24812047, 24827228
24827654, 24831514, 24835919, 24843188, 24844549, 24845157, 24848746
24848923, 24850622, 24907917, 24908321, 24911709, 24912588, 24922704
24923080, 24923215, 24923338, 24923790, 24924667, 24926999, 24929210
24938784, 24940060, 24942749, 24953434, 24957555, 24960044, 24966594
24966788, 24968162, 24976007, 24978100, 25022574, 25027852, 25028996
25029022, 25029423, 25032818, 25034396, 25036474, 25042823, 25044977
25045228, 25050160, 25051628, 25057811, 25058080, 25062592, 25063971
25065563, 25072986, 25078611, 25086233, 25087436, 25093872, 25098160
25099339, 25099497, 25099758, 25100063, 25100579, 25103996, 25107662
25110233, 25114561, 25120284, 25120668, 25120742, 25121089, 25123585
25124363, 25129925, 25140197, 25145163, 25145215, 25150925, 25159176
25162645, 25164293, 25166187, 25171084, 25175723, 25176408, 25178032
25178101, 25178179, 25179774, 25182817, 25184555, 25186079, 25191872
25192044, 25192729, 25199585, 25201454, 25202355, 25203656, 25206864
25207410, 25209912, 25210268, 25210499, 25211628, 25223839, 25224242
25225795, 25226665, 25227381, 25230870, 25230945, 25237577, 25240188
25240590, 25241448, 25241625, 25244807, 25248384, 25251648, 25257085
25259611, 25262869, 25263960, 25265499, 25283790, 25287072, 25293659
25296876, 25299227, 25299807, 25300427, 25303756, 25305405, 25307368
25309116, 25313154, 25313411, 25316758, 25317989, 25320555, 25323525
25328518, 25329664, 25335249, 25335360, 25335790, 25337332, 25337640
25348956, 25353983, 25356118, 25357142, 25362958, 25367588, 25367721
25382812, 25383204, 25384462, 25386748, 25388896, 25392535, 25395696
25397936, 25398306, 25404202, 25405100, 25405687, 25405813, 25410017
25410180, 25410802, 25410877, 25411036, 25417050, 25417056, 25417958
25425451, 25425760, 25427662, 25429959, 25430120, 25433696, 25435038
25437699, 25440818, 25442559, 25444961, 25445168, 25451531, 25455795
25457409, 25459958, 25462714, 25463844, 25472112, 25476149, 25477657
25478885, 25479164, 25489342, 25489367, 25489607, 25492379, 25498930
25498994, 25516250, 25524955, 25528838, 25530080, 25530814, 25535668
25536819, 25537470, 25539063, 25540738, 25546580, 25546608, 25547901
25551676, 25553616, 25554787, 25555252, 25557886, 25558986, 25560487
25561296, 25569149, 25570929, 25575348, 25575628, 25579458, 25579761
25594901, 25597525, 25598473, 25599425, 25600342, 25600421, 25602488
25603923, 25606091, 25607726, 25612095, 25614866, 25616268, 25616359
25616417, 25616645, 25631933, 25633101, 25634317, 25634348, 25635149
25638456, 25639019, 25643818, 25643931, 25646373, 25647325, 25648731
25653109, 25654459, 25654936, 25655390, 25655966, 25659655, 25660847
25661819, 25662088, 25662101, 25662524, 25663488, 25669791, 25670786
25671354, 25672640, 25674386, 25680221, 25685152, 25686739, 25687460
25691904, 25694206, 25695903, 25700654, 25710420, 25715167, 25717371
25722055, 25722608, 25722720, 25728085, 25729507, 25734963, 25736747

25739065, 25743479, 25754606, 25757748, 25760195, 25762221, 25764020
25766822, 25768681, 25772669, 25774077, 25775213, 25780343, 25783447
25784002, 25785331, 25785441, 25788879, 25789041, 25789277, 25789579
25790353, 25795865, 25797092, 25797124, 25797305, 25800464, 25802510
25803545, 25807997, 25810704, 25813931, 25818707, 25822410, 25823754
25825910, 25826740, 25830492, 25832935, 25834581, 25838361, 25852885
25856821, 25858672, 25861398, 25865785, 25870579, 25871177, 25871639
25871753, 25872127, 25872389, 25874050, 25874678, 25882264, 25883438
25885148, 25888073, 25890056, 25890673, 25894239, 25895224, 25897615
25904273, 25904490, 25906117, 25908728, 25911724, 25914276, 25919622
25932524, 25932728, 25933494, 25941836, 25943271, 25945130, 25947799
25953857, 25954022, 25954054, 25957038, 25963024, 25964954, 25967544
25967985, 25970731, 25971286, 25973152, 25975723, 25977302, 25980605
25980770, 25981498, 25982666, 25986062, 25990907, 25995938, 26006257
26007010, 26019148, 26024732, 26025681, 26029075, 26029777, 26029780
26032573, 26034119, 26036748, 26037215, 26038086, 26039623, 26040483
26045732, 26051656, 26078437, 26078493, 26080410, 26083298, 26088426
26088836, 26090767, 26091640, 26091786, 26095327, 26095405, 26096382
26108080, 26108337, 26110259, 26110632, 26111842, 26112621, 26115103
26121990, 26124078, 26137367, 26138085, 26149904, 26153977, 26169341
26169345, 26170715, 26176002, 26187943, 26189861, 26198757, 26198926
26201113, 26203182, 26223039, 26237431, 26237773, 26238195, 26242031
26243698, 26244115, 26245237, 26248143, 26249718, 26256131, 26259265
26261327, 26263328, 26263721, 26269790, 26271001, 26277439, 26285062
26285933, 26308650, 26309047, 26318627, 26323308, 26324206, 26324769
26327624, 26330994, 26331743, 26333141, 26336977, 26338953, 26351334
26353617, 26358670, 26359091, 26362821, 26366517, 26367012, 26367460
26371725, 26374791, 26375250, 26380097, 26385189, 26388538, 26396790
26399626, 26399691, 26406387, 26407408, 26412540, 26418088, 26420561
26421667, 26422277, 26423085, 26426526, 26426967, 26430323, 26430737
26434436, 26434999, 26435073, 26436168, 26438612, 26439748, 26440169
26440749, 26442308, 26444601, 26444887, 26446098, 26452606, 26474703
26475419, 26476244, 26478970, 26479173, 26486365, 26492866, 26493289
26498354, 26513709, 26521043, 26522439, 26523432, 26526726, 26526799
26536320, 26537307, 26542135, 26544823, 26545688, 26546070, 26546664
26546754, 26548363, 26556014, 26569225, 26575788, 26580633, 26582460
26584641, 26597140, 26599395, 26608137, 26608238, 26609942, 26615291
26615690, 26617804, 26623652, 26626879, 26629381, 26633355, 26633558
26635897, 26637273, 26637824, 26639167, 26641610, 26650226, 26654363
26658759, 26659182, 26680105, 26712331, 26714486, 26714910, 26717528
26725687, 26727397, 26729494, 26729611, 26740700, 26744595, 26745002
26751106, 26751171, 26755171, 26758193, 26764561, 26765212, 26775602
26784509, 26794786, 26797591, 26798516, 26802503, 26816582, 26820076
26822620, 26828994, 26829845, 26833932, 26837702, 26840654, 26844406

26844870, 26849779, 26875822, 26883456, 26895149, 26896659, 26898563
26907327, 26908788, 26909100, 26909504, 26911000, 26939314, 26944190
26958896, 26963310, 26966916, 26967713, 26969321, 26970175, 26970717
26981902, 26983259, 26986173, 26992964, 27006120, 27006664, 27009164
27013146, 27028251, 27034890, 27037839, 27038986, 27039712, 27044297
27052607, 27058530, 27060167, 27060859, 27061736, 27073314, 27079140
27087426, 27090765, 27093423, 27106179, 27110878, 27115422, 27117822
27119621, 27122162, 27124624, 27125872, 27133662, 27135647, 27135993
27138325, 27142373, 27142529, 27151826, 27153641, 27161071, 27162390
27162405, 27163928, 27165231, 27169796, 27170305, 27181537, 27181897
27199245, 27200959, 27207110, 27208795, 27213224, 27216046, 27223075
27229389, 27231051, 27236722, 27242226, 27244337, 27248917, 27250547
27251690, 27255377, 27256000, 27258578, 27259307, 27262945, 27266245
27274456, 27274536, 27275533, 27276231, 27283960, 27284499, 27285244
27288638, 27292213, 27293599, 27302711, 27302730, 27304410, 27305039
27314206, 27314390, 27320576, 27321179, 27329612, 27333106, 27334316
27338912, 27338946, 27339115, 27345231, 27346709, 27348081, 27349393
27350267, 27351628, 27359178, 27364854, 27367194, 27370965, 27375542
27381498, 27386467, 27394703, 27395416, 27396624, 27396672, 27396813
27397048, 27400416, 27400598, 27404668, 27405645, 27416997, 27423251
27424405, 27426363, 27432062, 27433870, 27434193, 27439835, 27441326
27442041, 27445727, 27457891, 27466597, 27493674, 27501373, 27501413
27502420, 27504770, 27505229, 27508985, 27510959, 27525909, 27534509
27540613, 27544973, 27548131, 27554074, 27555481, 27558861, 27560602
27562488, 27565906, 27567477, 27593501, 27595973, 27607563, 27611612
27613080, 27613530, 27617978, 27620808, 27634676, 27634991, 27658186
27666312, 27671633, 27680669, 27686599, 27687880, 27688036, 27688099
27688692, 27691920, 27691939, 27693713, 27695063, 27698953, 27700466
27704237, 27709046, 27726780, 27740424, 27748954, 27751755, 27757567
27757888, 27758972, 27759077, 27793533, 27799032, 27801337, 27824543
27825241, 27829295, 27833672, 27834551, 27835925, 27847259, 27855490
27882176, 27898015, 27931299, 27940876, 27945870, 27951817, 27959048
27966472, 27986817, 27994325, 27995215, 27995248, 27997875, 27998003
27999638, 28000269, 28022101, 28023081, 28023482, 28033429, 28040776
28045903, 28067846, 28072567, 28074713, 28090453, 28099662, 28108003
28111583, 28120036, 28120951, 28140658, 28171079, 28174827, 28180464
28184554, 28188330, 28194173, 28199085, 28218832, 28220398, 28223871
28226179, 28229360, 28279837, 28282606, 28290434, 28302049, 28305001
28305362, 28320399, 28354603, 28361221, 28365111, 28378446, 28390273
28396445, 28420042, 28420457, 28432129, 28434028, 28437315, 28454242
28468312, 28483184, 28489150, 28502343, 28507324, 28508053, 28508557
28522441, 28528349, 28535272, 28545134, 28571483, 28578164, 28587723
28600233, 28617959, 28621470, 28627255, 28636676, 28691965, 28708023
28728272, 28749289, 28803345, 28849751, 28852691, 28856060, 28891984

28951382, 28960211, 28987439, 28991884, 28993590, 29027694, 29189889
29250230

Version 12.2.0.1.ru-2019-01.rur-2019-01.r1

Version 12.2.0.1.ru-2019-01.rur-2019-01.r1 includes the following:

- Patch [28822515](#): Database Jan 2019 Release Update: 12.2.0.1.190115
- Patch [28790651](#): OJVM RELEASE UPDATE: 12.2.0.1.190115
- Patch [28125601](#): DSTv32 for RDBMS (TZDATA2018E)
- Patch [28127287](#): DSTv32 for OJVM (TZDATA2018E)
- PreUpgrade Jar: preupgrade_12201_cbuild_19_lf.zip

Oracle release update 12.2.0.1.190115, released January 2019

Bugs fixed:

26285062, 8480838, 8932139, 13554903, 14221306, 14690846, 15931756
16002385, 16438495, 16727454, 16942578, 17027695, 17533661, 17947871
18308268, 18521691, 18594510, 18774543, 19072655, 19211433, 19285025
19327292, 19526548, 19614243, 19647894, 19649997, 19721304, 20003668
20087519, 20118035, 20120236, 20324049, 20436508, 20532077, 20591151
20620169, 20736227, 20756305, 20866970, 20976443, 21095391, 21143725
21147908, 21159907, 21178363, 21186167, 21197098, 21216226, 21320338
21433452, 21479706, 21520266, 21547051, 21744603, 21882528, 21981529
21985256, 22007324, 22070853, 22072543, 22087683, 22104866, 22179537
22347493, 22364044, 22367053, 22379010, 22446455, 22495673, 22503283
22503297, 22504793, 22530986, 22564336, 22568728, 22581771, 22594071
22599050, 22628825, 22645009, 22654475, 22700845, 22729345, 22826067
22843979, 22845846, 22864303, 22898198, 22950945, 22970869, 22981722
23019710, 23026585, 23035249, 23055900, 23061453, 23065002, 23066146
23080557, 23104033, 23105538, 23110523, 23125560, 23126545, 23127945
23151677, 23179662, 23184263, 23197730, 23234232, 23249829, 23271203
23300142, 23310101, 23312077, 23481673, 23491861, 23499004, 23499160
23521523, 23527363, 23533647, 23548817, 23567857, 23572982, 23581777
23588722, 23599216, 23600861, 23602213, 23645516, 23665623, 23709062
23715460, 23730961, 23733981, 23735292, 23741944, 23746128, 23749454
23761724, 24010030, 24289874, 24294174, 24303148, 24307571, 24308349

24326444, 24326846, 24332831, 24334708, 24336249, 24337882, 24341675
24343905, 24345420, 24346821, 24348685, 24350620, 24352981, 24368004
24371491, 24373756, 24374976, 24376875, 24376878, 24385983, 24401351
24403922, 24415926, 24421668, 24423416, 24425056, 24425998, 24435982
24437162, 24443539, 24457597, 24460392, 24461826, 24467122, 24468470
24470606, 24471473, 24473736, 24485034, 24485161, 24485174, 24486059
24486237, 24509056, 24534401, 24554533, 24555417, 24556967, 24560906
24563422, 24570214, 24570598, 24573817, 24578718, 24578797, 24589081
24589590, 24593740, 24595699, 24600330, 24609592, 24609996, 24616637
24617969, 24623975, 24624166, 24642495, 24654629, 24655717, 24664211
24668398, 24669189, 24674197, 24674955, 24676172, 24677696, 24680959
24689376, 24692973, 24693290, 24697323, 24699619, 24710696, 24713381
24714096, 24717183, 24717859, 24718260, 24719799, 24735430, 24737064
24737403, 24737581, 24744383, 24744686, 24757934, 24759556, 24760407
24764085, 24766309, 24786669, 24792678, 24793511, 24796092, 24797119
24800423, 24801152, 24802934, 24811725, 24812047, 24827228, 24827654
24831514, 24835919, 24843188, 24844549, 24845157, 24848746, 24848923
24850622, 24907917, 24908321, 24911709, 24912588, 24922704, 24923080
24923215, 24923338, 24923790, 24929210, 24938784, 24940060, 24942749
24953434, 24957555, 24960044, 24966594, 24966788, 24968162, 24976007
24978100, 25022574, 25027852, 25028996, 25029022, 25029423, 25034396
25036474, 25044977, 25045228, 25050160, 25051628, 25057811, 25058080
25062592, 25063971, 25065563, 25072986, 25078611, 25086233, 25087436
25093872, 25098160, 25099339, 25099497, 25099758, 25100063, 25100579
25103996, 25107662, 25110233, 25114561, 25120284, 25120668, 25120742
25121089, 25123585, 25124363, 25129925, 25140197, 25145163, 25145215
25150925, 25159176, 25162645, 25164293, 25166187, 25171084, 25175723
25176408, 25178032, 25178101, 25178179, 25179774, 25182817, 25184555
25186079, 25191872, 25192044, 25192729, 25199585, 25201454, 25202355
25203656, 25206864, 25207410, 25209912, 25210268, 25210499, 25211628
25223839, 25224242, 25225795, 25226665, 25227381, 25230870, 25230945
25237577, 25240188, 25240590, 25241448, 25241625, 25244807, 25248384
25251648, 25257085, 25259611, 25262869, 25263960, 25265499, 25283790
25287072, 25296876, 25299227, 25299807, 25300427, 25305405, 25307368
25309116, 25313154, 25313411, 25316758, 25317989, 25320555, 25323525
25328518, 25329664, 25335249, 25335360, 25335790, 25337332, 25337640
25348956, 25353983, 25356118, 25357142, 25362958, 25382812, 25383204
25384462, 25386748, 25388896, 25392535, 25395696, 25397936, 25405813
25410017, 25410180, 25410802, 25410877, 25411036, 25417050, 25417056
25417958, 25425451, 25425760, 25427662, 25429959, 25430120, 25433696
25435038, 25437699, 25440818, 25444961, 25445168, 25451531, 25455795
25457409, 25459958, 25462714, 25463844, 25472112, 25476149, 25478885
25479164, 25489342, 25489367, 25489607, 25492379, 25498930, 25498994
25516250, 25524955, 25528838, 25530080, 25530814, 25535668, 25536819

25537470, 25539063, 25540738, 25546580, 25546608, 25547901, 25551676
25553616, 25554787, 25555252, 25557886, 25558986, 25560487, 25561296
25569149, 25570929, 25575348, 25575628, 25579458, 25579761, 25594901
25597525, 25598473, 25599425, 25600342, 25600421, 25602488, 25603923
25606091, 25607726, 25612095, 25614866, 25616268, 25616359, 25616417
25616645, 25631933, 25633101, 25634317, 25634348, 25635149, 25638456
25639019, 25643818, 25643931, 25646373, 25647325, 25648731, 25653109
25654459, 25654936, 25655390, 25655966, 25659655, 25660847, 25661819
25662088, 25662101, 25662524, 25669791, 25670786, 25671354, 25672640
25674386, 25680221, 25685152, 25686739, 25687460, 25691904, 25694206
25695903, 25700654, 25710420, 25715167, 25717371, 25722055, 25722608
25722720, 25728085, 25729507, 25734963, 25736747, 25739065, 25754606
25757748, 25760195, 25762221, 25764020, 25766822, 25768681, 25772669
25774077, 25775213, 25780343, 25784002, 25785331, 25785441, 25788879
25789041, 25789277, 25789579, 25790353, 25797092, 25797124, 25797305
25800464, 25802510, 25803545, 25807997, 25810704, 25813931, 25818707
25822410, 25823754, 25825910, 25826740, 25830492, 25832935, 25834581
25838361, 25852885, 25856821, 25858672, 25861398, 25865785, 25870579
25871177, 25871639, 25871753, 25872127, 25872389, 25874050, 25874678
25882264, 25885148, 25888073, 25890056, 25890673, 25894239, 25895224
25897615, 25904273, 25904490, 25906117, 25911724, 25914276, 25919622
25932524, 25932728, 25933494, 25941836, 25943271, 25945130, 25947799
25953857, 25954022, 25954054, 25957038, 25963024, 25964954, 25967544
25967985, 25970731, 25973152, 25975723, 25977302, 25980605, 25980770
25981498, 25982666, 25990907, 25995938, 26006257, 26007010, 26019148
26024732, 26025681, 26029780, 26032573, 26034119, 26036748, 26037215
26038086, 26039623, 26040483, 26045732, 26078437, 26078493, 26080410
26083298, 26088426, 26088836, 26090767, 26091640, 26091786, 26095327
26095405, 26096382, 26108080, 26108337, 26110632, 26111842, 26112621
26115103, 26121990, 26124078, 26137367, 26138085, 26149904, 26153977
26169341, 26169345, 26170715, 26176002, 26187943, 26189861, 26198757
26198926, 26201113, 26203182, 26223039, 26237431, 26237773, 26238195
26242031, 26243698, 26244115, 26245237, 26248143, 26249718, 26256131
26259265, 26261327, 26263328, 26263721, 26269790, 26271001, 26277439
26285933, 26308650, 26309047, 26318627, 26323308, 26324769, 26327624
26330994, 26331743, 26333141, 26336977, 26338953, 26351334, 26353617
26358670, 26359091, 26362821, 26366517, 26367012, 26371725, 26374791
26375250, 26380097, 26385189, 26388538, 26396790, 26399626, 26399691
26406387, 26407408, 26412540, 26418088, 26420561, 26421667, 26422277
26423085, 26426526, 26426967, 26430737, 26434436, 26434999, 26435073
26436168, 26438612, 26440749, 26442308, 26444601, 26444887, 26446098
26452606, 26474703, 26475419, 26476244, 26478970, 26479173, 26486365
26492866, 26493289, 26498354, 26513709, 26521043, 26522439, 26523432
26526726, 26536320, 26537307, 26542135, 26544823, 26545688, 26546070

26546664, 26546754, 26548363, 26556014, 26569225, 26575788, 26580633
26582460, 26584641, 26597140, 26599395, 26608137, 26609942, 26615291
26615690, 26623652, 26626879, 26629381, 26633355, 26633558, 26635897
26637273, 26637824, 26639167, 26641610, 26650226, 26658759, 26659182
26680105, 26712331, 26714486, 26714910, 26717528, 26725687, 26727397
26729494, 26729611, 26740700, 26744595, 26745002, 26751106, 26751171
26755171, 26758193, 26764561, 26765212, 26775602, 26784509, 26794786
26797591, 26798516, 26802503, 26820076, 26822620, 26828994, 26840654
26844406, 26844870, 26849779, 26875822, 26883456, 26895149, 26896659
26898563, 26907327, 26908788, 26909100, 26909504, 26911000, 26939314
26944190, 26958896, 26963310, 26966916, 26967713, 26969321, 26970717
26981902, 26983259, 26986173, 26992964, 27006664, 27009164, 27013146
27028251, 27034890, 27037839, 27038986, 27039712, 27044297, 27052607
27058530, 27060167, 27060859, 27073314, 27079140, 27087426, 27090765
27093423, 27110878, 27117822, 27119621, 27122162, 27124624, 27125872
27133662, 27135647, 27135993, 27138325, 27142373, 27142529, 27151826
27153641, 27161071, 27162405, 27163928, 27165231, 27169796, 27170305
27181537, 27181897, 27199245, 27200959, 27207110, 27213224, 27223075
27229389, 27236722, 27244337, 27248917, 27250547, 27251690, 27255377
27256000, 27258578, 27259307, 27262945, 27266245, 27274456, 27274536
27276231, 27283960, 27285244, 27292213, 27293599, 27302711, 27302730
27304410, 27305039, 27314206, 27314390, 27320576, 27321179, 27329612
27333106, 27334316, 27338912, 27338946, 27339115, 27345231, 27346709
27348081, 27349393, 27351628, 27359178, 27367194, 27370965, 27375542
27381498, 27386467, 27394703, 27395416, 27396624, 27396813, 27397048
27400416, 27400598, 27404668, 27405645, 27416997, 27433870, 27434193
27439835, 27441326, 27442041, 27445727, 27466597, 27493674, 27501373
27501413, 27502420, 27504770, 27505229, 27508985, 27510959, 27525909
27534509, 27540613, 27544973, 27548131, 27555481, 27558861, 27560602
27567477, 27593501, 27595973, 27607563, 27611612, 27613080, 27613530
27617978, 27620808, 27634676, 27658186, 27687880, 27688036, 27688099
27688692, 27691920, 27691939, 27693713, 27695063, 27698953, 27700466
27709046, 27726780, 27740424, 27748954, 27757888, 27759077, 27793533
27799032, 27801337, 27835925, 27847259, 27855490, 27882176, 27898015
27931299, 27940876, 27945870, 27951817, 27959048, 27994325, 27995248
27997875, 27998003, 27999638, 28000269, 28022101, 28023081, 28023482
28033429, 28040776, 28067846, 28072567, 28074713, 28090453, 28099662
28111583, 28120951, 28140658, 28171079, 28174827, 28180464, 28184554
28188330, 28194173, 28218832, 28220398, 28226179, 28229360, 28282606
28290434, 28302049, 28305001, 28305362, 28320399, 28354603, 28361221
28365111, 28390273, 28396445, 28420042, 28420457, 28434028, 28437315
28454242, 28483184, 28489150, 28502343, 28508053, 28508557, 28522441
28528349, 28535272, 28571483, 28617959, 28621470, 28627255, 28636676
28691965, 28708023, 28728272, 28749289, 28960211, 28993590

Version 12.2.0.1.ru-2018-10.rur-2018-10.r1

Version 12.2.0.1.ru-2018-10.rur-2018-10.r1 includes the following:

- October 2018 Release Update: 12.2.0.1.181016 (28662603)

Oracle release update 12.2.0.1.181016, released October 2018

Bugs fixed:

28390273, 28571483, 28483184, 8480838, 13554903, 14221306, 14690846
15931756, 16002385, 16438495, 16727454, 16942578, 17027695, 17533661
17947871, 18308268, 18521691, 18594510, 18774543, 19072655, 19211433
19285025, 19327292, 19526548, 19614243, 19647894, 19649997, 19721304
20003668, 20087519, 20118035, 20120236, 20324049, 20436508, 20532077
20591151, 20620169, 20736227, 20756305, 20866970, 20976443, 21143725
21147908, 21159907, 21178363, 21186167, 21216226, 21320338, 21433452
21479706, 21520266, 21547051, 21744603, 21882528, 21981529, 21985256
22007324, 22070853, 22072543, 22087683, 22104866, 22179537, 22347493
22364044, 22367053, 22379010, 22446455, 22495673, 22503283, 22503297
22504793, 22530986, 22564336, 22568728, 22581771, 22594071, 22599050
22628825, 22645009, 22654475, 22700845, 22729345, 22826067, 22843979
22845846, 22864303, 22898198, 22950945, 22970869, 22981722, 23019710
23026585, 23035249, 23055900, 23061453, 23065002, 23066146, 23080557
23105538, 23110523, 23125560, 23126545, 23127945, 23151677, 23179662
23184263, 23197730, 23234232, 23249829, 23271203, 23300142, 23310101
23312077, 23481673, 23491861, 23499160, 23521523, 23527363, 23533647
23548817, 23567857, 23572982, 23581777, 23588722, 23599216, 23600861
23602213, 23645516, 23665623, 23709062, 23715460, 23730961, 23733981
23735292, 23741944, 23746128, 23749454, 24010030, 24289874, 24294174
24303148, 24307571, 24308349, 24326444, 24326846, 24332831, 24334708
24336249, 24337882, 24341675, 24343905, 24345420, 24346821, 24348685
24350620, 24368004, 24371491, 24373756, 24374976, 24376875, 24376878
24385983, 24401351, 24403922, 24415926, 24421668, 24423416, 24425056
24425998, 24435982, 24437162, 24443539, 24457597, 24461826, 24467122
24468470, 24470606, 24473736, 24485034, 24485161, 24485174, 24486059
24486237, 24509056, 24534401, 24554533, 24555417, 24556967, 24560906
24563422, 24570598, 24573817, 24578718, 24578797, 24589081, 24589590
24593740, 24595699, 24600330, 24609592, 24609996, 24616637, 24617969

24623975, 24624166, 24642495, 24654629, 24655717, 24664211, 24668398
24674197, 24674955, 24676172, 24677696, 24680959, 24689376, 24692973
24693290, 24699619, 24710696, 24713381, 24714096, 24717183, 24717859
24718260, 24719799, 24735430, 24737064, 24737403, 24737581, 24744383
24744686, 24757934, 24759556, 24760407, 24766309, 24786669, 24792678
24793511, 24796092, 24797119, 24800423, 24801152, 24802934, 24811725
24812047, 24827228, 24827654, 24831514, 24835919, 24843188, 24844549
24845157, 24848746, 24848923, 24850622, 24907917, 24908321, 24911709
24912588, 24922704, 24923080, 24923215, 24923338, 24923790, 24929210
24938784, 24940060, 24942749, 24953434, 24957555, 24960044, 24966594
24966788, 24968162, 24976007, 24978100, 25027852, 25029022, 25029423
25034396, 25036474, 25044977, 25045228, 25050160, 25051628, 25057811
25058080, 25062592, 25063971, 25065563, 25072986, 25078611, 25086233
25087436, 25093872, 25098160, 25099339, 25099497, 25099758, 25100063
25100579, 25103996, 25107662, 25110233, 25120284, 25120742, 25121089
25123585, 25124363, 25129925, 25140197, 25145163, 25145215, 25150925
25159176, 25162645, 25164293, 25166187, 25171084, 25175723, 25176408
25178032, 25178101, 25178179, 25179774, 25182817, 25184555, 25186079
25191872, 25192044, 25192729, 25199585, 25201454, 25202355, 25203656
25206864, 25207410, 25209912, 25210268, 25210499, 25211628, 25223839
25224242, 25225795, 25226665, 25227381, 25230945, 25237577, 25240590
25241448, 25241625, 25244807, 25248384, 25251648, 25257085, 25259611
25262869, 25263960, 25265499, 25283790, 25287072, 25296876, 25299227
25299807, 25300427, 25305405, 25307368, 25309116, 25313154, 25313411
25316758, 25317989, 25320555, 25323525, 25328518, 25329664, 25335249
25335360, 25335790, 25337332, 25337640, 25348956, 25353983, 25357142
25362958, 25382812, 25383204, 25384462, 25386748, 25388896, 25392535
25395696, 25397936, 25405813, 25410017, 25410180, 25410802, 25410877
25411036, 25417050, 25417056, 25417958, 25425451, 25425760, 25427662
25429959, 25430120, 25433696, 25435038, 25437699, 25440818, 25444961
25451531, 25455795, 25457409, 25459958, 25462714, 25463844, 25472112
25476149, 25478885, 25479164, 25489342, 25489367, 25489607, 25492379
25498930, 25498994, 25516250, 25524955, 25528838, 25530080, 25530814
25535668, 25536819, 25537470, 25539063, 25540738, 25546580, 25546608
25547901, 25551676, 25553616, 25554787, 25555252, 25557886, 25558986
25560487, 25561296, 25569149, 25570929, 25575348, 25575628, 25579458
25579761, 25594901, 25597525, 25598473, 25600342, 25600421, 25602488
25603923, 25606091, 25607726, 25612095, 25614866, 25616268, 25616359
25616417, 25616645, 25631933, 25633101, 25634317, 25634348, 25635149
25638456, 25639019, 25643818, 25643931, 25646373, 25647325, 25648731
25653109, 25654459, 25654936, 25655390, 25655966, 25659655, 25660847
25661819, 25662088, 25662101, 25662524, 25669791, 25670786, 25672640
25674386, 25680221, 25685152, 25686739, 25687460, 25691904, 25694206
25695903, 25700654, 25710420, 25715167, 25717371, 25722055, 25722608

25722720, 25728085, 25729507, 25734963, 25736747, 25739065, 25754606
25757748, 25760195, 25762221, 25764020, 25766822, 25768681, 25772669
25774077, 25775213, 25780343, 25784002, 25785331, 25785441, 25788879
25789041, 25789277, 25789579, 25790353, 25797092, 25797124, 25797305
25800464, 25803545, 25807997, 25810704, 25813931, 25818707, 25822410
25823754, 25825910, 25826740, 25830492, 25832935, 25834581, 25838361
25852885, 25856821, 25858672, 25861398, 25865785, 25870579, 25871177
25871639, 25871753, 25872127, 25872389, 25874050, 25874678, 25882264
25885148, 25888073, 25890056, 25890673, 25894239, 25895224, 25897615
25904273, 25904490, 25906117, 25911724, 25914276, 25919622, 25932524
25932728, 25933494, 25941836, 25943271, 25945130, 25947799, 25953857
25954022, 25954054, 25957038, 25963024, 25964954, 25967544, 25967985
25970731, 25973152, 25975723, 25977302, 25980605, 25980770, 25981498
25982666, 25990907, 25995938, 26006257, 26007010, 26019148, 26024732
26025681, 26029780, 26032573, 26036748, 26037215, 26038086, 26039623
26040483, 26045732, 26078437, 26078493, 26080410, 26083298, 26088426
26088836, 26090767, 26091640, 26091786, 26095327, 26095405, 26096382
26108080, 26110632, 26111842, 26121990, 26137367, 26138085, 26149904
26153977, 26169341, 26169345, 26170715, 26176002, 26187943, 26189861
26198757, 26198926, 26201113, 26223039, 26237431, 26237773, 26242031
26243698, 26244115, 26245237, 26249718, 26256131, 26259265, 26261327
26263328, 26263721, 26269790, 26271001, 26277439, 26285933, 26308650
26309047, 26318627, 26323308, 26324769, 26327624, 26330994, 26331743
26333141, 26338953, 26351334, 26353617, 26358670, 26362821, 26366517
26367012, 26374791, 26375250, 26380097, 26385189, 26388538, 26396790
26399626, 26399691, 26406387, 26412540, 26418088, 26420561, 26421667
26422277, 26426526, 26430737, 26434999, 26435073, 26436168, 26438612
26440749, 26442308, 26444601, 26444887, 26446098, 26452606, 26475419
26476244, 26478970, 26479173, 26486365, 26492866, 26493289, 26498354
26513709, 26521043, 26522439, 26523432, 26526726, 26536320, 26537307
26542135, 26544823, 26545688, 26546070, 26546664, 26546754, 26548363
26556014, 26569225, 26575788, 26582460, 26584641, 26597140, 26599395
26608137, 26609942, 26615291, 26615690, 26623652, 26626879, 26629381
26633355, 26633558, 26635897, 26637273, 26637824, 26639167, 26641610
26650226, 26658759, 26659182, 26680105, 26712331, 26714910, 26717528
26727397, 26729494, 26729611, 26740700, 26744595, 26751106, 26751171
26758193, 26764561, 26765212, 26775602, 26784509, 26794786, 26797591
26802503, 26820076, 26822620, 26828994, 26840654, 26844870, 26849779
26875822, 26883456, 26896659, 26898563, 26907327, 26908788, 26909100
26909504, 26911000, 26939314, 26944190, 26963310, 26966916, 26967713
26969321, 26970717, 26981902, 26983259, 26986173, 26992964, 27006664
27009164, 27013146, 27028251, 27034890, 27038986, 27039712, 27044297
27052607, 27060167, 27060859, 27073314, 27079140, 27087426, 27090765
27093423, 27110878, 27117822, 27119621, 27124624, 27125872, 27133662

27135647, 27135993, 27138325, 27142373, 27153641, 27161071, 27162405
27163928, 27165231, 27169796, 27170305, 27181537, 27199245, 27207110
27213224, 27229389, 27244337, 27248917, 27250547, 27251690, 27255377
27256000, 27259307, 27262945, 27274536, 27276231, 27285244, 27292213
27293599, 27302711, 27302730, 27304410, 27305039, 27314206, 27314390
27321179, 27329612, 27333106, 27334316, 27338912, 27338946, 27339115
27345231, 27346709, 27348081, 27349393, 27351628, 27359178, 27367194
27370965, 27375542, 27394703, 27395416, 27396624, 27396813, 27400598
27405645, 27416997, 27433870, 27434193, 27439835, 27441326, 27442041
27466597, 27493674, 27501373, 27501413, 27502420, 27504770, 27505229
27508985, 27510959, 27534509, 27544973, 27548131, 27555481, 27558861
27560602, 27567477, 27595973, 27607563, 27611612, 27613080, 27620808
27687880, 27688036, 27688692, 27691920, 27691939, 27698953, 27700466
27709046, 27726780, 27740424, 27748954, 27757888, 27799032, 27835925
27847259, 27882176, 27898015, 27940876, 27945870, 27951817, 27959048
27994325, 27997875, 27998003, 28000269, 28033429, 28040776, 28074713
28090453, 28099662, 28140658, 28171079, 28174827, 28184554, 28188330
28218832, 28226179, 28290434, 28305001, 28320399, 28354603, 28437315
28454242, 28508557, 28522441

Amazon RDS for Oracle Database 12c Release 1 (12.1.0.2)

For Amazon RDS for Oracle Database 12c Release 1 (12.1.0.2), Amazon RDS incorporates bug fixes from Oracle by using their quarterly Database Patch Set Updates (PSUs). If you apply updates, you can be confident that your DB instance is running a version of the database software that has been tested by both Oracle and Amazon. We don't support applying one-off patches to individual DB instances.

Note

RDS for Oracle Database 12c is no longer supported. This information is only useful if you want to upgrade an Oracle Database 12c snapshot.

To find what Oracle Patch Set Updates (PSUs) are applied to Amazon RDS for Oracle Database 12c Release 1 (12.1.0.2), see the following table.

Date	PSU
2022 July	12.1.0.2.v29
2022 April	12.1.0.2.v28
2022 January	12.1.0.2.v27
2021 October	12.1.0.2.v26
2021 July	12.1.0.2.v25
2021 April	12.1.0.2.v24
2021 January	12.1.0.2.v23
2020 October	12.1.0.2.v22
2020 July	12.1.0.2.v21
2020 April	12.1.0.2.v20

Date	PSU
2020 January	12.1.0.2.v19
2019 October	12.1.0.2.v18
2019 July	12.1.0.2.v17
2019 April	12.1.0.2.v16
2019 January	12.1.0.2.v15
2018 October	12.1.0.2.v14
2018 July	12.1.0.2.v13
2018 April	12.1.0.2.v12
2018 January	12.1.0.2.v11
2017 October	12.1.0.2.v10
2017 July	12.1.0.2.v9
2017 April	12.1.0.2.v8
2017 January	12.1.0.2.v7
2016 October	12.1.0.2.v6
2016 July	12.1.0.2.v5
2016 April	12.1.0.2.v4
2016 January	12.1.0.2.v3
2015 October	12.1.0.2.v2
2015 April	12.1.0.2.v1

Version 12.1.0.2.v29

Version 12.1.0.2.v29 includes the following:

- Patch [34057742](#): DATABASE PATCH SET UPDATE 12.1.0.2.220719
- Patch [34086863](#): OJVM PATCH SET UPDATE 12.1.0.2.220719
- Patch [34006614](#): RDBMS - DSTV38 UPDATE - TZDATA2022A
- Patch [34006650](#): DSTV38 UPDATE - TZDATA2022A - NEED OJVM FIX
- Patch [17969866](#): Oracle GoldenGate - 46719 ENH REPLICATION SUPPORT FOR INSERTS / FULL UPDATES WITH LARGE VALUES
- Patch [20394750](#): Oracle GoldenGate - APPLY CDR RESOLUTION FAILING FOR LOBS, XML, LONG, AND OBJECTS
- Patch [24835919](#): Oracle GoldenGate - IR EXECUTING DEPENDENT TRANSACTIONS OUT OF ORDER WITH PARALLELISM GREATER THAN
- Patch [23262847](#): Oracle GoldenGate - MALFORMED REDO CAUSED OGG REPLICATION ABEND
- Patch [21171382](#): ADD CONTROL FOR AUTOMATIC CREATION OF STATS EXTENSIONS
- Patch [21091901](#): ONLINE MOVE OF HASH OR REF PARTITION CAN LEAVE LOCAL INDEXES INCONSISTENT
- Patch [25031502](#): MV: QUERY REWRITE WORKLOAD HIT ORA 600 [KGL-HEAP-SIZE-EXCEEDED]
- Patch [23711335](#): CDB_UPG:PDCDB:CDB UPGRADE AS WHOLE TAKES 1 MORE HOUR THAN PREVIOUS LABELS IN MAY
- Patch [34339921](#): MERGE REQUEST ON TOP OF DATABASE PSU 12.1.0.2.220719 FOR BUGS 33788341
- Patch [19504946](#): FLASH CACHE DOESN'T WORK IN OEL7
- Patch [34459167](#): 12.1.0.2 DB INSTANCE STARTUP FAILING WITH ORA-7445 EXCEPTION
- PreUpgrade Jar: preupgrade_12.1.0.2.0_18_crlf.zip

Combined patches for version 12.1.0.2.v29, released October 05, 2022

Bugs fixed:

6194865, 6418158, 6599380, 8975044, 13542050, 13787015, 13854364
14283239, 14643995, 14705949, 15996848, 16090440, 16354467, 16359751
16439813, 16619249, 16756406, 16777441, 16799735, 16863642, 16870214

16875041, 16887946, 16923858, 16938780, 16941434, 17008068, 17210525
17258582, 17274537, 17319928, 17365043, 17409174, 17414008, 17428816
17432124, 17495022, 17532729, 17532734, 17533661, 17551063, 17655240
17722075, 17760068, 17777718, 17835294, 17867700, 17890099, 17969866
18007682, 18043064, 18051556, 18090142, 18110491, 18111216, 18122373
18191823, 18197127, 18202441, 18250893, 18254023, 18272672, 18288842
18306996, 18307021, 18308268, 18324100, 18354830, 18371441, 18373438
18382302, 18411216, 18417036, 18419520, 18427406, 18436647, 18440095
18456643, 18459080, 18475439, 18492302, 18498878, 18499088, 18510194
18542562, 18548246, 18548433, 18549238, 18604493, 18604692, 18607546
18610915, 18618122, 18628388, 18648816, 18662619, 18673090, 18674024
18674047, 18681056, 18693124, 18700762, 18705806, 18727933, 18733351
18740837, 18742258, 18743542, 18758877, 18759211, 18774543, 18775971
18778801, 18791688, 18797519, 18798250, 18799063, 18799993, 18801391
18803726, 18810904, 18818069, 18819908, 18840932, 18841764, 18845653
18849537, 18849970, 18851894, 18856106, 18856999, 18866977, 18868646
18885870, 18886413, 18890385, 18893947, 18895170, 18899974, 18900107
18904062, 18909599, 18913440, 18914624, 18921743, 18940497, 18948177
18952766, 18952989, 18964939, 18964978, 18966843, 18967382, 18973548
18974476, 18988834, 18990023, 18990693, 18999568, 19001359, 19001390
19012119, 19013183, 19016730, 19017309, 19018206, 19018447, 19022470
19023822, 19024808, 19028800, 19032777, 19035573, 19044962, 19048007
19050649, 19051460, 19052488, 19054077, 19058490, 19060015, 19065556
19065677, 19067244, 19068380, 19068610, 19068970, 19074147, 19075256
19076343, 19077215, 19079752, 19081128, 19124336, 19124589, 19130152
19130616, 19131386, 19131607, 19134173, 19141838, 19143550, 19146474
19149990, 19153980, 19154375, 19155797, 19157754, 19165673, 19168167
19171086, 19174430, 19174521, 19174942, 19176223, 19176326, 19176885
19178851, 19180394, 19180770, 19183343, 19184226, 19185876, 19188385
19188927, 19189317, 19189525, 19195895, 19197175, 19201867, 19207117
19209117, 19211433, 19213447, 19223010, 19231857, 19238590, 19243521
19245191, 19248279, 19248799, 19258504, 19269405, 19272708, 19279273
19280225, 19284031, 19285025, 19289642, 19291380, 19297917, 19303936
19304354, 19306797, 19307662, 19308965, 19309466, 19313563, 19315668
19315691, 19317646, 19326908, 19327391, 19329654, 19330795, 19332396
19333670, 19335438, 19339555, 19347458, 19354335, 19354794, 19358317
19363645, 19364502, 19366375, 19370504, 19371175, 19373893, 19375649
19382851, 19383839, 19385656, 19390567, 19390620, 19393542, 19396455
19399918, 19402853, 19404068, 19409212, 19430401, 19433930, 19434529
19439759, 19440386, 19440520, 19440586, 19445860, 19448499, 19450116
19450314, 19452434, 19461270, 19461428, 19468347, 19468612, 19468991
19469538, 19475971, 19487147, 19490948, 19501299, 19503821, 19504946
19512341, 19516448, 19518079, 19520602, 19523462, 19524158, 19524384
19527222, 19529868, 19532017, 19534363, 19536415, 19543384, 19547370

19547774, 19548064, 19550902, 19561643, 19562381, 19566592, 19571055
19571082, 19571367, 19577410, 19578247, 19578350, 19583624, 19587324
19590877, 19591608, 19593445, 19597439, 19597583, 19601762, 19604659
19606174, 19617921, 19619732, 19621704, 19623450, 19627012, 19632912
19637186, 19639483, 19644859, 19647503, 19649152, 19658708, 19662635
19663176, 19670108, 19676012, 19676905, 19680796, 19684504, 19687159
19689979, 19693090, 19699191, 19699946, 19701015, 19703301, 19705781
19706965, 19708342, 19708632, 19718981, 19721304, 19723336, 19730508
19769480, 19769625, 19777862, 19781326, 19784751, 19790243, 19791273
19791377, 19799847, 19800418, 19805359, 19809171, 19811709, 19817386
19818513, 19824871, 19831647, 19835133, 19841800, 19855285, 19859472
19865345, 19869255, 19871910, 19873610, 19877336, 19879746, 19880190
19883092, 19886165, 19888853, 19889230, 19891090, 19895326, 19895362
19896336, 19902195, 19908836, 19909862, 19915271, 19928926, 19930276
19931367, 19931709, 19932634, 19933147, 19941352, 19943771, 19945814
19952975, 19957298, 19972766, 19978542, 19982584, 19988852, 19989009
19990037, 19995869, 20001168, 20001466, 20009569, 20009833, 20011515
20011646, 20011897, 20017509, 20023340, 20031873, 20043616, 20048359
20052269, 20061399, 20074391, 20076781, 20078186, 20087383, 20088237
20093776, 20101006, 20117253, 20118035, 20122715, 20124446, 20130575
20134113, 20134339, 20139391, 20144019, 20144308, 20165574, 20169408
20171986, 20172151, 20173897, 20175161, 20181030, 20212067, 20217801
20228093, 20229001, 20233181, 20235511, 20245930, 20250147, 20267166
20273319, 20281121, 20284155, 20294666, 20296619, 20298413, 20302006
20308238, 20308798, 20315311, 20318889, 20322560, 20324049, 20328248
20331945, 20347562, 20348653, 20354900, 20356733, 20361671, 20368850
20373598, 20374572, 20378086, 20382309, 20387265, 20394750, 20397490
20401975, 20402832, 20408829, 20408866, 20413820, 20415564, 20424183
20424899, 20425790, 20428621, 20432873, 20437153, 20440930, 20441797
20446883, 20447445, 20459944, 20464614, 20466322, 20466628, 20468401
20468490, 20470877, 20471920, 20474192, 20475845, 20476175, 20480209
20493163, 20505778, 20509482, 20513399, 20524085, 20528052, 20539050
20543011, 20544065, 20554364, 20557786, 20558005, 20560611, 20562898
20564072, 20565112, 20565133, 20569094, 20577490, 20581111, 20582405
20588486, 20588502, 20591183, 20596234, 20598042, 20603378, 20603431
20613079, 20618595, 20627866, 20635353, 20641666, 20657411, 20657441
20669434, 20671094, 20673810, 20677396, 20677974, 20684983, 20686773
20688221, 20703000, 20703629, 20704450, 20705577, 20707932, 20708701
20711718, 20717081, 20717091, 20717359, 20725343, 20734332, 20736227
20746251, 20753555, 20757079, 20764012, 20766180, 20768076, 20778986
20782911, 20794034, 20798891, 20800890, 20801783, 20803014, 20825533
20828947, 20830459, 20831538, 20832516, 20835241, 20838453, 20839705
20842388, 20844426, 20848335, 20853821, 20856766, 20859910, 20860659
20862087, 20868862, 20869721, 20875898, 20877664, 20878790, 20879709

20879889, 20880215, 20882568, 20890311, 20897759, 20898391, 20898997
20899461, 20904530, 20907061, 20914870, 20919320, 20920911, 20922010
20925795, 20926021, 20929771, 20936731, 20936905, 20938170, 20951038
20952966, 20958816, 20977794, 20978259, 21037905, 21037923, 21047218
21047766, 21047803, 21049500, 21052842, 21059919, 21060755, 21061354
21063322, 21068507, 21072646, 21080143, 21091431, 21091901, 21095391
21097043, 21099555, 21101873, 21106027, 21132297, 21133343, 21142837
21147908, 21153266, 21157342, 21157728, 21159665, 21164318, 21171382
21172913, 21174504, 21184223, 21186167, 21188532, 21188537, 21188584
21196809, 21197626, 21220620, 21225209, 21239530, 21241052, 21241829
21246723, 21260397, 21260431, 21263635, 21266085, 21270823, 21273804
21275255, 21281532, 21281607, 21285458, 21291274, 21293600, 21294938
21296029, 21297872, 21299490, 21300341, 21308727, 21315084, 21322887
21329301, 21354456, 21373076, 21373473, 21380789, 21383171, 21385422
21387128, 21387964, 21418655, 21419850, 21421886, 21422580, 21424824
21425496, 21429602, 21442094, 21450666, 21475738, 21476308, 21479753
21492036, 21502702, 21514877, 21515534, 21516611, 21517440, 21522582
21526048, 21532755, 21534893, 21542577, 21555660, 21560152, 21566639
21566944, 21566993, 21575362, 21612959, 21620471, 21623164, 21625179
21626377, 21629064, 21632821, 21641414, 21641760, 21644640, 21649497
21656630, 21659726, 21665897, 21668627, 21675340, 21695575, 21698350
21744290, 21756661, 21756677, 21756699, 21764119, 21773465, 21779541
21780146, 21785691, 21787056, 21794615, 21795111, 21797203, 21811517
21813400, 21820934, 21821302, 21828126, 21834568, 21837606, 21842017
21842740, 21847223, 21856522, 21863727, 21868720, 21875360, 21889720
21893235, 21894802, 21896069, 21897746, 21899588, 21911701, 21913183
21915719, 21917884, 21924131, 21960504, 21967197, 21969671, 21977186
21977392, 21978888, 22007324, 22018363, 22022760, 22024071, 22037014
22046677, 22062026, 22062517, 22068305, 22070866, 22072818, 22075064
22077517, 22083366, 22087683, 22092979, 22118835, 22118851, 22139226
22146062, 22148226, 22153958, 22157363, 22160989, 22165897, 22168163
22173980, 22175564, 22176950, 22178855, 22179537, 22185234, 22205263
22214989, 22223463, 22228324, 22232606, 22233505, 22236041, 22238921
22243719, 22243983, 22250006, 22256431, 22256560, 22258530, 22261050
22264489, 22268833, 22282748, 22294260, 22296366, 22301880, 22305887
22310426, 22331786, 22346829, 22347493, 22351572, 22353199, 22353346
22359063, 22364044, 22365117, 22366322, 22366558, 22374754, 22379445
22380919, 22454326, 22454940, 22458049, 22465352, 22467685, 22468255
22468781, 22470443, 22475617, 22492533, 22495062, 22495673, 22496904
22499356, 22501616, 22503297, 22507210, 22507234, 22510285, 22515353
22517782, 22518784, 22519146, 22520320, 22528741, 22529728, 22533631
22536802, 22551446, 22568016, 22568177, 22568797, 22606521, 22624709
22645009, 22654475, 22657942, 22662332, 22666802, 22670385, 22670413
22674709, 22675136, 22686674, 22690648, 22695831, 22707244, 22707866

22721409, 22727335, 22729345, 22730454, 22733141, 22734547, 22750215
22757364, 22760595, 22760679, 22761995, 22762046, 22782647, 22806698
22808310, 22809871, 22815955, 22816287, 22820579, 22820798, 22826067
22826718, 22836801, 22842151, 22855193, 22860641, 22862134, 22865673
22873635, 22894101, 22894949, 22897344, 22901797, 22905130, 22916353
22922076, 22923409, 22950945, 22961508, 22972770, 22977256, 23002524
23003979, 23007241, 23008056, 23019710, 23020270, 23025340, 23026585
23028781, 23029562, 23035249, 23053606, 23054054, 23061453, 23061702
23065323, 23066146, 23068169, 23080557, 23082876, 23084507, 23088803
23089357, 23096938, 23101501, 23104033, 23105538, 23108128, 23115139
23124895, 23125587, 23125826, 23126410, 23140259, 23148260, 23149541
23151677, 23168363, 23170620, 23172924, 23177536, 23177923, 23184013
23184263, 23195445, 23197103, 23209741, 23220453, 23229229, 23230647
23237313, 23240358, 23260854, 23262847, 23263264, 23265456, 23265914
23265965, 23266217, 23272045, 23294548, 23302839, 23314180, 23315153
23315889, 23324000, 23326313, 23328639, 23338911, 23342170, 23492665
23501901, 23514710, 23514911, 23521523, 23528412, 23533524, 23533807
23543183, 23548817, 23555824, 23567857, 23571055, 23572982, 23584909
23591576, 23602213, 23614158, 23627427, 23628685, 23632545, 23642282
23645516, 23702338, 23709062, 23711335, 23713236, 23717151, 23725036
23727148, 23731896, 23746128, 23854396, 24285405, 24300640, 24303148
24307571, 24308635, 24315824, 24316947, 24318855, 24321547, 24326444
24341675, 24350620, 24350831, 24357500, 24365589, 24385625, 24385983
24386767, 24393981, 24397438, 24401351, 24411921, 24413809, 24415926
24416451, 24421668, 24423416, 24425998, 24437510, 24448240, 24448282
24457597, 24461826, 24470606, 24480567, 24509056, 24523374, 24525353
24530364, 24534298, 24545494, 24555417, 24560906, 24563422, 24570598
24573817, 24577566, 24589081, 24597536, 24600330, 24609530, 24623975
24624166, 24642295, 24642495, 24652769, 24662775, 24674955, 24683149
24690216, 24693382, 24701840, 24713381, 24717859, 24718260, 24719736
24737064, 24737403, 24737581, 24737954, 24739928, 24752618, 24766121
24784414, 24790914, 24792678, 24796092, 24801152, 24802934, 24808595
24812585, 24817447, 24825843, 24831514, 24835538, 24835919, 24838599
24848928, 24907917, 24908321, 24917972, 24920582, 24929210, 24966594
25029423, 25031502, 25034396, 25042823, 25047724, 25051465, 25056052
25058080, 25060506, 25067795, 25076732, 25076756, 25077278, 25079710
25091141, 25093739, 25093872, 25099339, 25107334, 25110233, 25115178
25123585, 25150925, 25161298, 25165496, 25178179, 25179774, 25192729
25205368, 25210690, 25240188, 25248384, 25264559, 25288078, 25300427
25307368, 25313154, 25328093, 25330273, 25353983, 25357142, 25371030
25377044, 25392535, 25405687, 25415713, 25417056, 25417958, 25423453
25427662, 25429959, 25437695, 25437699, 25459958, 25472885, 25475853
25476125, 25477657, 25482971, 25483815, 25484507, 25486384, 25489342
25489367, 25489607, 25490238, 25492379, 25494379, 25494413, 25495682

25539063, 25546608, 25547060, 25549931, 25551676, 25555252, 25575628
25579761, 25599425, 25600342, 25600421, 25602488, 25606091, 25612095
25616268, 25633101, 25634317, 25635149, 25639019, 25643818, 25643931
25649873, 25653109, 25654936, 25655390, 25669791, 25670786, 25695903
25699321, 25722055, 25733479, 25740844, 25743479, 25760195, 25764020
25766822, 25775213, 25780343, 25789277, 25790353, 25791890, 25809524
25822410, 25823532, 25823754, 25835365, 25856821, 25861398, 25879984
25881255, 25885148, 25890782, 25897615, 25904490, 25906117, 25914276
25919622, 25947799, 25957038, 25971286, 25982666, 25986062, 25997810
26007010, 26023002, 26023025, 26024732, 26027162, 26029780, 26039623
26088426, 26089440, 26110259, 26110632, 26111842, 26121990, 26126424
26145560, 26153977, 26169341, 26187943, 26198757, 26198926, 26203182
26243698, 26245237, 26248143, 26256131, 26262953, 26263721, 26318200
26318627, 26324206, 26325856, 26336977, 26353617, 26366517, 26412540
26430737, 26439748, 26444887, 26446098, 26482376, 26513067, 26513709
26544823, 26546664, 26546754, 26556014, 26569225, 26570171, 26575788
26608137, 26633558, 26635845, 26637592, 26637824, 26654363, 26658759
26714910, 26716835, 26729494, 26758193, 26768025, 26784509, 26798411
26822620, 26828994, 26832296, 26844406, 26844870, 26875822, 26898563
26956036, 26968670, 26999139, 27000663, 27000690, 27001733, 27012701
27015449, 27033652, 27034890, 27052607, 27060167, 27072923, 27080844
27086138, 27092508, 27097854, 27101105, 27122162, 27133662, 27169796
27185188, 27199245, 27207110, 27207634, 27213224, 27217412, 27223075
27229389, 27255377, 27274536, 27276231, 27285244, 27302681, 27303938
27314206, 27314390, 27314697, 27337759, 27348081, 27351628, 27370965
27375542, 27397048, 27400598, 27404573, 27419631, 27424405, 27433385
27434193, 27441326, 27443406, 27445727, 27452046, 27461789, 27461842
27468303, 27475603, 27487919, 27504770, 27516009, 27534509, 27548131
27565906, 27567477, 27611612, 27620950, 27623159, 27629756, 27634991
27642235, 27667128, 27679641, 27710072, 27726780, 27729678, 27745728
27751755, 27829295, 27841399, 27846298, 27847259, 27873364, 27897759
27923320, 27929509, 27938623, 27952577, 27952584, 27986817, 27995248
27997875, 28000269, 28022101, 28023399, 28023482, 28024793, 28025414
28026866, 28043157, 28072383, 28079127, 28098160, 28107123, 28125601
28164480, 28174827, 28199085, 28201045, 28204104, 28215510, 28250929
28281094, 28289945, 28302049, 28305362, 28357401, 28362607, 28369092
28371123, 28384353, 28390273, 28394726, 28420042, 28423598, 28432129
28440711, 28491715, 28492769, 28501075, 28502113, 28502128, 28507324
28534493, 28542455, 28566241, 28578164, 28587723, 28612674, 28636676
28639299, 28644756, 28683167, 28708023, 28714988, 28730253, 28758090
28774416, 28790654, 28797711, 28821847, 28849751, 28852325, 28867992
28889389, 28891741, 28891984, 28915933, 28950969, 28986231, 28993590
29006527, 29009513, 29027694, 29030780, 29061016, 29122367, 29142109
29163567, 29170232, 29189889, 29200700, 29247712, 29250317, 29251241

29254615, 29260956, 29265446, 29342099, 29343156, 29372460, 29378913
29379978, 29388020, 29408136, 29434301, 29437712, 29458132, 29464779
29477015, 29483626, 29483672, 29483723, 29483771, 29500257, 29500963
29511611, 29559723, 29621961, 29625065, 29633753, 29635990, 29637560
29645349, 29655164, 29689697, 29707896, 29719146, 29726695, 29774367
29774383, 29782211, 29791152, 29796916, 29814995, 29817278, 29828111
29869404, 29869906, 29884958, 29893132, 29933718, 29944159, 29944660
29961353, 29962927, 29962939, 29965888, 29997937, 30018017, 30025002
30031027, 30116203, 30117469, 30128197, 30160639, 30164714, 30179644
30186245, 30193165, 30196358, 30200680, 30215130, 30218044, 30225443
30248531, 30252098, 30285540, 30295478, 30305880, 30320029, 30365745
30387666, 30398099, 30421204, 30497057, 30499600, 30502041, 30517516
30522998, 30534664, 30578221, 30624864, 30658421, 30659882, 30660412
30668407, 30698289, 30758943, 30803210, 30805558, 30816938, 30822919
30826474, 30855121, 30860803, 30866988, 30889351, 30939307, 30973003
30987088, 31001455, 31013127, 31022858, 31028986, 31031715, 31046619
31089270, 31106577, 31156383, 31172207, 31194264, 31219939, 31228670
31233170, 31306274, 31335037, 31404014, 31409964, 31421316, 31501139
31510891, 31525783, 31527103, 31600023, 31637680, 31658943, 31667940
31668061, 31668867, 31668915, 31675539, 31696577, 31711889, 31748000
31786838, 31787041, 31799139, 31827339, 31836113, 31848903, 31852482
31862611, 31908345, 31909295, 31927930, 31945038, 31951628, 31987278
31992953, 32065792, 32097882, 32105135, 32117253, 32119339, 32119956
32153619, 32165915, 32166272, 32186646, 32190132, 32190284, 32222473
32252213, 32284608, 32284725, 32287989, 32296941, 32312586, 32327201
32335769, 32355765, 32359044, 32368792, 32386877, 32425124, 32428097
32436757, 32442404, 32473164, 32523233, 32602194, 32628221, 32649749
32675227, 32676350, 32720458, 32747680, 32755493, 32775512, 32776891
32786309, 32803807, 32834168, 32846272, 32851841, 32876425, 32878039
32892894, 32984679, 32988028, 33027553, 33034103, 33040335, 33065437
33090781, 33090848, 33096609, 33106822, 33131742, 33192628, 33223294
33239083, 33247372, 33393503, 33414041, 33417987, 33425127, 33441073
33561268, 33563123, 33613829, 33621092, 33805168, 33808385, 33873839
33916081, 33921275, 33933784, 34006614, 34006650, 34057742, 34086863
34096213, 34100909, 34149259, 34249359, 34459167

Version 12.1.0.2.v28

Version 12.1.0.2.v28 includes the following:

- Patch [33711081](#): DATABASE PATCH SET UPDATE 12.1.0.2.220419
- Patch [33808385](#): OJVM PATCH SET UPDATE 12.1.0.2.220419

- Patch [34006614](#): RDBMS - DSTV38 UPDATE - TZDATA2022A
- Patch [34006650](#): DSTV38 UPDATE - TZDATA2022A - NEED OJVM FIX
- Patch [17969866](#): Oracle GoldenGate - 46719 ENH REPLICATION SUPPORT FOR INSERTS / FULL UPDATES WITH LARGE VALUES
- Patch [20394750](#): Oracle GoldenGate - APPLY CDR RESOLUTION FAILING FOR LOBS, XML, LONG, AND OBJECTS
- Patch [24835919](#): Oracle GoldenGate - IR EXECUTING DEPENDENT TRANSACTIONS OUT OF ORDER WITH PARALLELISM GREATER THAN
- Patch [23262847](#): Oracle GoldenGate - MALFORMED REDO CAUSED OGG REPLICATION ABEND
- Patch [21171382](#): ADD CONTROL FOR AUTOMATIC CREATION OF STATS EXTENSIONS
- Patch [21091901](#): ONLINE MOVE OF HASH OR REF PARTITION CAN LEAVE LOCAL INDEXES INCONSISTENT
- Patch [25031502](#): MV QUERY REWRITE WORKLOAD HIT ORA 600 [KGL-HEAP-SIZE-EXCEEDED]
- Patch [23711335](#): CDB_UPG PDCDB CDB UPGRADE AS WHOLE TAKES 1 MORE HOUR THAN PREVIOUS LABELS IN MAY
- Patch [34040225](#): MERGE REQUEST ON TOP OF DATABASE PSU 12.1.0.2.220419 FOR BUGS 33788341
- Patch [19504946](#): FLASH CACHE DOESN'T WORK IN OEL7
- PreUpgrade Jar: preupgrade_12.1.0.2.0_18_crlf.zip

Combined patches for version 12.1.0.2.v28, released July 28, 2022

Bugs fixed:

```
6194865, 6418158, 6599380, 8975044, 13542050, 13787015, 13854364
14283239, 14643995, 14705949, 15996848, 16090440, 16354467, 16359751
16439813, 16619249, 16756406, 16777441, 16799735, 16863642, 16870214
16875041, 16887946, 16923858, 16938780, 16941434, 17008068, 17210525
17258582, 17274537, 17319928, 17365043, 17409174, 17414008, 17428816
17432124, 17495022, 17532729, 17532734, 17533661, 17551063, 17655240
17722075, 17760068, 17777718, 17835294, 17867700, 17890099, 17969866
18007682, 18043064, 18051556, 18090142, 18110491, 18122373, 18191823
18197127, 18202441, 18250893, 18254023, 18272672, 18288842, 18306996
18307021, 18308268, 18324100, 18354830, 18371441, 18373438, 18382302
18411216, 18417036, 18419520, 18427406, 18436647, 18440095, 18456643
18475439, 18492302, 18499088, 18510194, 18542562, 18548246, 18548433
```

18549238, 18604493, 18604692, 18607546, 18610915, 18618122, 18628388
18648816, 18662619, 18673090, 18674024, 18674047, 18681056, 18693124
18700762, 18705806, 18727933, 18733351, 18740837, 18742258, 18743542
18758877, 18759211, 18774543, 18775971, 18778801, 18791688, 18797519
18798250, 18799063, 18799993, 18801391, 18803726, 18810904, 18818069
18819908, 18840932, 18841764, 18845653, 18849537, 18849970, 18851894
18856106, 18856999, 18866977, 18868646, 18885870, 18886413, 18890385
18893947, 18895170, 18899974, 18900107, 18904062, 18909599, 18913440
18914624, 18921743, 18940497, 18948177, 18952766, 18952989, 18964939
18964978, 18966843, 18967382, 18973548, 18974476, 18988834, 18990023
18990693, 18999568, 19001359, 19001390, 19012119, 19013183, 19016730
19017309, 19018206, 19018447, 19022470, 19023822, 19024808, 19028800
19032777, 19035573, 19044962, 19048007, 19050649, 19051460, 19052488
19054077, 19058490, 19060015, 19065556, 19065677, 19067244, 19068380
19068610, 19068970, 19074147, 19075256, 19076343, 19077215, 19079752
19081128, 19124336, 19124589, 19130152, 19130616, 19131386, 19131607
19134173, 19141838, 19143550, 19146474, 19149990, 19153980, 19154375
19155797, 19157754, 19165673, 19168167, 19171086, 19174430, 19174521
19174942, 19176223, 19176326, 19176885, 19178851, 19180394, 19180770
19183343, 19185876, 19188385, 19188927, 19189317, 19189525, 19195895
19197175, 19201867, 19207117, 19211433, 19213447, 19223010, 19231857
19238590, 19243521, 19245191, 19248279, 19248799, 19258504, 19269405
19272708, 19279273, 19280225, 19284031, 19285025, 19289642, 19291380
19297917, 19303936, 19304354, 19306797, 19307662, 19308965, 19309466
19313563, 19315668, 19315691, 19317646, 19326908, 19327391, 19329654
19330795, 19332396, 19333670, 19335438, 19339555, 19347458, 19354335
19354794, 19358317, 19363645, 19364502, 19366375, 19370504, 19371175
19373893, 19375649, 19382851, 19383839, 19385656, 19390567, 19390620
19393542, 19396455, 19399918, 19402853, 19404068, 19409212, 19430401
19433930, 19434529, 19439759, 19440520, 19440586, 19445860, 19448499
19450116, 19450314, 19452434, 19461270, 19461428, 19468347, 19468612
19468991, 19469538, 19475971, 19487147, 19490948, 19501299, 19503821
19504946, 19512341, 19516448, 19518079, 19520602, 19523462, 19524158
19524384, 19527222, 19529868, 19532017, 19534363, 19536415, 19543384
19547370, 19547774, 19548064, 19550902, 19561643, 19562381, 19566592
19571055, 19571082, 19571367, 19577410, 19578247, 19578350, 19583624
19587324, 19590877, 19591608, 19593445, 19597439, 19597583, 19601762
19604659, 19606174, 19617921, 19619732, 19621704, 19623450, 19627012
19632912, 19637186, 19639483, 19644859, 19647503, 19649152, 19658708
19662635, 19663176, 19670108, 19676012, 19676905, 19680796, 19684504
19687159, 19689979, 19693090, 19699191, 19699946, 19701015, 19703301
19705781, 19706965, 19708342, 19708632, 19718981, 19721304, 19723336
19730508, 19769480, 19769625, 19777862, 19781326, 19784751, 19790243
19791273, 19791377, 19799847, 19805359, 19809171, 19811709, 19817386

19818513, 19824871, 19831647, 19835133, 19841800, 19855285, 19859472
19865345, 19869255, 19871910, 19873610, 19877336, 19879746, 19880190
19883092, 19886165, 19888853, 19889230, 19891090, 19895326, 19895362
19896336, 19902195, 19908836, 19909862, 19915271, 19928926, 19930276
19931367, 19931709, 19932634, 19933147, 19941352, 19943771, 19945814
19952975, 19957298, 19978542, 19982584, 19988852, 19989009, 19990037
19995869, 20001168, 20001466, 20009569, 20009833, 20011515, 20011646
20011897, 20017509, 20023340, 20031873, 20043616, 20048359, 20052269
20061399, 20074391, 20076781, 20078186, 20087383, 20088237, 20093776
20101006, 20117253, 20118035, 20122715, 20124446, 20130575, 20134113
20134339, 20139391, 20144019, 20144308, 20165574, 20169408, 20171986
20172151, 20173897, 20175161, 20181030, 20212067, 20217801, 20228093
20229001, 20233181, 20235511, 20245930, 20250147, 20267166, 20273319
20281121, 20284155, 20294666, 20296619, 20298413, 20302006, 20308238
20308798, 20315311, 20318889, 20322560, 20324049, 20328248, 20331945
20347562, 20348653, 20354900, 20356733, 20361671, 20368850, 20373598
20374572, 20378086, 20382309, 20387265, 20394750, 20397490, 20401975
20402832, 20408829, 20408866, 20413820, 20415564, 20424183, 20424899
20425790, 20428621, 20432873, 20437153, 20440930, 20441797, 20446883
20447445, 20459944, 20464614, 20466322, 20466628, 20468401, 20468490
20470877, 20471920, 20474192, 20475845, 20476175, 20480209, 20493163
20505778, 20509482, 20513399, 20524085, 20528052, 20539050, 20543011
20544065, 20554364, 20557786, 20558005, 20560611, 20562898, 20564072
20565112, 20565133, 20569094, 20577490, 20581111, 20582405, 20588486
20588502, 20591183, 20596234, 20598042, 20603378, 20603431, 20613079
20618595, 20627866, 20635353, 20641666, 20657411, 20657441, 20669434
20671094, 20673810, 20677396, 20677974, 20684983, 20686773, 20688221
20703000, 20703629, 20704450, 20705577, 20707932, 20708701, 20711718
20717081, 20717091, 20717359, 20725343, 20734332, 20736227, 20746251
20753555, 20757079, 20764012, 20766180, 20768076, 20778986, 20794034
20798891, 20800890, 20801783, 20803014, 20825533, 20828947, 20830459
20831538, 20832516, 20835241, 20838453, 20839705, 20842388, 20844426
20848335, 20856766, 20859910, 20860659, 20862087, 20868862, 20869721
20875898, 20877664, 20878790, 20879709, 20879889, 20880215, 20882568
20890311, 20897759, 20898391, 20898997, 20899461, 20904530, 20907061
20914870, 20919320, 20920911, 20922010, 20925795, 20926021, 20929771
20936731, 20936905, 20938170, 20951038, 20952966, 20958816, 20977794
20978259, 21037905, 21037923, 21047218, 21047766, 21047803, 21052842
21059919, 21060755, 21061354, 21063322, 21068507, 21072646, 21080143
21091431, 21091901, 21095391, 21097043, 21099555, 21101873, 21106027
21132297, 21133343, 21142837, 21147908, 21153266, 21157728, 21159665
21164318, 21171382, 21172913, 21174504, 21184223, 21186167, 21188532
21188537, 21188584, 21196809, 21197626, 21220620, 21225209, 21239530
21241052, 21241829, 21246723, 21260397, 21260431, 21263635, 21266085

21270823, 21273804, 21275255, 21281532, 21281607, 21285458, 21291274
21293600, 21294938, 21296029, 21297872, 21299490, 21300341, 21308727
21315084, 21322887, 21329301, 21354456, 21373076, 21373473, 21380789
21383171, 21385422, 21387128, 21387964, 21418655, 21419850, 21421886
21422580, 21424824, 21425496, 21429602, 21442094, 21450666, 21475738
21476308, 21479753, 21492036, 21502702, 21514877, 21516611, 21517440
21522582, 21526048, 21532755, 21534893, 21542577, 21555660, 21560152
21566639, 21566944, 21566993, 21575362, 21612959, 21620471, 21623164
21625179, 21626377, 21629064, 21632821, 21641414, 21641760, 21644640
21649497, 21656630, 21659726, 21665897, 21668627, 21675340, 21695575
21698350, 21744290, 21756661, 21756677, 21756699, 21764119, 21773465
21779541, 21780146, 21785691, 21787056, 21794615, 21795111, 21797203
21811517, 21813400, 21820934, 21821302, 21828126, 21834568, 21837606
21842017, 21842740, 21847223, 21856522, 21863727, 21868720, 21875360
21889720, 21893235, 21896069, 21899588, 21911701, 21913183, 21915719
21917884, 21924131, 21960504, 21967197, 21969671, 21977186, 21977392
21978888, 22007324, 22018363, 22022760, 22024071, 22037014, 22046677
22062026, 22062517, 22068305, 22070866, 22072818, 22075064, 22077517
22083366, 22087683, 22092979, 22118835, 22118851, 22139226, 22146062
22148226, 22157363, 22160989, 22165897, 22168163, 22173980, 22175564
22176950, 22178855, 22179537, 22185234, 22205263, 22214989, 22223463
22228324, 22232606, 22233505, 22238921, 22243719, 22243983, 22250006
22256431, 22256560, 22258530, 22261050, 22264489, 22268833, 22282748
22294260, 22296366, 22301880, 22305887, 22331786, 22346829, 22347493
22351572, 22353199, 22353346, 22359063, 22364044, 22365117, 22366322
22366558, 22374754, 22379445, 22380919, 22454326, 22454940, 22458049
22465352, 22467685, 22468255, 22468781, 22470443, 22475617, 22492533
22495062, 22495673, 22496904, 22499356, 22501616, 22503297, 22507210
22507234, 22510285, 22515353, 22517782, 22518784, 22519146, 22520320
22528741, 22529728, 22533631, 22536802, 22551446, 22568016, 22568177
22568797, 22606521, 22624709, 22645009, 22654475, 22657942, 22662332
22666802, 22670385, 22670413, 22674709, 22675136, 22686674, 22690648
22695831, 22707244, 22707866, 22721409, 22729345, 22730454, 22733141
22734547, 22750215, 22757364, 22760595, 22760679, 22761995, 22762046
22782647, 22806698, 22808310, 22809871, 22815955, 22816287, 22820579
22820798, 22826718, 22836801, 22842151, 22855193, 22860641, 22862134
22865673, 22873635, 22894101, 22894949, 22897344, 22901797, 22905130
22916353, 22922076, 22923409, 22950945, 22961508, 22972770, 22977256
23002524, 23003979, 23007241, 23008056, 23019710, 23020270, 23025340
23026585, 23028781, 23029562, 23035249, 23053606, 23061453, 23061702
23065323, 23066146, 23068169, 23080557, 23082876, 23084507, 23088803
23089357, 23096938, 23101501, 23104033, 23105538, 23108128, 23115139
23124895, 23125587, 23125826, 23126410, 23140259, 23148260, 23149541
23151677, 23168363, 23170620, 23172924, 23177536, 23177923, 23184013

23184263, 23195445, 23197103, 23209741, 23220453, 23229229, 23230647
23237313, 23240358, 23260854, 23262847, 23263264, 23265456, 23265914
23265965, 23266217, 23272045, 23294548, 23302839, 23314180, 23315153
23315889, 23324000, 23326313, 23328639, 23338911, 23342170, 23492665
23501901, 23514710, 23514911, 23521523, 23528412, 23533524, 23533807
23543183, 23548817, 23555824, 23567857, 23571055, 23572982, 23584909
23591576, 23602213, 23614158, 23627427, 23628685, 23632545, 23642282
23645516, 23709062, 23711335, 23713236, 23717151, 23725036, 23727148
23731896, 23746128, 23854396, 24285405, 24300640, 24303148, 24307571
24308635, 24315824, 24316947, 24318855, 24321547, 24326444, 24341675
24350620, 24350831, 24357500, 24365589, 24385625, 24385983, 24386767
24393981, 24397438, 24401351, 24411921, 24413809, 24415926, 24416451
24421668, 24423416, 24425998, 24437510, 24448240, 24448282, 24457597
24461826, 24480567, 24509056, 24523374, 24530364, 24534298, 24545494
24555417, 24560906, 24563422, 24570598, 24573817, 24577566, 24589081
24597536, 24600330, 24623975, 24624166, 24642295, 24642495, 24652769
24662775, 24674955, 24683149, 24690216, 24693382, 24701840, 24713381
24717859, 24718260, 24719736, 24737064, 24737403, 24737581, 24737954
24739928, 24752618, 24766121, 24784414, 24790914, 24792678, 24796092
24801152, 24802934, 24808595, 24812585, 24817447, 24825843, 24831514
24835538, 24835919, 24838599, 24848928, 24907917, 24908321, 24917972
24920582, 24929210, 24966594, 25029423, 25031502, 25034396, 25042823
25047724, 25051465, 25056052, 25058080, 25060506, 25067795, 25076732
25076756, 25077278, 25079710, 25091141, 25093739, 25093872, 25099339
25107334, 25110233, 25115178, 25123585, 25150925, 25161298, 25165496
25178179, 25179774, 25192729, 25205368, 25210690, 25240188, 25248384
25264559, 25288078, 25300427, 25307368, 25313154, 25328093, 25330273
25353983, 25357142, 25371030, 25377044, 25392535, 25405687, 25415713
25417056, 25417958, 25423453, 25427662, 25429959, 25437695, 25437699
25459958, 25472885, 25475853, 25476125, 25477657, 25482971, 25483815
25484507, 25486384, 25489342, 25489367, 25489607, 25490238, 25492379
25494379, 25494413, 25495682, 25539063, 25546608, 25547060, 25549931
25551676, 25555252, 25575628, 25579761, 25599425, 25600342, 25600421
25602488, 25606091, 25612095, 25616268, 25633101, 25634317, 25635149
25639019, 25643818, 25643931, 25649873, 25653109, 25654936, 25655390
25669791, 25670786, 25695903, 25699321, 25722055, 25733479, 25740844
25743479, 25760195, 25764020, 25766822, 25775213, 25780343, 25789277
25790353, 25791890, 25809524, 25822410, 25823532, 25823754, 25835365
25856821, 25861398, 25879984, 25881255, 25885148, 25890782, 25897615
25904490, 25906117, 25914276, 25919622, 25947799, 25957038, 25971286
25982666, 25986062, 25997810, 26007010, 26023002, 26023025, 26024732
26027162, 26029780, 26039623, 26088426, 26089440, 26110259, 26110632
26111842, 26121990, 26126424, 26145560, 26153977, 26169341, 26187943
26198757, 26198926, 26203182, 26243698, 26245237, 26248143, 26256131

26262953, 26263721, 26318200, 26318627, 26324206, 26325856, 26336977
26353617, 26366517, 26412540, 26430737, 26439748, 26444887, 26446098
26482376, 26513067, 26513709, 26544823, 26546664, 26546754, 26556014
26569225, 26570171, 26575788, 26608137, 26633558, 26635845, 26637592
26637824, 26654363, 26658759, 26714910, 26716835, 26729494, 26758193
26768025, 26784509, 26798411, 26822620, 26828994, 26832296, 26844406
26844870, 26875822, 26898563, 26956036, 26968670, 26999139, 27000663
27000690, 27001733, 27012701, 27015449, 27033652, 27034890, 27052607
27060167, 27072923, 27080844, 27086138, 27092508, 27097854, 27101105
27122162, 27133662, 27169796, 27185188, 27199245, 27207110, 27207634
27213224, 27217412, 27223075, 27229389, 27255377, 27274536, 27276231
27285244, 27303938, 27314206, 27314390, 27314697, 27337759, 27348081
27351628, 27370965, 27375542, 27397048, 27400598, 27404573, 27419631
27424405, 27433385, 27434193, 27441326, 27443406, 27445727, 27452046
27461789, 27461842, 27468303, 27475603, 27487919, 27504770, 27516009
27534509, 27548131, 27565906, 27567477, 27611612, 27620950, 27623159
27629756, 27634991, 27642235, 27667128, 27679641, 27710072, 27726780
27729678, 27745728, 27751755, 27829295, 27841399, 27846298, 27847259
27873364, 27897759, 27923320, 27929509, 27938623, 27952577, 27952584
27986817, 27995248, 27997875, 28000269, 28022101, 28023399, 28023482
28024793, 28025414, 28026866, 28043157, 28072383, 28079127, 28098160
28107123, 28125601, 28164480, 28174827, 28199085, 28201045, 28204104
28215510, 28250929, 28281094, 28302049, 28305362, 28357401, 28369092
28371123, 28384353, 28390273, 28394726, 28420042, 28423598, 28432129
28440711, 28491715, 28501075, 28502113, 28502128, 28507324, 28534493
28542455, 28566241, 28578164, 28587723, 28612674, 28636676, 28639299
28644756, 28683167, 28708023, 28714988, 28730253, 28758090, 28774416
28790654, 28797711, 28821847, 28849751, 28852325, 28867992, 28889389
28891741, 28891984, 28915933, 28950969, 28986231, 28993590, 29006527
29009513, 29027694, 29030780, 29061016, 29122367, 29142109, 29163567
29170232, 29189889, 29200700, 29247712, 29250317, 29251241, 29254615
29260956, 29265446, 29342099, 29343156, 29372460, 29378913, 29379978
29388020, 29408136, 29434301, 29437712, 29458132, 29464779, 29477015
29483626, 29483672, 29483723, 29483771, 29500257, 29500963, 29511611
29559723, 29621961, 29625065, 29633753, 29635990, 29637560, 29645349
29655164, 29689697, 29707896, 29719146, 29726695, 29774367, 29774383
29782211, 29791152, 29796916, 29814995, 29817278, 29828111, 29869404
29869906, 29884958, 29893132, 29933718, 29944159, 29944660, 29961353
29962927, 29962939, 29965888, 29997937, 30018017, 30025002, 30031027
30116203, 30117469, 30128197, 30160639, 30164714, 30179644, 30186245
30193165, 30196358, 30200680, 30215130, 30218044, 30225443, 30248531
30252098, 30285540, 30295478, 30305880, 30320029, 30365745, 30387666
30398099, 30421204, 30497057, 30499600, 30502041, 30517516, 30522998
30534664, 30578221, 30624864, 30659882, 30660412, 30668407, 30698289

30758943, 30803210, 30805558, 30816938, 30822919, 30826474, 30855121
30860803, 30866988, 30889351, 30939307, 30973003, 30987088, 31001455
31013127, 31022858, 31028986, 31031715, 31046619, 31089270, 31106577
31156383, 31172207, 31194264, 31219939, 31228670, 31233170, 31306274
31335037, 31404014, 31409964, 31421316, 31501139, 31510891, 31525783
31527103, 31600023, 31637680, 31658943, 31667940, 31668061, 31668867
31668915, 31675539, 31696577, 31711889, 31748000, 31786838, 31799139
31827339, 31836113, 31848903, 31852482, 31862611, 31908345, 31909295
31927930, 31945038, 31951628, 31987278, 31992953, 32065792, 32097882
32105135, 32117253, 32119339, 32119956, 32153619, 32165915, 32166272
32186646, 32190132, 32190284, 32222473, 32252213, 32284608, 32284725
32287989, 32296941, 32312586, 32327201, 32335769, 32355765, 32359044
32368792, 32386877, 32425124, 32428097, 32436757, 32442404, 32473164
32523233, 32602194, 32628221, 32649749, 32675227, 32676350, 32720458
32747680, 32755493, 32775512, 32776891, 32786309, 32803807, 32834168
32846272, 32851841, 32876425, 32878039, 32892894, 32984679, 32988028
33027553, 33034103, 33040335, 33065437, 33090781, 33090848, 33096609
33106822, 33131742, 33192628, 33223294, 33247372, 33414041, 33417987
33425127, 33441073, 33561268, 33563123, 33613829, 33621092, 33711081
33805168, 33808385, 34006614, 34006650

Version 12.1.0.2.v27

Version 12.1.0.2.v27 includes the following:

- Patch [33477199](#): DATABASE PATCH SET UPDATE 12.1.0.2.220118
- Patch [33561268](#): OJVM PATCH SET UPDATE 12.1.0.2.220118
- Patch [33613829](#): RDBMS - DSTV37 UPDATE - TZDATA2020E
- Patch [33613833](#): DSTV37 UPDATE - TZDATA2020E - NEED OJVM FIX
- Patch [17969866](#): Oracle GoldenGate – 46719 ENH REPLICATION SUPPORT FOR INSERTS / FULL UPDATES WITH LARGE VALUES
- Patch [20394750](#): Oracle GoldenGate – APPLY CDR RESOLUTION FAILING FOR LOBS, XML, LONG, AND OBJECTS
- Patch [24835919](#): Oracle GoldenGate – IR EXECUTING DEPENDENT TRANSACTIONS OUT OF ORDER WITH PARALLELISM GREATER THAN
- Patch [23262847](#): Oracle GoldenGate - MALFORMED REDO CAUSED OGG REPLICATION ABEND
- Patch [21171382](#): ADD CONTROL FOR AUTOMATIC CREATION OF STATS EXTENSIONS

- Patch [21091901](#): ONLINE MOVE OF HASH OR REF PARTITION CAN LEAVE LOCAL INDEXES INCONSISTENT
- Patch [25031502](#): MV QUERY REWRITE WORKLOAD HIT ORA 600 [KGL-HEAP-SIZE-EXCEEDED]
- Patch [23711335](#): CDB_UPG PDCDB CDB UPGRADE AS WHOLE TAKES 1 MORE HOUR THAN PREVIOUS LABELS IN MAY
- Patch [33788341](#): JSON Bundle Patch - MERGE REQUEST ON TOP OF DATABASE PSU 12.1.0.2.220118 FOR BUGS 32327179
- Patch [19504946](#): FLASH CACHE DOESN'T WORK IN OEL7
- PreUpgrade Jar: preupgrade_12.1.0.2.0_18_crlf.zip

Combined patches for version 12.1.0.2.v27, released January 2022

Bugs fixed:

6194865, 6418158, 6599380, 8975044, 13542050, 13787015, 13854364
 14283239, 14643995, 14705949, 15996848, 16090440, 16354467, 16359751
 16439813, 16619249, 16756406, 16777441, 16799735, 16863642, 16870214
 16875041, 16887946, 16923858, 16938780, 16941434, 17008068, 17210525
 17258582, 17274537, 17319928, 17365043, 17409174, 17414008, 17428816
 17432124, 17495022, 17532729, 17532734, 17533661, 17551063, 17655240
 17722075, 17760068, 17777718, 17835294, 17867700, 17890099, 17969866
 18007682, 18043064, 18051556, 18090142, 18110491, 18122373, 18191823
 18197127, 18202441, 18250893, 18254023, 18272672, 18288842, 18306996
 18307021, 18308268, 18324100, 18354830, 18371441, 18373438, 18382302
 18411216, 18417036, 18419520, 18427406, 18436647, 18440095, 18456643
 18475439, 18492302, 18499088, 18510194, 18542562, 18548246, 18548433
 18549238, 18604493, 18604692, 18607546, 18610915, 18618122, 18628388
 18648816, 18662619, 18673090, 18674024, 18674047, 18681056, 18693124
 18700762, 18705806, 18727933, 18733351, 18740837, 18742258, 18743542
 18758877, 18759211, 18774543, 18775971, 18778801, 18791688, 18797519
 18798250, 18799063, 18799993, 18801391, 18803726, 18810904, 18818069
 18819908, 18840932, 18841764, 18845653, 18849537, 18849970, 18851894
 18856106, 18856999, 18866977, 18868646, 18885870, 18886413, 18893947
 18895170, 18899974, 18900107, 18904062, 18909599, 18913440, 18914624
 18921743, 18940497, 18948177, 18952766, 18952989, 18964939, 18964978
 18966843, 18967382, 18973548, 18974476, 18988834, 18990023, 18990693
 18999568, 19001359, 19001390, 19012119, 19013183, 19016730, 19017309
 19018206, 19018447, 19022470, 19023822, 19024808, 19028800, 19032777
 19035573, 19044962, 19048007, 19050649, 19051460, 19052488, 19054077

19058490, 19060015, 19065556, 19065677, 19067244, 19068380, 19068610
19068970, 19074147, 19075256, 19076343, 19077215, 19079752, 19081128
19124336, 19124589, 19130152, 19130616, 19131386, 19131607, 19134173
19141838, 19143550, 19146474, 19149990, 19153980, 19154375, 19155797
19157754, 19165673, 19168167, 19171086, 19174430, 19174521, 19174942
19176223, 19176326, 19176885, 19178851, 19180394, 19180770, 19183343
19185876, 19188385, 19188927, 19189317, 19189525, 19195895, 19197175
19201867, 19207117, 19211433, 19213447, 19223010, 19231857, 19238590
19243521, 19245191, 19248279, 19248799, 19258504, 19269405, 19272708
19279273, 19280225, 19284031, 19285025, 19289642, 19291380, 19297917
19303936, 19304354, 19306797, 19307662, 19308965, 19309466, 19313563
19315668, 19315691, 19317646, 19326908, 19327391, 19329654, 19330795
19332396, 19333670, 19335438, 19339555, 19347458, 19354335, 19354794
19358317, 19363645, 19364502, 19366375, 19370504, 19371175, 19373893
19375649, 19382851, 19383839, 19385656, 19390567, 19390620, 19393542
19396455, 19399918, 19402853, 19404068, 19409212, 19430401, 19433930
19434529, 19439759, 19440520, 19440586, 19445860, 19448499, 19450116
19450314, 19452434, 19461270, 19461428, 19468347, 19468612, 19468991
19469538, 19475971, 19487147, 19490948, 19501299, 19503821, 19504946
19512341, 19516448, 19518079, 19520602, 19523462, 19524158, 19524384
19527222, 19529868, 19532017, 19534363, 19536415, 19543384, 19547370
19547774, 19548064, 19550902, 19561643, 19562381, 19566592, 19571055
19571082, 19571367, 19577410, 19578247, 19578350, 19583624, 19587324
19590877, 19591608, 19593445, 19597439, 19597583, 19601762, 19604659
19606174, 19617921, 19619732, 19621704, 19623450, 19627012, 19632912
19637186, 19639483, 19644859, 19647503, 19649152, 19658708, 19662635
19663176, 19670108, 19676012, 19676905, 19680796, 19684504, 19687159
19689979, 19693090, 19699191, 19699946, 19701015, 19703301, 19705781
19706965, 19708342, 19708632, 19718981, 19721304, 19723336, 19730508
19769480, 19769625, 19777862, 19781326, 19784751, 19790243, 19791273
19791377, 19799847, 19805359, 19809171, 19811709, 19817386, 19818513
19824871, 19831647, 19835133, 19841800, 19855285, 19859472, 19865345
19869255, 19871910, 19873610, 19877336, 19879746, 19880190, 19883092
19886165, 19888853, 19889230, 19891090, 19895326, 19895362, 19896336
19902195, 19908836, 19909862, 19915271, 19928926, 19930276, 19931367
19931709, 19932634, 19933147, 19941352, 19943771, 19945814, 19952975
19957298, 19978542, 19982584, 19988852, 19989009, 19990037, 19995869
20001168, 20001466, 20009569, 20009833, 20011515, 20011646, 20011897
20017509, 20023340, 20031873, 20043616, 20048359, 20052269, 20061399
20074391, 20076781, 20078186, 20087383, 20093776, 20101006, 20117253
20118035, 20122715, 20124446, 20134113, 20134339, 20139391, 20144019
20144308, 20165574, 20169408, 20171986, 20172151, 20173897, 20175161
20181030, 20212067, 20217801, 20228093, 20229001, 20233181, 20235511
20245930, 20250147, 20267166, 20273319, 20281121, 20284155, 20294666

20296619, 20298413, 20302006, 20308238, 20308798, 20315311, 20318889
20322560, 20324049, 20328248, 20331945, 20347562, 20348653, 20354900
20356733, 20361671, 20368850, 20373598, 20374572, 20378086, 20382309
20387265, 20394750, 20397490, 20401975, 20402832, 20408829, 20408866
20413820, 20415564, 20424183, 20424899, 20425790, 20428621, 20432873
20437153, 20440930, 20441797, 20446883, 20447445, 20459944, 20464614
20466322, 20466628, 20468401, 20468490, 20470877, 20471920, 20474192
20475845, 20476175, 20480209, 20493163, 20505778, 20509482, 20513399
20524085, 20528052, 20539050, 20543011, 20544065, 20554364, 20557786
20558005, 20560611, 20562898, 20564072, 20565112, 20565133, 20569094
20577490, 20581111, 20582405, 20588486, 20588502, 20591183, 20596234
20598042, 20603378, 20603431, 20613079, 20618595, 20627866, 20635353
20641666, 20657411, 20657441, 20669434, 20671094, 20673810, 20677396
20677974, 20684983, 20686773, 20688221, 20703000, 20703629, 20704450
20705577, 20707932, 20708701, 20711718, 20717081, 20717091, 20717359
20725343, 20734332, 20736227, 20746251, 20753555, 20757079, 20764012
20766180, 20768076, 20778986, 20794034, 20798891, 20800890, 20801783
20803014, 20825533, 20828947, 20830459, 20831538, 20832516, 20835241
20838453, 20839705, 20842388, 20844426, 20848335, 20856766, 20859910
20860659, 20862087, 20868862, 20869721, 20875898, 20877664, 20878790
20879709, 20879889, 20880215, 20882568, 20890311, 20897759, 20898391
20898997, 20899461, 20904530, 20907061, 20914870, 20919320, 20920911
20922010, 20925795, 20926021, 20929771, 20936731, 20936905, 20938170
20951038, 20952966, 20958816, 20977794, 20978259, 21037905, 21037923
21047218, 21047766, 21047803, 21052842, 21059919, 21060755, 21061354
21063322, 21068507, 21072646, 21080143, 21091431, 21091901, 21095391
21097043, 21099555, 21101873, 21106027, 21132297, 21133343, 21142837
21147908, 21153266, 21157728, 21159665, 21164318, 21171382, 21172913
21174504, 21184223, 21186167, 21188532, 21188537, 21188584, 21196809
21197626, 21220620, 21225209, 21239530, 21241052, 21241829, 21246723
21260397, 21260431, 21263635, 21266085, 21270823, 21273804, 21275255
21281532, 21281607, 21285458, 21291274, 21293600, 21294938, 21296029
21297872, 21299490, 21300341, 21308727, 21315084, 21322887, 21329301
21354456, 21373076, 21373473, 21380789, 21383171, 21385422, 21387128
21387964, 21419850, 21421886, 21422580, 21424824, 21425496, 21429602
21442094, 21450666, 21475738, 21476308, 21479753, 21492036, 21502702
21514877, 21516611, 21517440, 21522582, 21526048, 21532755, 21534893
21542577, 21555660, 21560152, 21566639, 21566944, 21566993, 21575362
21612959, 21620471, 21623164, 21625179, 21626377, 21629064, 21632821
21641414, 21641760, 21644640, 21649497, 21656630, 21659726, 21665897
21668627, 21675340, 21695575, 21698350, 21744290, 21756661, 21756677
21756699, 21764119, 21773465, 21779541, 21780146, 21785691, 21787056
21794615, 21795111, 21797203, 21811517, 21813400, 21820934, 21821302
21828126, 21834568, 21837606, 21842017, 21842740, 21847223, 21856522

21863727, 21868720, 21875360, 21889720, 21893235, 21896069, 21899588
21911701, 21913183, 21915719, 21917884, 21924131, 21960504, 21967197
21969671, 21977186, 21977392, 21978888, 22007324, 22018363, 22022760
22024071, 22037014, 22046677, 22062026, 22062517, 22068305, 22070866
22072818, 22075064, 22077517, 22083366, 22087683, 22092979, 22118835
22118851, 22139226, 22146062, 22148226, 22157363, 22160989, 22165897
22168163, 22173980, 22175564, 22176950, 22178855, 22179537, 22185234
22205263, 22214989, 22223463, 22228324, 22232606, 22233505, 22238921
22243719, 22243983, 22250006, 22256431, 22256560, 22258530, 22261050
22264489, 22268833, 22282748, 22294260, 22296366, 22301880, 22305887
22331786, 22346829, 22347493, 22351572, 22353199, 22353346, 22359063
22364044, 22365117, 22366322, 22366558, 22374754, 22379445, 22380919
22454326, 22454940, 22458049, 22465352, 22467685, 22468255, 22468781
22470443, 22475617, 22492533, 22495062, 22495673, 22496904, 22499356
22501616, 22503297, 22507210, 22507234, 22515353, 22517782, 22518784
22519146, 22520320, 22528741, 22529728, 22533631, 22536802, 22551446
22568016, 22568177, 22568797, 22606521, 22624709, 22645009, 22654475
22657942, 22662332, 22670385, 22670413, 22674709, 22675136, 22686674
22690648, 22695831, 22707244, 22707866, 22721409, 22729345, 22730454
22733141, 22734547, 22750215, 22757364, 22760595, 22760679, 22761995
22762046, 22782647, 22806698, 22808310, 22809871, 22815955, 22816287
22820579, 22820798, 22826718, 22836801, 22842151, 22855193, 22860641
22862134, 22865673, 22873635, 22894101, 22894949, 22897344, 22901797
22905130, 22916353, 22922076, 22923409, 22950945, 22961508, 22972770
22977256, 23002524, 23003979, 23007241, 23008056, 23019710, 23020270
23025340, 23026585, 23028781, 23029562, 23035249, 23053606, 23061453
23061702, 23065323, 23066146, 23068169, 23080557, 23082876, 23084507
23088803, 23089357, 23096938, 23101501, 23104033, 23105538, 23108128
23115139, 23124895, 23125587, 23125826, 23126410, 23140259, 23148260
23149541, 23151677, 23168363, 23170620, 23172924, 23177536, 23177923
23184013, 23184263, 23195445, 23197103, 23209741, 23220453, 23229229
23230647, 23237313, 23240358, 23260854, 23262847, 23265456, 23265914
23265965, 23266217, 23272045, 23294548, 23302839, 23314180, 23315153
23315889, 23324000, 23326313, 23328639, 23338911, 23342170, 23492665
23501901, 23514710, 23514911, 23521523, 23528412, 23533524, 23533807
23543183, 23548817, 23555824, 23567857, 23571055, 23572982, 23584909
23602213, 23614158, 23627427, 23628685, 23642282, 23645516, 23709062
23711335, 23713236, 23717151, 23725036, 23727148, 23731896, 23746128
23854396, 24285405, 24300640, 24303148, 24307571, 24308635, 24315824
24316947, 24318855, 24321547, 24326444, 24341675, 24350620, 24350831
24357500, 24365589, 24385625, 24385983, 24386767, 24393981, 24397438
24401351, 24411921, 24413809, 24415926, 24416451, 24421668, 24423416
24425998, 24437510, 24448240, 24448282, 24457597, 24461826, 24480567
24509056, 24523374, 24530364, 24534298, 24545494, 24555417, 24560906

24563422, 24570598, 24573817, 24577566, 24589081, 24597536, 24600330
24623975, 24624166, 24642295, 24642495, 24652769, 24662775, 24674955
24683149, 24690216, 24693382, 24701840, 24713381, 24717859, 24718260
24719736, 24737064, 24737403, 24737581, 24737954, 24739928, 24752618
24766121, 24784414, 24790914, 24792678, 24796092, 24801152, 24802934
24808595, 24812585, 24817447, 24825843, 24831514, 24835538, 24835919
24848928, 24907917, 24908321, 24917972, 24920582, 24929210, 24966594
25029423, 25031502, 25034396, 25042823, 25047724, 25051465, 25056052
25058080, 25060506, 25067795, 25076732, 25076756, 25077278, 25079710
25091141, 25093739, 25093872, 25099339, 25107334, 25110233, 25115178
25123585, 25150925, 25161298, 25165496, 25178179, 25179774, 25192729
25205368, 25210690, 25240188, 25248384, 25264559, 25288078, 25300427
25307368, 25313154, 25328093, 25330273, 25353983, 25357142, 25377044
25392535, 25405687, 25415713, 25417056, 25417958, 25423453, 25427662
25429959, 25437695, 25437699, 25459958, 25472885, 25475853, 25476125
25477657, 25482971, 25483815, 25484507, 25486384, 25489342, 25489367
25489607, 25490238, 25492379, 25494379, 25494413, 25495682, 25539063
25546608, 25547060, 25551676, 25555252, 25575628, 25579761, 25599425
25600342, 25600421, 25602488, 25606091, 25612095, 25616268, 25633101
25634317, 25635149, 25639019, 25643818, 25643931, 25649873, 25653109
25654936, 25655390, 25669791, 25670786, 25695903, 25699321, 25722055
25733479, 25740844, 25743479, 25760195, 25764020, 25766822, 25775213
25780343, 25789277, 25790353, 25791890, 25809524, 25822410, 25823532
25823754, 25835365, 25856821, 25861398, 25879984, 25881255, 25885148
25890782, 25897615, 25904490, 25906117, 25914276, 25919622, 25947799
25957038, 25971286, 25982666, 25986062, 25997810, 26007010, 26023002
26023025, 26024732, 26027162, 26029780, 26039623, 26088426, 26089440
26110259, 26110632, 26111842, 26121990, 26126424, 26153977, 26169341
26187943, 26198757, 26198926, 26203182, 26243698, 26245237, 26248143
26256131, 26262953, 26263721, 26318200, 26318627, 26324206, 26325856
26336977, 26353617, 26366517, 26412540, 26430737, 26439748, 26444887
26446098, 26482376, 26513067, 26513709, 26544823, 26546664, 26546754
26556014, 26569225, 26570171, 26575788, 26608137, 26633558, 26635845
26637592, 26637824, 26654363, 26658759, 26714910, 26716835, 26729494
26758193, 26768025, 26784509, 26798411, 26822620, 26828994, 26832296
26844406, 26844870, 26875822, 26898563, 26956036, 26968670, 26999139
27000663, 27000690, 27001733, 27012701, 27015449, 27033652, 27034890
27052607, 27060167, 27072923, 27080844, 27086138, 27092508, 27097854
27101105, 27122162, 27133662, 27169796, 27185188, 27199245, 27207110
27207634, 27213224, 27217412, 27223075, 27229389, 27255377, 27274536
27276231, 27285244, 27303938, 27314206, 27314390, 27314697, 27337759
27348081, 27351628, 27370965, 27375542, 27397048, 27400598, 27404573
27419631, 27424405, 27433385, 27434193, 27441326, 27443406, 27445727
27452046, 27461789, 27461842, 27468303, 27475603, 27487919, 27504770

27534509, 27548131, 27565906, 27567477, 27611612, 27620950, 27623159
27629756, 27634991, 27642235, 27667128, 27679641, 27710072, 27726780
27729678, 27745728, 27751755, 27829295, 27846298, 27847259, 27897759
27923320, 27929509, 27938623, 27952577, 27952584, 27986817, 27995248
27997875, 28000269, 28022101, 28023399, 28023482, 28024793, 28025414
28026866, 28043157, 28072383, 28079127, 28098160, 28125601, 28164480
28174827, 28199085, 28201045, 28204104, 28215510, 28250929, 28281094
28302049, 28305362, 28357401, 28369092, 28371123, 28384353, 28390273
28394726, 28420042, 28423598, 28432129, 28440711, 28491715, 28501075
28502113, 28502128, 28507324, 28534493, 28542455, 28566241, 28578164
28587723, 28612674, 28636676, 28639299, 28644756, 28683167, 28708023
28714988, 28730253, 28758090, 28774416, 28790654, 28797711, 28821847
28849751, 28852325, 28867992, 28891741, 28891984, 28915933, 28950969
28986231, 28993590, 29006527, 29009513, 29027694, 29030780, 29061016
29122367, 29142109, 29163567, 29170232, 29189889, 29200700, 29247712
29250317, 29251241, 29254615, 29260956, 29265446, 29342099, 29343156
29372460, 29378913, 29379978, 29388020, 29408136, 29434301, 29437712
29458132, 29464779, 29477015, 29483626, 29483672, 29483723, 29483771
29500257, 29500963, 29511611, 29559723, 29621961, 29625065, 29633753
29635990, 29637560, 29645349, 29655164, 29689697, 29707896, 29719146
29726695, 29774367, 29774383, 29782211, 29791152, 29796916, 29814995
29817278, 29828111, 29869404, 29869906, 29884958, 29893132, 29933718
29944159, 29944660, 29961353, 29962927, 29962939, 29965888, 29997937
30018017, 30025002, 30031027, 30116203, 30117469, 30128197, 30160639
30164714, 30179644, 30186245, 30193165, 30196358, 30200680, 30215130
30218044, 30225443, 30248531, 30252098, 30285540, 30295478, 30305880
30320029, 30365745, 30387666, 30398099, 30421204, 30497057, 30499600
30502041, 30517516, 30522998, 30534664, 30578221, 30624864, 30659882
30660412, 30668407, 30698289, 30758943, 30803210, 30805558, 30816938
30822919, 30826474, 30855121, 30860803, 30866988, 30889351, 30939307
30973003, 30987088, 31001455, 31013127, 31022858, 31028986, 31031715
31046619, 31089270, 31106577, 31156383, 31172207, 31194264, 31219939
31228670, 31233170, 31306274, 31335037, 31404014, 31409964, 31421316
31501139, 31510891, 31525783, 31527103, 31637680, 31658943, 31667940
31668061, 31668867, 31668915, 31675539, 31696577, 31711889, 31748000
31786838, 31799139, 31827339, 31836113, 31848903, 31852482, 31862611
31909295, 31927930, 31945038, 32065792, 32097882, 32105135, 32119339
32119956, 32153619, 32165915, 32166272, 32186646, 32190132, 32190284
32222473, 32252213, 32296941, 32312586, 32327201, 32335769, 32355765
32359044, 32368792, 32386877, 32425124, 32436757, 32442404, 32473164
32523233, 32628221, 32676350, 32720458, 32755493, 32775512, 32776891
32786309, 32803807, 32834168, 32846272, 32851841, 32876425, 32878039
32892894, 32984679, 32988028, 33027553, 33034103, 33040335, 33065437
33090781, 33090848, 33096609, 33106822, 33131742, 33192628, 33223294

33414041, 33417987, 33425127, 33477199, 33561268, 33563123, 33613829
33613833, 33621092

Version 12.1.0.2.v26

Version 12.1.0.2.v26 includes the following:

- Patch [33128590](#): DATABASE OCT 2021 RELEASE UPDATE 12.1.0.2.211019
- Patch [33192628](#): OJVM RELEASE UPDATE 12.1.0.2.211019
- Patch [32327201](#): RDBMS - DSTV36 UPDATE - TZDATA2020E
- Patch [17969866](#): Oracle GoldenGate – 46719 ENH REPLICATION SUPPORT FOR INSERTS / FULL UPDATES WITH LARGE VALUE
- Patch [20394750](#): Oracle GoldenGate – APPLY CDR RESOLUTION FAILING FOR LOBS, XML, LONG, AND OBJECTS
- Patch [24835919](#): Oracle GoldenGate – IR EXECUTING DEPENDENT TRANSACTIONS OUT OF ORDER WITH PARALLELISM GREATER THAN
- Patch [23262847](#): Oracle GoldenGate - MALFORMED REDO CAUSED OGG REPLICATION ABEND
- Patch [21171382](#): ADD CONTROL FOR AUTOMATIC CREATION OF STATS EXTENSIONS
- Patch [21091901](#): ONLINE MOVE OF HASH OR REF PARTITION CAN LEAVE LOCAL INDEXES INCONSISTENT
- Patch [25031502](#): MV QUERY REWRITE WORKLOAD HIT ORA 600 [KGL-HEAP-SIZE-EXCEEDED]
- Patch [23711335](#): CDB_UPG PDCDB CDB UPGRADE AS WHOLE TAKES 1 MORE HOUR THAN PREVIOUS LABELS IN MAY
- Patch [33510113](#): JSON Bundle Patch
- PreUpgrade Jar: preupgrade_12.1.0.2.0_18_crlf.zip

Combined patches for version 12.1.0.2.v26, released October 2021

Bugs fixed:

6194865, 6418158, 6599380, 13542050, 13787015, 13854364, 14283239
14643995, 14705949, 15996848, 16090440, 16354467, 16359751, 16439813
16619249, 16756406, 16777441, 16799735, 16863642, 16870214, 16875041
16887946, 16923858, 16938780, 16941434, 17008068, 17210525, 17258582

17274537, 17319928, 17365043, 17409174, 17414008, 17428816, 17432124
17495022, 17532729, 17532734, 17533661, 17551063, 17655240, 17722075
17760068, 17777718, 17835294, 17867700, 17890099, 17969866, 18007682
18043064, 18051556, 18090142, 18110491, 18122373, 18191823, 18197127
18202441, 18250893, 18254023, 18272672, 18288842, 18306996, 18307021
18308268, 18324100, 18354830, 18371441, 18373438, 18382302, 18411216
18417036, 18419520, 18427406, 18436647, 18440095, 18456643, 18475439
18492302, 18499088, 18510194, 18542562, 18548246, 18548433, 18549238
18604493, 18604692, 18607546, 18610915, 18618122, 18628388, 18648816
18662619, 18673090, 18674024, 18674047, 18681056, 18693124, 18700762
18705806, 18727933, 18733351, 18740837, 18742258, 18743542, 18758877
18759211, 18774543, 18775971, 18778801, 18791688, 18797519, 18798250
18799063, 18799993, 18801391, 18803726, 18810904, 18818069, 18819908
18840932, 18841764, 18845653, 18849537, 18849970, 18851894, 18856106
18856999, 18866977, 18868646, 18885870, 18886413, 18893947, 18895170
18899974, 18900107, 18904062, 18909599, 18913440, 18914624, 18921743
18940497, 18948177, 18952766, 18952989, 18964939, 18964978, 18966843
18967382, 18973548, 18974476, 18988834, 18990023, 18990693, 18999568
19001359, 19001390, 19012119, 19013183, 19016730, 19017309, 19018206
19018447, 19022470, 19023822, 19024808, 19028800, 19032777, 19035573
19044962, 19048007, 19050649, 19051460, 19052488, 19054077, 19058490
19060015, 19065556, 19065677, 19067244, 19068380, 19068610, 19068970
19074147, 19075256, 19076343, 19077215, 19079752, 19081128, 19124336
19124589, 19130152, 19130616, 19131386, 19131607, 19134173, 19141838
19143550, 19146474, 19149990, 19153980, 19154375, 19155797, 19157754
19165673, 19168167, 19171086, 19174430, 19174521, 19174942, 19176223
19176326, 19176885, 19178851, 19180394, 19180770, 19183343, 19185876
19188385, 19188927, 19189317, 19189525, 19195895, 19197175, 19201867
19207117, 19211433, 19213447, 19223010, 19231857, 19238590, 19243521
19245191, 19248279, 19248799, 19258504, 19272708, 19279273, 19280225
19284031, 19285025, 19289642, 19291380, 19297917, 19303936, 19304354
19306797, 19307662, 19308965, 19309466, 19313563, 19315668, 19315691
19317646, 19326908, 19327391, 19329654, 19330795, 19332396, 19333670
19335438, 19339555, 19347458, 19354335, 19354794, 19358317, 19363645
19364502, 19366375, 19370504, 19371175, 19373893, 19375649, 19382851
19383839, 19385656, 19390567, 19390620, 19393542, 19396455, 19399918
19402853, 19404068, 19409212, 19430401, 19433930, 19434529, 19439759
19440520, 19440586, 19445860, 19448499, 19450116, 19450314, 19452434
19461270, 19461428, 19468347, 19468612, 19468991, 19469538, 19475971
19487147, 19490948, 19501299, 19503821, 19504946, 19512341, 19516448
19518079, 19520602, 19523462, 19524158, 19524384, 19529868, 19532017
19534363, 19536415, 19543384, 19547370, 19547774, 19548064, 19550902
19561643, 19562381, 19566592, 19571055, 19571082, 19571367, 19577410
19578247, 19578350, 19583624, 19587324, 19590877, 19591608, 19593445

19597439, 19597583, 19601762, 19604659, 19606174, 19617921, 19619732
19621704, 19623450, 19627012, 19632912, 19637186, 19639483, 19644859
19647503, 19649152, 19658708, 19662635, 19663176, 19670108, 19676012
19676905, 19680796, 19684504, 19687159, 19689979, 19693090, 19699191
19699946, 19701015, 19703301, 19705781, 19706965, 19708342, 19708632
19718981, 19721304, 19723336, 19730508, 19769480, 19769625, 19777862
19781326, 19784751, 19790243, 19791273, 19791377, 19799847, 19805359
19809171, 19811709, 19817386, 19818513, 19824871, 19831647, 19835133
19841800, 19855285, 19859472, 19865345, 19869255, 19871910, 19873610
19877336, 19879746, 19880190, 19883092, 19886165, 19888853, 19889230
19891090, 19895326, 19895362, 19896336, 19902195, 19908836, 19909862
19915271, 19928926, 19930276, 19931367, 19931709, 19932634, 19933147
19941352, 19943771, 19945814, 19952975, 19957298, 19978542, 19982584
19988852, 19989009, 19990037, 19995869, 20001168, 20001466, 20009569
20009833, 20011515, 20011646, 20011897, 20017509, 20023340, 20031873
20043616, 20048359, 20052269, 20061399, 20074391, 20076781, 20078186
20087383, 20093776, 20101006, 20117253, 20118035, 20122715, 20124446
20134113, 20134339, 20139391, 20144019, 20144308, 20165574, 20169408
20171986, 20172151, 20173897, 20175161, 20181030, 20212067, 20217801
20228093, 20229001, 20233181, 20235511, 20245930, 20250147, 20267166
20273319, 20281121, 20284155, 20294666, 20296619, 20298413, 20302006
20308238, 20308798, 20315311, 20318889, 20322560, 20324049, 20328248
20331945, 20347562, 20348653, 20354900, 20356733, 20361671, 20368850
20373598, 20374572, 20378086, 20382309, 20387265, 20394750, 20397490
20401975, 20402832, 20408829, 20408866, 20413820, 20415564, 20424183
20424899, 20425790, 20428621, 20432873, 20437153, 20440930, 20441797
20446883, 20447445, 20459944, 20464614, 20466322, 20466628, 20468401
20468490, 20470877, 20471920, 20474192, 20475845, 20476175, 20480209
20493163, 20505778, 20509482, 20513399, 20524085, 20528052, 20539050
20543011, 20544065, 20554364, 20557786, 20558005, 20560611, 20562898
20564072, 20565112, 20565133, 20569094, 20577490, 20581111, 20582405
20588486, 20588502, 20591183, 20596234, 20598042, 20603378, 20603431
20613079, 20618595, 20627866, 20635353, 20641666, 20657411, 20657441
20669434, 20671094, 20673810, 20677396, 20677974, 20684983, 20686773
20688221, 20703000, 20703629, 20704450, 20705577, 20707932, 20708701
20711718, 20717081, 20717091, 20717359, 20725343, 20734332, 20736227
20746251, 20757079, 20764012, 20766180, 20768076, 20778986, 20794034
20798891, 20800890, 20801783, 20803014, 20825533, 20828947, 20830459
20831538, 20832516, 20835241, 20838453, 20839705, 20842388, 20844426
20848335, 20856766, 20859910, 20860659, 20862087, 20868862, 20869721
20875898, 20877664, 20878790, 20879709, 20879889, 20880215, 20882568
20890311, 20897759, 20898391, 20898997, 20899461, 20904530, 20907061
20914870, 20919320, 20920911, 20922010, 20925795, 20926021, 20929771
20936731, 20936905, 20938170, 20951038, 20952966, 20958816, 20977794

20978259, 21037905, 21037923, 21047766, 21047803, 21052842, 21059919
21060755, 21061354, 21063322, 21068507, 21072646, 21080143, 21091431
21091901, 21095391, 21097043, 21099555, 21101873, 21106027, 21132297
21133343, 21142837, 21147908, 21153266, 21157728, 21159665, 21164318
21171382, 21172913, 21174504, 21184223, 21186167, 21188532, 21188537
21188584, 21196809, 21197626, 21220620, 21225209, 21239530, 21241052
21241829, 21246723, 21260397, 21260431, 21263635, 21266085, 21270823
21273804, 21275255, 21281532, 21281607, 21285458, 21291274, 21293600
21294938, 21296029, 21297872, 21299490, 21300341, 21308727, 21315084
21322887, 21329301, 21354456, 21373076, 21373473, 21380789, 21383171
21385422, 21387128, 21387964, 21419850, 21421886, 21422580, 21424824
21425496, 21429602, 21442094, 21450666, 21475738, 21476308, 21479753
21492036, 21502702, 21514877, 21516611, 21517440, 21522582, 21526048
21532755, 21534893, 21542577, 21555660, 21560152, 21566639, 21566944
21566993, 21575362, 21612959, 21620471, 21623164, 21625179, 21626377
21629064, 21632821, 21641414, 21641760, 21644640, 21649497, 21656630
21659726, 21665897, 21668627, 21675340, 21695575, 21698350, 21744290
21756661, 21756677, 21756699, 21764119, 21773465, 21779541, 21780146
21785691, 21787056, 21794615, 21795111, 21797203, 21811517, 21820934
21821302, 21828126, 21834568, 21837606, 21842017, 21842740, 21847223
21856522, 21863727, 21868720, 21875360, 21889720, 21893235, 21896069
21899588, 21911701, 21913183, 21915719, 21917884, 21924131, 21960504
21967197, 21969671, 21977186, 21977392, 22007324, 22018363, 22022760
22024071, 22037014, 22046677, 22062026, 22062517, 22068305, 22070866
22072818, 22075064, 22077517, 22083366, 22087683, 22092979, 22118835
22118851, 22139226, 22146062, 22148226, 22157363, 22160989, 22165897
22168163, 22173980, 22175564, 22176950, 22178855, 22179537, 22185234
22205263, 22214989, 22223463, 22228324, 22232606, 22233505, 22238921
22243719, 22243983, 22250006, 22256431, 22256560, 22258530, 22261050
22264489, 22268833, 22282748, 22294260, 22296366, 22301880, 22305887
22346829, 22347493, 22351572, 22353199, 22353346, 22359063, 22364044
22365117, 22366322, 22366558, 22374754, 22380919, 22454326, 22454940
22458049, 22465352, 22468255, 22468781, 22470443, 22475617, 22492533
22495062, 22495673, 22496904, 22499356, 22501616, 22503297, 22507210
22507234, 22515353, 22517782, 22518784, 22519146, 22520320, 22528741
22529728, 22533631, 22536802, 22551446, 22568016, 22568177, 22568797
22606521, 22624709, 22645009, 22654475, 22657942, 22662332, 22670385
22670413, 22674709, 22675136, 22686674, 22690648, 22695831, 22707244
22707866, 22721409, 22729345, 22730454, 22733141, 22734547, 22750215
22757364, 22760595, 22760679, 22762046, 22782647, 22806698, 22808310
22809871, 22815955, 22816287, 22820579, 22820798, 22826718, 22836801
22842151, 22855193, 22862134, 22865673, 22873635, 22894101, 22894949
22897344, 22901797, 22905130, 22916353, 22922076, 22923409, 22950945
22961508, 22972770, 22977256, 23002524, 23003979, 23007241, 23008056

23019710, 23020270, 23025340, 23026585, 23028781, 23029562, 23035249
23053606, 23061453, 23061702, 23065323, 23066146, 23068169, 23080557
23082876, 23084507, 23088803, 23089357, 23096938, 23101501, 23104033
23105538, 23108128, 23115139, 23124895, 23125587, 23125826, 23126410
23140259, 23148260, 23149541, 23151677, 23168363, 23170620, 23172924
23177536, 23177923, 23184013, 23184263, 23195445, 23197103, 23209741
23220453, 23229229, 23230647, 23237313, 23240358, 23260854, 23262847
23265914, 23265965, 23266217, 23272045, 23294548, 23302839, 23314180
23315153, 23315889, 23324000, 23326313, 23328639, 23338911, 23342170
23492665, 23501901, 23514710, 23514911, 23521523, 23528412, 23533524
23533807, 23543183, 23548817, 23555824, 23567857, 23571055, 23572982
23584909, 23602213, 23614158, 23627427, 23628685, 23642282, 23709062
23711335, 23713236, 23717151, 23725036, 23727148, 23731896, 23746128
23854396, 24285405, 24300640, 24303148, 24307571, 24308635, 24315824
24316947, 24318855, 24321547, 24326444, 24341675, 24350620, 24350831
24357500, 24365589, 24385625, 24385983, 24386767, 24393981, 24397438
24401351, 24411921, 24413809, 24415926, 24416451, 24421668, 24423416
24425998, 24437510, 24448240, 24448282, 24457597, 24461826, 24480567
24509056, 24523374, 24530364, 24534298, 24555417, 24560906, 24563422
24570598, 24573817, 24577566, 24589081, 24597536, 24600330, 24623975
24624166, 24642295, 24642495, 24652769, 24662775, 24674955, 24683149
24690216, 24693382, 24701840, 24713381, 24717859, 24718260, 24719736
24737064, 24737403, 24737581, 24737954, 24739928, 24752618, 24766121
24784414, 24790914, 24792678, 24796092, 24801152, 24802934, 24808595
24812585, 24817447, 24825843, 24831514, 24835538, 24835919, 24848928
24907917, 24908321, 24917972, 24920582, 24929210, 24966594, 25029423
25031502, 25034396, 25042823, 25047724, 25051465, 25056052, 25058080
25060506, 25067795, 25076732, 25076756, 25077278, 25079710, 25091141
25093739, 25093872, 25099339, 25107334, 25110233, 25115178, 25123585
25150925, 25161298, 25165496, 25178179, 25179774, 25192729, 25205368
25210690, 25240188, 25248384, 25264559, 25288078, 25300427, 25307368
25313154, 25328093, 25330273, 25353983, 25357142, 25377044, 25392535
25405687, 25415713, 25417056, 25417958, 25423453, 25427662, 25429959
25437695, 25437699, 25459958, 25472885, 25475853, 25476125, 25477657
25482971, 25483815, 25484507, 25486384, 25489342, 25489367, 25489607
25490238, 25492379, 25494379, 25494413, 25495682, 25539063, 25546608
25547060, 25551676, 25555252, 25575628, 25579761, 25599425, 25600342
25600421, 25602488, 25606091, 25612095, 25616268, 25633101, 25634317
25635149, 25639019, 25643818, 25643931, 25649873, 25653109, 25654936
25655390, 25669791, 25670786, 25695903, 25699321, 25722055, 25733479
25740844, 25743479, 25760195, 25764020, 25766822, 25775213, 25780343
25789277, 25790353, 25809524, 25822410, 25823532, 25823754, 25856821
25861398, 25879984, 25881255, 25885148, 25890782, 25897615, 25904490
25914276, 25919622, 25947799, 25957038, 25982666, 25986062, 25997810

26007010, 26023002, 26023025, 26024732, 26027162, 26029780, 26039623
26088426, 26089440, 26110259, 26110632, 26111842, 26121990, 26126424
26153977, 26169341, 26187943, 26198757, 26198926, 26203182, 26243698
26245237, 26248143, 26256131, 26262953, 26263721, 26318200, 26318627
26324206, 26325856, 26336977, 26353617, 26366517, 26412540, 26430737
26439748, 26444887, 26446098, 26482376, 26513067, 26513709, 26544823
26546664, 26546754, 26556014, 26569225, 26570171, 26575788, 26633558
26635845, 26637592, 26637824, 26654363, 26658759, 26714910, 26716835
26729494, 26758193, 26768025, 26784509, 26822620, 26828994, 26832296
26844406, 26875822, 26898563, 26956036, 26968670, 26999139, 27000663
27000690, 27001733, 27012701, 27015449, 27033652, 27034890, 27052607
27060167, 27072923, 27080844, 27086138, 27092508, 27097854, 27101105
27122162, 27133662, 27169796, 27185188, 27199245, 27207110, 27207634
27213224, 27217412, 27223075, 27229389, 27255377, 27274536, 27276231
27285244, 27303938, 27314206, 27314390, 27314697, 27337759, 27348081
27351628, 27370965, 27375542, 27397048, 27404573, 27424405, 27433385
27434193, 27441326, 27443406, 27445727, 27452046, 27461789, 27461842
27468303, 27475603, 27487919, 27534509, 27548131, 27565906, 27567477
27611612, 27620950, 27623159, 27629756, 27634991, 27642235, 27667128
27710072, 27726780, 27729678, 27745728, 27751755, 27829295, 27846298
27847259, 27897759, 27923320, 27929509, 27938623, 27952577, 27952584
27986817, 27995248, 27997875, 28000269, 28022101, 28023399, 28023482
28024793, 28025414, 28026866, 28043157, 28072383, 28079127, 28098160
28125601, 28164480, 28174827, 28199085, 28201045, 28204104, 28215510
28250929, 28281094, 28302049, 28305362, 28357401, 28369092, 28371123
28384353, 28390273, 28394726, 28420042, 28423598, 28432129, 28440711
28491715, 28501075, 28502113, 28502128, 28507324, 28534493, 28542455
28566241, 28578164, 28587723, 28612674, 28636676, 28639299, 28644756
28683167, 28708023, 28714988, 28730253, 28758090, 28774416, 28790654
28797711, 28821847, 28849751, 28852325, 28867992, 28891741, 28891984
28915933, 28950969, 28986231, 28993590, 29006527, 29009513, 29027694
29030780, 29061016, 29122367, 29142109, 29163567, 29170232, 29189889
29200700, 29247712, 29250317, 29251241, 29254615, 29260956, 29265446
29342099, 29343156, 29372460, 29378913, 29379978, 29388020, 29408136
29434301, 29437712, 29458132, 29464779, 29477015, 29483626, 29483672
29483723, 29483771, 29500257, 29500963, 29511611, 29559723, 29621961
29625065, 29633753, 29635990, 29637560, 29645349, 29655164, 29689697
29707896, 29719146, 29726695, 29774367, 29774383, 29782211, 29791152
29796916, 29814995, 29817278, 29828111, 29869404, 29869906, 29884958
29893132, 29933718, 29944159, 29944660, 29961353, 29962927, 29962939
29965888, 29997937, 29997959, 30018017, 30025002, 30031027, 30116203
30117469, 30128197, 30160639, 30164714, 30179644, 30186245, 30193165
30196358, 30200680, 30215130, 30218044, 30225443, 30248531, 30252098
30285540, 30295478, 30305880, 30320029, 30365745, 30387666, 30398099

30421204, 30497057, 30499600, 30502041, 30517516, 30522998, 30534664
30578221, 30624864, 30659882, 30668407, 30698289, 30758943, 30803210
30805558, 30816938, 30822919, 30826474, 30855121, 30860803, 30866988
30889351, 30939307, 30973003, 30987088, 31001455, 31013127, 31022858
31028986, 31031715, 31046619, 31089270, 31106577, 31156383, 31172207
31194264, 31219939, 31228670, 31233170, 31306274, 31335037, 31335142
31404014, 31409964, 31421316, 31501139, 31510891, 31525783, 31527103
31637680, 31658943, 31667940, 31668061, 31668867, 31668915, 31675539
31696577, 31711889, 31748000, 31786838, 31799139, 31827339, 31836113
31848903, 31862611, 31909295, 31927930, 31945038, 32065792, 32097882
32105135, 32119339, 32119956, 32153619, 32165915, 32166272, 32186646
32190132, 32190284, 32222473, 32252213, 32296941, 32312586, 32327201
32327208, 32335769, 32355765, 32359044, 32368792, 32386877, 32425124
32436757, 32442404, 32473164, 32523233, 32628221, 32676350, 32720458
32755493, 32775512, 32776891, 32786309, 32834168, 32846272, 32851841
32876425, 32878039, 32892894, 32988028, 33034103, 33128590, 33131742
33192628, 33223294

Version 12.1.0.2.v25

Version 12.1.0.2.v25 includes the following:

- Patch [32768233](#): DATABASE PATCH SET UPDATE 12.1.0.2.210720
- Patch [32876425](#): OJVM PATCH SET UPDATE 12.1.0.2.210720
- Patch [32327201](#): RDBMS - DSTV36 UPDATE - TZDATA2020E
- Patch [17969866](#): Oracle GoldenGate – 46719 ENH REPLICATION SUPPORT FOR INSERTS / FULL UPDATES WITH LARGE VALUES
- Patch [20394750](#): Oracle GoldenGate – APPLY CDR RESOLUTION FAILING FOR LOBS, XML, LONG, AND OBJECTS
- Patch [24835919](#): Oracle GoldenGate – IR EXECUTING DEPENDENT TRANSACTIONS OUT OF ORDER WITH PARALLELISM GREATER THAN
- Patch [23262847](#): Oracle GoldenGate - MALFORMED REDO CAUSED OGG REPLICATION ABEND
- Patch [21171382](#): ADD CONTROL FOR AUTOMATIC CREATION OF STATS EXTENSIONS
- Patch [21091901](#): ONLINE MOVE OF HASH OR REF PARTITION CAN LEAVE LOCAL INDEXES INCONSISTENT
- Patch [25031502](#): MV QUERY REWRITE WORKLOAD HIT ORA 600 [KGL-HEAP-SIZE-EXCEEDED]

- Patch [23711335](#): CDB_UPG PDCDB CDB UPGRADE AS WHOLE TAKES 1 MORE HOUR THAN PREVIOUS LABELS IN MAY
- Patch [33013352](#): JSON Bundle Patch
- PreUpgrade Jar: preupgrade_12.1.0.2.0_18_crlf.zip

Combined patches for version 12.1.0.2.v25, released July 2021

Bugs fixed:

6194865, 6418158, 6599380, 13542050, 13787015, 13854364, 14283239
14643995, 14705949, 15996848, 16090440, 16354467, 16359751, 16439813
16619249, 16756406, 16777441, 16799735, 16863642, 16870214, 16875041
16887946, 16923858, 16938780, 16941434, 17008068, 17210525, 17258582
17274537, 17319928, 17365043, 17409174, 17414008, 17428816, 17432124
17495022, 17532729, 17532734, 17533661, 17551063, 17655240, 17722075
17760068, 17835294, 17867700, 17890099, 17969866, 18007682, 18043064
18051556, 18090142, 18110491, 18122373, 18191823, 18197127, 18202441
18250893, 18254023, 18272672, 18288842, 18306996, 18307021, 18308268
18324100, 18354830, 18371441, 18373438, 18382302, 18411216, 18417036
18419520, 18427406, 18436647, 18440095, 18456643, 18475439, 18492302
18499088, 18510194, 18542562, 18548246, 18548433, 18549238, 18604493
18604692, 18607546, 18610915, 18618122, 18628388, 18648816, 18662619
18673090, 18674024, 18674047, 18681056, 18693124, 18700762, 18705806
18727933, 18733351, 18740837, 18742258, 18743542, 18758877, 18759211
18774543, 18775971, 18778801, 18791688, 18797519, 18798250, 18799063
18799993, 18801391, 18803726, 18810904, 18818069, 18819908, 18840932
18841764, 18845653, 18849537, 18849970, 18851894, 18856106, 18856999
18866977, 18868646, 18885870, 18886413, 18893947, 18895170, 18899974
18900107, 18904062, 18909599, 18913440, 18914624, 18921743, 18940497
18948177, 18952766, 18952989, 18964939, 18964978, 18966843, 18967382
18973548, 18974476, 18988834, 18990023, 18990693, 18999568, 19001359
19001390, 19012119, 19013183, 19016730, 19017309, 19018206, 19018447
19022470, 19023822, 19024808, 19028800, 19032777, 19035573, 19044962
19048007, 19050649, 19051460, 19052488, 19054077, 19058490, 19060015
19065556, 19065677, 19067244, 19068380, 19068610, 19068970, 19074147
19075256, 19076343, 19077215, 19079752, 19081128, 19124336, 19124589
19130152, 19130616, 19131386, 19131607, 19134173, 19141838, 19143550
19146474, 19149990, 19153980, 19154375, 19155797, 19157754, 19165673
19168167, 19171086, 19174430, 19174521, 19174942, 19176223, 19176326
19176885, 19178851, 19180394, 19180770, 19183343, 19185876, 19188385

19188927, 19189317, 19189525, 19195895, 19197175, 19201867, 19207117
19211433, 19213447, 19223010, 19231857, 19238590, 19243521, 19245191
19248279, 19248799, 19258504, 19272708, 19279273, 19280225, 19284031
19285025, 19289642, 19291380, 19297917, 19303936, 19304354, 19306797
19307662, 19308965, 19309466, 19313563, 19315668, 19315691, 19317646
19326908, 19327391, 19329654, 19330795, 19332396, 19333670, 19335438
19339555, 19347458, 19354335, 19354794, 19358317, 19363645, 19364502
19366375, 19370504, 19371175, 19373893, 19375649, 19382851, 19383839
19385656, 19390567, 19390620, 19393542, 19396455, 19399918, 19402853
19404068, 19409212, 19430401, 19433930, 19434529, 19439759, 19440520
19440586, 19445860, 19448499, 19450116, 19450314, 19452434, 19461270
19461428, 19468347, 19468612, 19468991, 19469538, 19475971, 19487147
19490948, 19501299, 19503821, 19504946, 19512341, 19516448, 19518079
19520602, 19523462, 19524158, 19524384, 19529868, 19532017, 19534363
19536415, 19543384, 19547370, 19547774, 19548064, 19550902, 19561643
19562381, 19566592, 19571055, 19571082, 19571367, 19577410, 19578247
19578350, 19583624, 19587324, 19590877, 19591608, 19593445, 19597439
19597583, 19601762, 19604659, 19606174, 19617921, 19619732, 19621704
19623450, 19627012, 19632912, 19637186, 19639483, 19644859, 19647503
19649152, 19658708, 19662635, 19663176, 19670108, 19676012, 19676905
19680796, 19684504, 19687159, 19689979, 19693090, 19699191, 19699946
19701015, 19703301, 19705781, 19706965, 19708342, 19708632, 19718981
19721304, 19723336, 19730508, 19769480, 19769625, 19777862, 19781326
19784751, 19790243, 19791273, 19791377, 19799847, 19805359, 19809171
19811709, 19817386, 19818513, 19824871, 19831647, 19835133, 19841800
19855285, 19859472, 19865345, 19869255, 19871910, 19873610, 19877336
19879746, 19880190, 19883092, 19886165, 19888853, 19889230, 19891090
19895326, 19895362, 19896336, 19902195, 19908836, 19909862, 19915271
19928926, 19930276, 19931367, 19931709, 19932634, 19933147, 19941352
19943771, 19945814, 19952975, 19957298, 19978542, 19982584, 19988852
19989009, 19990037, 19995869, 20001168, 20001466, 20009569, 20009833
20011515, 20011646, 20011897, 20017509, 20023340, 20031873, 20043616
20048359, 20052269, 20061399, 20074391, 20076781, 20078186, 20087383
20093776, 20101006, 20117253, 20118035, 20122715, 20124446, 20134113
20134339, 20139391, 20144019, 20144308, 20165574, 20169408, 20171986
20172151, 20173897, 20175161, 20181030, 20212067, 20217801, 20228093
20229001, 20233181, 20235511, 20245930, 20250147, 20267166, 20273319
20281121, 20284155, 20294666, 20296619, 20298413, 20302006, 20308238
20308798, 20315311, 20318889, 20322560, 20324049, 20328248, 20331945
20347562, 20348653, 20354900, 20356733, 20361671, 20368850, 20373598
20374572, 20378086, 20382309, 20387265, 20394750, 20397490, 20401975
20402832, 20408829, 20408866, 20413820, 20415564, 20424183, 20424899
20425790, 20428621, 20432873, 20437153, 20440930, 20441797, 20446883
20447445, 20459944, 20464614, 20466322, 20466628, 20468401, 20468490

20470877, 20471920, 20474192, 20475845, 20476175, 20480209, 20493163
20505778, 20509482, 20513399, 20524085, 20528052, 20539050, 20543011
20544065, 20554364, 20557786, 20558005, 20560611, 20562898, 20564072
20565112, 20565133, 20569094, 20577490, 20581111, 20582405, 20588486
20588502, 20591183, 20596234, 20598042, 20603378, 20603431, 20613079
20618595, 20627866, 20635353, 20641666, 20657411, 20657441, 20669434
20671094, 20673810, 20677396, 20677974, 20684983, 20686773, 20688221
20703000, 20703629, 20704450, 20705577, 20707932, 20708701, 20711718
20717081, 20717091, 20717359, 20725343, 20734332, 20736227, 20746251
20757079, 20764012, 20766180, 20768076, 20778986, 20794034, 20798891
20800890, 20801783, 20803014, 20825533, 20828947, 20830459, 20831538
20832516, 20835241, 20839705, 20842388, 20844426, 20848335, 20856766
20859910, 20860659, 20862087, 20868862, 20869721, 20875898, 20877664
20878790, 20879709, 20879889, 20880215, 20882568, 20890311, 20897759
20898391, 20898997, 20899461, 20904530, 20907061, 20914870, 20919320
20920911, 20922010, 20925795, 20926021, 20929771, 20936731, 20936905
20938170, 20951038, 20952966, 20958816, 20977794, 20978259, 21037905
21037923, 21047766, 21047803, 21052842, 21059919, 21060755, 21061354
21063322, 21068507, 21072646, 21080143, 21091431, 21091901, 21095391
21097043, 21099555, 21101873, 21106027, 21132297, 21133343, 21142837
21147908, 21153266, 21157728, 21159665, 21164318, 21171382, 21172913
21174504, 21184223, 21186167, 21188532, 21188537, 21188584, 21196809
21197626, 21220620, 21225209, 21239530, 21241052, 21241829, 21246723
21260397, 21260431, 21263635, 21266085, 21270823, 21273804, 21275255
21281532, 21281607, 21285458, 21291274, 21293600, 21294938, 21296029
21297872, 21299490, 21300341, 21308727, 21315084, 21322887, 21329301
21354456, 21373076, 21373473, 21380789, 21383171, 21385422, 21387128
21387964, 21419850, 21421886, 21422580, 21424824, 21425496, 21429602
21442094, 21450666, 21475738, 21476308, 21479753, 21492036, 21502702
21514877, 21516611, 21517440, 21522582, 21526048, 21532755, 21534893
21542577, 21555660, 21560152, 21566639, 21566944, 21566993, 21575362
21612959, 21620471, 21623164, 21625179, 21626377, 21629064, 21632821
21641414, 21641760, 21644640, 21649497, 21656630, 21659726, 21665897
21668627, 21675340, 21695575, 21698350, 21744290, 21756661, 21756677
21756699, 21764119, 21773465, 21780146, 21785691, 21787056, 21794615
21795111, 21797203, 21811517, 21820934, 21821302, 21828126, 21834568
21837606, 21842017, 21842740, 21847223, 21856522, 21863727, 21868720
21875360, 21889720, 21893235, 21896069, 21899588, 21911701, 21913183
21915719, 21917884, 21924131, 21960504, 21967197, 21969671, 21977186
21977392, 22007324, 22018363, 22022760, 22024071, 22037014, 22046677
22062026, 22062517, 22068305, 22070866, 22072818, 22075064, 22077517
22083366, 22087683, 22092979, 22118835, 22118851, 22139226, 22146062
22148226, 22157363, 22160989, 22165897, 22168163, 22173980, 22175564
22176950, 22178855, 22179537, 22185234, 22205263, 22214989, 22223463

22228324, 22232606, 22233505, 22238921, 22243719, 22243983, 22250006
22256431, 22256560, 22258530, 22261050, 22264489, 22268833, 22282748
22294260, 22296366, 22301880, 22305887, 22346829, 22347493, 22351572
22353199, 22353346, 22359063, 22364044, 22365117, 22366322, 22366558
22374754, 22380919, 22454326, 22454940, 22458049, 22465352, 22468255
22468781, 22475617, 22492533, 22495062, 22495673, 22496904, 22499356
22501616, 22503297, 22507210, 22507234, 22515353, 22517782, 22518784
22519146, 22520320, 22528741, 22529728, 22533631, 22536802, 22551446
22568016, 22568177, 22568797, 22606521, 22624709, 22645009, 22654475
22657942, 22662332, 22670385, 22670413, 22674709, 22675136, 22686674
22690648, 22695831, 22707244, 22707866, 22721409, 22729345, 22730454
22733141, 22734547, 22750215, 22757364, 22760595, 22760679, 22762046
22782647, 22806698, 22808310, 22809871, 22815955, 22816287, 22820579
22820798, 22826718, 22836801, 22842151, 22855193, 22862134, 22865673
22873635, 22894101, 22894949, 22897344, 22901797, 22905130, 22916353
22922076, 22923409, 22950945, 22961508, 22972770, 22977256, 23002524
23003979, 23007241, 23008056, 23019710, 23020270, 23025340, 23026585
23028781, 23029562, 23035249, 23053606, 23061453, 23061702, 23065323
23066146, 23068169, 23080557, 23082876, 23084507, 23088803, 23089357
23096938, 23101501, 23104033, 23105538, 23108128, 23115139, 23124895
23125826, 23126410, 23140259, 23148260, 23149541, 23151677, 23168363
23170620, 23172924, 23177536, 23177923, 23184013, 23184263, 23195445
23197103, 23209741, 23220453, 23229229, 23230647, 23237313, 23240358
23260854, 23262847, 23265914, 23265965, 23266217, 23272045, 23294548
23302839, 23314180, 23315153, 23315889, 23324000, 23326313, 23328639
23338911, 23342170, 23492665, 23501901, 23514710, 23514911, 23521523
23528412, 23533524, 23533807, 23543183, 23548817, 23567857, 23571055
23572982, 23584909, 23602213, 23614158, 23627427, 23628685, 23642282
23709062, 23711335, 23713236, 23717151, 23725036, 23727148, 23731896
23746128, 23854396, 24285405, 24300640, 24303148, 24307571, 24308635
24315824, 24316947, 24321547, 24326444, 24341675, 24350620, 24350831
24357500, 24365589, 24385625, 24385983, 24386767, 24393981, 24397438
24401351, 24411921, 24413809, 24415926, 24416451, 24421668, 24423416
24425998, 24437510, 24448240, 24448282, 24457597, 24461826, 24480567
24509056, 24523374, 24530364, 24534298, 24555417, 24560906, 24563422
24570598, 24573817, 24577566, 24589081, 24597536, 24600330, 24623975
24624166, 24642295, 24642495, 24652769, 24662775, 24674955, 24683149
24690216, 24693382, 24701840, 24713381, 24717859, 24718260, 24719736
24737064, 24737403, 24737581, 24737954, 24739928, 24752618, 24766121
24784414, 24790914, 24792678, 24796092, 24801152, 24802934, 24808595
24812585, 24817447, 24825843, 24831514, 24835538, 24835919, 24848928
24907917, 24908321, 24917972, 24920582, 24929210, 24966594, 25029423
25031502, 25034396, 25042823, 25047724, 25051465, 25056052, 25058080
25060506, 25067795, 25076732, 25076756, 25077278, 25079710, 25091141

25093739, 25093872, 25099339, 25107334, 25110233, 25115178, 25123585
25150925, 25161298, 25165496, 25178179, 25179774, 25192729, 25205368
25210690, 25240188, 25248384, 25264559, 25288078, 25300427, 25307368
25313154, 25328093, 25330273, 25353983, 25357142, 25377044, 25392535
25405687, 25415713, 25417056, 25417958, 25423453, 25427662, 25429959
25437695, 25437699, 25459958, 25472885, 25475853, 25476125, 25477657
25482971, 25483815, 25484507, 25486384, 25489342, 25489367, 25489607
25490238, 25492379, 25494379, 25494413, 25495682, 25539063, 25546608
25547060, 25551676, 25555252, 25575628, 25579761, 25599425, 25600342
25600421, 25602488, 25606091, 25612095, 25616268, 25633101, 25634317
25635149, 25639019, 25643818, 25643931, 25649873, 25653109, 25654936
25655390, 25669791, 25670786, 25695903, 25699321, 25722055, 25733479
25740844, 25743479, 25760195, 25764020, 25766822, 25775213, 25780343
25789277, 25790353, 25809524, 25822410, 25823532, 25823754, 25856821
25861398, 25879984, 25881255, 25885148, 25890782, 25897615, 25904490
25914276, 25919622, 25947799, 25957038, 25982666, 25986062, 25997810
26007010, 26023002, 26023025, 26024732, 26027162, 26029780, 26039623
26088426, 26089440, 26110259, 26110632, 26111842, 26121990, 26126424
26153977, 26169341, 26187943, 26198757, 26198926, 26203182, 26243698
26245237, 26248143, 26256131, 26262953, 26263721, 26318200, 26318627
26324206, 26325856, 26336977, 26353617, 26366517, 26412540, 26430737
26439748, 26444887, 26446098, 26482376, 26513067, 26513709, 26544823
26546664, 26546754, 26556014, 26569225, 26570171, 26575788, 26633558
26635845, 26637592, 26637824, 26654363, 26658759, 26714910, 26716835
26729494, 26758193, 26768025, 26784509, 26822620, 26828994, 26832296
26844406, 26875822, 26898563, 26968670, 26999139, 27000663, 27000690
27001733, 27012701, 27015449, 27033652, 27034890, 27052607, 27060167
27072923, 27086138, 27092508, 27097854, 27101105, 27122162, 27133662
27169796, 27185188, 27199245, 27207110, 27207634, 27213224, 27217412
27223075, 27229389, 27255377, 27274536, 27276231, 27285244, 27303938
27314206, 27314390, 27314697, 27337759, 27348081, 27351628, 27370965
27375542, 27397048, 27404573, 27424405, 27433385, 27434193, 27441326
27443406, 27445727, 27452046, 27461789, 27461842, 27468303, 27475603
27487919, 27534509, 27548131, 27565906, 27567477, 27611612, 27620950
27623159, 27629756, 27634991, 27642235, 27667128, 27710072, 27726780
27729678, 27745728, 27751755, 27829295, 27846298, 27847259, 27897759
27923320, 27929509, 27938623, 27952577, 27952584, 27986817, 27995248
27997875, 28000269, 28022101, 28023399, 28023482, 28024793, 28025414
28026866, 28043157, 28072383, 28079127, 28098160, 28125601, 28164480
28174827, 28199085, 28215510, 28250929, 28281094, 28302049, 28305362
28357401, 28369092, 28371123, 28384353, 28390273, 28394726, 28420042
28423598, 28432129, 28440711, 28491715, 28501075, 28502113, 28502128
28507324, 28534493, 28542455, 28566241, 28578164, 28587723, 28612674
28636676, 28639299, 28644756, 28683167, 28708023, 28714988, 28730253

28758090, 28774416, 28790654, 28797711, 28821847, 28849751, 28852325
28867992, 28891741, 28891984, 28915933, 28950969, 28986231, 28993590
29006527, 29009513, 29027694, 29030780, 29061016, 29142109, 29163567
29170232, 29189889, 29200700, 29247712, 29250317, 29251241, 29254615
29260956, 29265446, 29342099, 29343156, 29372460, 29378913, 29379978
29388020, 29408136, 29434301, 29437712, 29464779, 29477015, 29483626
29483672, 29483723, 29483771, 29500257, 29500963, 29511611, 29559723
29621961, 29625065, 29633753, 29637560, 29645349, 29689697, 29707896
29719146, 29726695, 29774367, 29774383, 29782211, 29791152, 29796916
29814995, 29817278, 29828111, 29869404, 29869906, 29884958, 29893132
29933718, 29944660, 29961353, 29962927, 29962939, 29965888, 29997937
29997959, 30018017, 30025002, 30031027, 30116203, 30117469, 30128197
30160639, 30164714, 30179644, 30186245, 30196358, 30200680, 30215130
30218044, 30225443, 30252098, 30295478, 30305880, 30320029, 30365745
30387666, 30398099, 30421204, 30497057, 30499600, 30502041, 30517516
30522998, 30534664, 30578221, 30624864, 30659882, 30668407, 30698289
30758943, 30803210, 30805558, 30816938, 30822919, 30826474, 30855121
30860803, 30866988, 30889351, 30939307, 30973003, 30987088, 31001455
31013127, 31022858, 31028986, 31031715, 31046619, 31089270, 31106577
31156383, 31172207, 31194264, 31219939, 31228670, 31233170, 31306274
31335037, 31335142, 31409964, 31421316, 31501139, 31510891, 31527103
31637680, 31658943, 31667940, 31668061, 31668867, 31668915, 31675539
31696577, 31711889, 31748000, 31786838, 31799139, 31836113, 31848903
31862611, 31909295, 31927930, 31945038, 32065792, 32097882, 32105135
32119339, 32119956, 32153619, 32165915, 32186646, 32190132, 32190284
32222473, 32252213, 32296941, 32312586, 32327201, 32327208, 32335769
32359044, 32368792, 32386877, 32425124, 32436757, 32442404, 32473164
32523233, 32628221, 32676350, 32720458, 32768233, 32786309, 32876425
32892894, 33034103

Version 12.1.0.2.v24

Version 12.1.0.2.v24 includes the following:

- Patch [32328635](#): DATABASE PATCH SET UPDATE 12.1.0.2.210420
- Patch [32473164](#): OJVM PATCH SET UPDATE 12.1.0.2.210420
- Patch [32327201](#): RDBMS - DSTV36 UPDATE - TZDATA2020E
- Patch [17969866](#): Oracle GoldenGate – 46719 ENH REPLICATION SUPPORT FOR INSERTS / FULL UPDATES WITH LARGE VALUES

- Patch [20394750](#): Oracle GoldenGate – APPLY CDR RESOLUTION FAILING FOR LOBS, XML, LONG, AND OBJECTS
- Patch [24835919](#): Oracle GoldenGate – IR EXECUTING DEPENDENT TRANSACTIONS OUT OF ORDER WITH PARALLELISM GREATER THAN
- Patch [23262847](#): Oracle GoldenGate - MALFORMED REDO CAUSED OGG REPLICATION ABEND
- Patch [21171382](#): ADD CONTROL FOR AUTOMATIC CREATION OF STATS EXTENSIONS
- Patch [21091901](#): ONLINE MOVE OF HASH OR REF PARTITION CAN LEAVE LOCAL INDEXES INCONSISTENT
- Patch [25031502](#): MV QUERY REWRITE WORKLOAD HIT ORA 600 [KGL-HEAP-SIZE-EXCEEDED]
- Patch [23711335](#): CDB_UPG PDCDB CDB UPGRADE AS WHOLE TAKES 1 MORE HOUR THAN PREVIOUS LABELS IN MAY
- Patch [32616600](#): JSON Bundle Patch
- PreUpgrade Jar: preupgrade_12.1.0.2.0_18_crlf.zip

Combined patches for version 12.1.0.2.v24, released April 2021

Bugs fixed:

6194865, 6418158, 6599380, 13542050, 13787015, 13854364, 14283239
14643995, 14705949, 16090440, 16354467, 16359751, 16439813, 16619249
16756406, 16777441, 16799735, 16863642, 16870214, 16875041, 16887946
16923858, 16938780, 16941434, 17008068, 17210525, 17258582, 17274537
17319928, 17365043, 17409174, 17414008, 17432124, 17495022, 17532729
17532734, 17533661, 17551063, 17655240, 17722075, 17760068, 17835294
17867700, 17890099, 17969866, 18007682, 18043064, 18051556, 18090142
18110491, 18122373, 18191823, 18202441, 18250893, 18254023, 18272672
18288842, 18306996, 18307021, 18308268, 18324100, 18354830, 18371441
18373438, 18382302, 18411216, 18417036, 18419520, 18427406, 18436647
18440095, 18456643, 18475439, 18492302, 18499088, 18510194, 18542562
18548246, 18548433, 18549238, 18604493, 18604692, 18607546, 18610915
18618122, 18628388, 18648816, 18662619, 18673090, 18674024, 18674047
18681056, 18693124, 18700762, 18705806, 18727933, 18733351, 18740837
18742258, 18743542, 18758877, 18759211, 18774543, 18775971, 18778801
18791688, 18797519, 18798250, 18799063, 18799993, 18801391, 18803726
18810904, 18818069, 18819908, 18840932, 18841764, 18845653, 18849537
18849970, 18851894, 18856106, 18856999, 18866977, 18868646, 18885870
18886413, 18893947, 18895170, 18899974, 18900107, 18904062, 18909599

18913440, 18914624, 18921743, 18940497, 18948177, 18952766, 18952989
18964939, 18964978, 18966843, 18967382, 18973548, 18974476, 18988834
18990023, 18990693, 18999568, 19001359, 19001390, 19012119, 19013183
19016730, 19017309, 19018206, 19018447, 19022470, 19023822, 19024808
19028800, 19032777, 19035573, 19044962, 19048007, 19050649, 19052488
19054077, 19058490, 19060015, 19065556, 19065677, 19067244, 19068380
19068610, 19068970, 19074147, 19075256, 19076343, 19077215, 19079752
19081128, 19124336, 19124589, 19130152, 19131386, 19131607, 19134173
19141838, 19143550, 19146474, 19149990, 19153980, 19154375, 19155797
19157754, 19165673, 19168167, 19171086, 19174430, 19174521, 19174942
19176223, 19176326, 19176885, 19178851, 19180394, 19180770, 19183343
19185876, 19188385, 19188927, 19189317, 19189525, 19195895, 19197175
19201867, 19207117, 19211433, 19213447, 19223010, 19231857, 19238590
19243521, 19245191, 19248279, 19248799, 19258504, 19272708, 19279273
19280225, 19284031, 19285025, 19289642, 19291380, 19297917, 19303936
19304354, 19306797, 19307662, 19308965, 19309466, 19313563, 19315668
19315691, 19317646, 19326908, 19327391, 19329654, 19330795, 19332396
19333670, 19335438, 19339555, 19347458, 19354335, 19354794, 19358317
19363645, 19364502, 19366375, 19370504, 19371175, 19373893, 19375649
19382851, 19383839, 19385656, 19390567, 19390620, 19393542, 19396455
19399918, 19402853, 19404068, 19409212, 19430401, 19433930, 19434529
19439759, 19440520, 19440586, 19445860, 19448499, 19450116, 19450314
19452434, 19461270, 19461428, 19468347, 19468612, 19468991, 19469538
19475971, 19487147, 19490948, 19501299, 19503821, 19512341, 19516448
19518079, 19520602, 19523462, 19524158, 19524384, 19529868, 19532017
19534363, 19536415, 19543384, 19547370, 19547774, 19548064, 19550902
19561643, 19562381, 19566592, 19571055, 19571082, 19571367, 19577410
19578247, 19578350, 19583624, 19587324, 19590877, 19591608, 19593445
19597439, 19597583, 19601762, 19604659, 19606174, 19617921, 19619732
19623450, 19627012, 19632912, 19637186, 19639483, 19644859, 19647503
19649152, 19658708, 19662635, 19663176, 19670108, 19676012, 19676905
19680796, 19684504, 19687159, 19689979, 19693090, 19699191, 19699946
19701015, 19703301, 19705781, 19706965, 19708342, 19708632, 19718981
19721304, 19723336, 19730508, 19769480, 19769625, 19777862, 19781326
19784751, 19790243, 19791273, 19791377, 19799847, 19805359, 19809171
19811709, 19817386, 19818513, 19824871, 19831647, 19835133, 19841800
19855285, 19859472, 19865345, 19869255, 19871910, 19873610, 19877336
19879746, 19880190, 19883092, 19886165, 19888853, 19889230, 19891090
19895326, 19895362, 19896336, 19902195, 19908836, 19909862, 19915271
19928926, 19930276, 19931367, 19931709, 19932634, 19933147, 19941352
19943771, 19952975, 19957298, 19978542, 19982584, 19988852, 19989009
19990037, 19995869, 20001168, 20001466, 20009569, 20009833, 20011515
20011646, 20011897, 20017509, 20023340, 20031873, 20043616, 20048359
20052269, 20061399, 20074391, 20076781, 20078186, 20087383, 20093776

20101006, 20117253, 20118035, 20122715, 20124446, 20134113, 20134339
20139391, 20144019, 20144308, 20165574, 20169408, 20171986, 20172151
20173897, 20175161, 20181030, 20212067, 20217801, 20228093, 20229001
20233181, 20235511, 20245930, 20250147, 20267166, 20273319, 20281121
20284155, 20294666, 20296619, 20298413, 20302006, 20308798, 20315311
20318889, 20322560, 20324049, 20328248, 20331945, 20347562, 20348653
20354900, 20356733, 20361671, 20368850, 20373598, 20374572, 20378086
20382309, 20387265, 20394750, 20397490, 20401975, 20402832, 20408829
20408866, 20413820, 20415564, 20424183, 20424899, 20425790, 20428621
20432873, 20437153, 20440930, 20441797, 20446883, 20447445, 20459944
20464614, 20466322, 20466628, 20468401, 20468490, 20470877, 20471920
20474192, 20475845, 20476175, 20480209, 20493163, 20505778, 20509482
20513399, 20524085, 20528052, 20539050, 20543011, 20544065, 20554364
20557786, 20558005, 20560611, 20562898, 20564072, 20565112, 20565133
20569094, 20577490, 20581111, 20582405, 20588486, 20588502, 20591183
20596234, 20598042, 20603378, 20603431, 20613079, 20618595, 20627866
20635353, 20641666, 20657411, 20657441, 20669434, 20671094, 20673810
20677396, 20677974, 20684983, 20686773, 20688221, 20703000, 20703629
20704450, 20705577, 20707932, 20708701, 20711718, 20717081, 20717091
20717359, 20725343, 20734332, 20736227, 20746251, 20757079, 20764012
20766180, 20768076, 20778986, 20794034, 20798891, 20800890, 20801783
20803014, 20825533, 20828947, 20830459, 20831538, 20832516, 20835241
20839705, 20842388, 20844426, 20848335, 20856766, 20859910, 20860659
20862087, 20868862, 20869721, 20875898, 20877664, 20878790, 20879709
20879889, 20880215, 20882568, 20890311, 20897759, 20898391, 20898997
20899461, 20904530, 20907061, 20914870, 20919320, 20920911, 20922010
20925795, 20926021, 20929771, 20936731, 20936905, 20938170, 20951038
20952966, 20958816, 20977794, 20978259, 21037905, 21037923, 21047766
21047803, 21052842, 21059919, 21060755, 21061354, 21063322, 21068507
21072646, 21080143, 21091431, 21091901, 21095391, 21097043, 21099555
21101873, 21106027, 21132297, 21133343, 21142837, 21147908, 21153266
21157728, 21159665, 21164318, 21171382, 21172913, 21174504, 21184223
21186167, 21188532, 21188537, 21188584, 21196809, 21197626, 21220620
21225209, 21239530, 21241052, 21241829, 21246723, 21260397, 21260431
21263635, 21266085, 21270823, 21273804, 21275255, 21281532, 21281607
21285458, 21291274, 21293600, 21294938, 21296029, 21297872, 21299490
21300341, 21308727, 21315084, 21322887, 21329301, 21354456, 21373076
21373473, 21380789, 21383171, 21385422, 21387128, 21387964, 21419850
21421886, 21422580, 21424824, 21425496, 21429602, 21442094, 21450666
21475738, 21476308, 21479753, 21492036, 21502702, 21514877, 21516611
21517440, 21522582, 21526048, 21532755, 21534893, 21542577, 21555660
21560152, 21566639, 21566944, 21566993, 21575362, 21612959, 21620471
21623164, 21625179, 21626377, 21629064, 21632821, 21641414, 21641760
21644640, 21649497, 21656630, 21659726, 21665897, 21668627, 21675340

21695575, 21698350, 21744290, 21756661, 21756677, 21756699, 21764119
21773465, 21780146, 21785691, 21787056, 21794615, 21795111, 21797203
21811517, 21820934, 21821302, 21828126, 21834568, 21837606, 21842017
21842740, 21847223, 21856522, 21863727, 21868720, 21875360, 21889720
21893235, 21896069, 21899588, 21911701, 21913183, 21915719, 21917884
21924131, 21960504, 21967197, 21977186, 21977392, 22007324, 22018363
22022760, 22024071, 22037014, 22046677, 22062026, 22062517, 22068305
22070866, 22072818, 22075064, 22077517, 22083366, 22087683, 22092979
22118835, 22118851, 22139226, 22146062, 22148226, 22157363, 22160989
22165897, 22168163, 22173980, 22175564, 22176950, 22178855, 22179537
22185234, 22205263, 22214989, 22223463, 22228324, 22232606, 22233505
22238921, 22243719, 22243983, 22250006, 22256431, 22256560, 22258530
22261050, 22264489, 22268833, 22282748, 22294260, 22296366, 22301880
22305887, 22346829, 22347493, 22351572, 22353199, 22353346, 22359063
22364044, 22365117, 22366322, 22366558, 22374754, 22380919, 22454326
22454940, 22458049, 22465352, 22468255, 22468781, 22475617, 22492533
22495062, 22495673, 22496904, 22499356, 22501616, 22503297, 22507210
22507234, 22515353, 22517782, 22518784, 22519146, 22520320, 22528741
22529728, 22533631, 22536802, 22551446, 22568016, 22568177, 22568797
22606521, 22624709, 22645009, 22654475, 22657942, 22662332, 22670385
22670413, 22674709, 22675136, 22686674, 22690648, 22695831, 22707244
22707866, 22721409, 22729345, 22730454, 22733141, 22734547, 22750215
22757364, 22760595, 22760679, 22762046, 22782647, 22806698, 22808310
22809871, 22815955, 22816287, 22820579, 22820798, 22826718, 22836801
22842151, 22855193, 22862134, 22865673, 22873635, 22894101, 22894949
22897344, 22901797, 22905130, 22916353, 22922076, 22923409, 22950945
22961508, 22972770, 22977256, 23002524, 23003979, 23007241, 23008056
23019710, 23020270, 23025340, 23026585, 23028781, 23029562, 23035249
23053606, 23061453, 23061702, 23065323, 23066146, 23068169, 23080557
23082876, 23084507, 23088803, 23089357, 23096938, 23101501, 23104033
23105538, 23108128, 23115139, 23124895, 23125826, 23126410, 23140259
23148260, 23149541, 23151677, 23168363, 23170620, 23172924, 23177536
23177923, 23184013, 23184263, 23195445, 23197103, 23209741, 23220453
23229229, 23237313, 23240358, 23260854, 23262847, 23265914, 23265965
23266217, 23272045, 23294548, 23302839, 23314180, 23315153, 23315889
23324000, 23326313, 23328639, 23338911, 23342170, 23492665, 23501901
23514710, 23514911, 23521523, 23528412, 23533524, 23533807, 23543183
23548817, 23567857, 23571055, 23572982, 23584909, 23602213, 23614158
23627427, 23628685, 23642282, 23709062, 23711335, 23713236, 23717151
23725036, 23727148, 23731896, 23746128, 23854396, 24285405, 24300640
24303148, 24307571, 24308635, 24315824, 24316947, 24321547, 24326444
24341675, 24350620, 24350831, 24365589, 24385625, 24385983, 24386767
24393981, 24397438, 24401351, 24411921, 24413809, 24415926, 24416451
24421668, 24423416, 24425998, 24437510, 24448240, 24448282, 24457597

24461826, 24480567, 24509056, 24523374, 24530364, 24534298, 24555417
24560906, 24563422, 24570598, 24573817, 24577566, 24589081, 24597536
24600330, 24624166, 24642295, 24642495, 24652769, 24662775, 24674955
24683149, 24690216, 24693382, 24701840, 24713381, 24717859, 24718260
24719736, 24737064, 24737403, 24737581, 24737954, 24739928, 24752618
24766121, 24784414, 24790914, 24792678, 24796092, 24801152, 24802934
24808595, 24812585, 24817447, 24825843, 24831514, 24835538, 24835919
24848928, 24907917, 24908321, 24917972, 24920582, 24929210, 24966594
25029423, 25031502, 25034396, 25042823, 25047724, 25051465, 25056052
25058080, 25060506, 25067795, 25076732, 25076756, 25077278, 25079710
25091141, 25093739, 25093872, 25099339, 25107334, 25110233, 25115178
25123585, 25150925, 25161298, 25165496, 25178179, 25179774, 25192729
25205368, 25210690, 25240188, 25248384, 25264559, 25288078, 25300427
25307368, 25313154, 25328093, 25330273, 25353983, 25357142, 25377044
25392535, 25405687, 25415713, 25417056, 25417958, 25423453, 25427662
25429959, 25437695, 25437699, 25459958, 25472885, 25475853, 25476125
25477657, 25482971, 25483815, 25484507, 25486384, 25489342, 25489367
25489607, 25490238, 25492379, 25494379, 25494413, 25495682, 25539063
25546608, 25547060, 25551676, 25555252, 25575628, 25579761, 25599425
25600342, 25600421, 25602488, 25606091, 25612095, 25616268, 25633101
25634317, 25635149, 25639019, 25643818, 25643931, 25649873, 25653109
25654936, 25655390, 25669791, 25670786, 25695903, 25699321, 25722055
25733479, 25740844, 25743479, 25760195, 25764020, 25766822, 25775213
25780343, 25789277, 25790353, 25809524, 25822410, 25823532, 25823754
25856821, 25861398, 25879984, 25881255, 25885148, 25890782, 25897615
25904490, 25914276, 25919622, 25947799, 25957038, 25982666, 25986062
25997810, 26007010, 26023002, 26023025, 26024732, 26027162, 26029780
26039623, 26088426, 26089440, 26110259, 26110632, 26111842, 26121990
26126424, 26153977, 26169341, 26187943, 26198757, 26198926, 26203182
26243698, 26245237, 26248143, 26256131, 26262953, 26263721, 26318200
26318627, 26324206, 26325856, 26336977, 26353617, 26366517, 26412540
26430737, 26439748, 26444887, 26446098, 26482376, 26513067, 26513709
26544823, 26546664, 26546754, 26556014, 26569225, 26570171, 26575788
26633558, 26635845, 26637592, 26637824, 26654363, 26658759, 26714910
26716835, 26729494, 26758193, 26768025, 26784509, 26822620, 26828994
26832296, 26844406, 26875822, 26898563, 26968670, 26999139, 27000663
27000690, 27001733, 27012701, 27015449, 27033652, 27034890, 27052607
27060167, 27072923, 27086138, 27092508, 27097854, 27101105, 27122162
27133662, 27169796, 27185188, 27199245, 27207110, 27207634, 27213224
27217412, 27223075, 27229389, 27255377, 27274536, 27276231, 27285244
27303938, 27314206, 27314390, 27314697, 27337759, 27348081, 27351628
27370965, 27375542, 27397048, 27404573, 27424405, 27433385, 27434193
27441326, 27443406, 27445727, 27452046, 27461789, 27461842, 27468303
27475603, 27487919, 27534509, 27548131, 27565906, 27567477, 27611612

27620950, 27623159, 27629756, 27634991, 27642235, 27667128, 27710072
27726780, 27729678, 27745728, 27751755, 27829295, 27846298, 27847259
27897759, 27923320, 27929509, 27938623, 27952577, 27952584, 27986817
27995248, 27997875, 28000269, 28022101, 28023399, 28023482, 28024793
28025414, 28026866, 28043157, 28072383, 28079127, 28098160, 28125601
28164480, 28174827, 28199085, 28215510, 28250929, 28281094, 28302049
28305362, 28357401, 28369092, 28371123, 28384353, 28390273, 28394726
28420042, 28423598, 28432129, 28440711, 28501075, 28502113, 28502128
28507324, 28542455, 28566241, 28578164, 28587723, 28612674, 28636676
28639299, 28683167, 28708023, 28714988, 28758090, 28774416, 28790654
28797711, 28821847, 28849751, 28852325, 28867992, 28891741, 28891984
28915933, 28950969, 28986231, 28993590, 29006527, 29009513, 29027694
29030780, 29061016, 29142109, 29163567, 29170232, 29189889, 29200700
29247712, 29250317, 29251241, 29254615, 29260956, 29342099, 29343156
29372460, 29378913, 29379978, 29388020, 29408136, 29434301, 29437712
29464779, 29477015, 29483626, 29483672, 29483723, 29483771, 29500257
29500963, 29511611, 29559723, 29621961, 29625065, 29633753, 29637560
29645349, 29689697, 29707896, 29719146, 29726695, 29774367, 29774383
29782211, 29791152, 29796916, 29814995, 29817278, 29828111, 29869404
29869906, 29884958, 29893132, 29933718, 29944660, 29961353, 29962927
29962939, 29965888, 29997937, 30018017, 30031027, 30116203, 30117469
30128197, 30160639, 30164714, 30179644, 30186245, 30196358, 30200680
30215130, 30218044, 30225443, 30252098, 30295478, 30305880, 30320029
30365745, 30387666, 30421204, 30497057, 30499600, 30502041, 30517516
30522998, 30534664, 30578221, 30624864, 30659882, 30668407, 30698289
30758943, 30803210, 30805558, 30816938, 30822919, 30826474, 30855121
30860803, 30866988, 30889351, 30973003, 30987088, 31001455, 31013127
31022858, 31028986, 31031715, 31046619, 31106577, 31156383, 31172207
31194264, 31219939, 31228670, 31233170, 31306274, 31335037, 31335142
31501139, 31637680, 31658943, 31668061, 31668867, 31668915, 31675539
31696577, 31711889, 31748000, 31786838, 31799139, 31836113, 31862611
31909295, 31927930, 31945038, 32065792, 32097882, 32105135, 32119956
32165915, 32186646, 32222473, 32296941, 32327201, 32328635, 32436757
32473164, 32523233

Version 12.1.0.2.v23

Version 12.1.0.2.v23 includes the following:

- Patch [31985579](#): DATABASE PATCH SET UPDATE 12.1.0.2.210119
- Patch [32119956](#): OJVM PATCH SET UPDATE 12.1.0.2.210119

- Patch [31335037](#): RDBMS - DSTV35 UPDATE - TZDATA2020A
- Patch [31335142](#): DSTV35 UPDATE - TZDATA2020A - NEED OJVM FIX
- Patch [28730253](#): SUPPORT NEW ERA REIWA FOR JAPANESE IMPERIAL CALENDAR
- Patch [17969866](#): Oracle GoldenGate – 46719 ENH REPLICATION SUPPORT FOR INSERTS / FULL UPDATES WITH LARGE VALUES
- Patch [20394750](#): Oracle GoldenGate – APPLY CDR RESOLUTION FAILING FOR LOBS, XML, LONG, AND OBJECTS
- Patch [24835919](#): Oracle GoldenGate – IR EXECUTING DEPENDENT TRANSACTIONS OUT OF ORDER WITH PARALLELISM GREATER THAN
- Patch [23262847](#): Oracle GoldenGate - MALFORMED REDO CAUSED OGG REPLICATION ABEND
- Patch [21171382](#): ADD CONTROL FOR AUTOMATIC CREATION OF STATS EXTENSIONS
- Patch [21091901](#): ONLINE MOVE OF HASH OR REF PARTITION CAN LEAVE LOCAL INDEXES INCONSISTENT
- Patch [25031502](#): MV QUERY REWRITE WORKLOAD HIT ORA 600 [KGL-HEAP-SIZE-EXCEEDED]
- Patch [23711335](#): CDB_UPG PDCDB CDB UPGRADE AS WHOLE TAKES 1 MORE HOUR THAN PREVIOUS LABELS IN MAY
- Patch [32327179](#): JSON Bundle Patch
- PreUpgrade Jar: preupgrade_12.1.0.2.0_18_crlf.zip
- Java Cryptography Extension (JCE): Unlimited Strength Jurisdiction Policy Files for JVM version 6

Combined patches for version 12.1.0.2.v23, released February 2021

Bugs fixed:

```
6194865, 6418158, 6599380, 13542050, 13787015, 13854364, 14283239
14643995, 14705949, 16090440, 16354467, 16359751, 16439813, 16619249
16756406, 16777441, 16799735, 16863642, 16870214, 16875041, 16887946
16923858, 16938780, 16941434, 17008068, 17210525, 17258582, 17274537
17319928, 17365043, 17409174, 17414008, 17432124, 17495022, 17532729
17532734, 17533661, 17551063, 17655240, 17722075, 17760068, 17835294
17867700, 17890099, 17969866, 18007682, 18043064, 18051556, 18090142
18110491, 18122373, 18191823, 18202441, 18250893, 18254023, 18272672
18288842, 18306996, 18307021, 18308268, 18324100, 18354830, 18371441
18373438, 18382302, 18411216, 18417036, 18419520, 18427406, 18436647
18440095, 18456643, 18475439, 18492302, 18499088, 18510194, 18542562
```

18548246, 18548433, 18549238, 18604493, 18604692, 18607546, 18610915
18618122, 18628388, 18648816, 18662619, 18673090, 18674024, 18674047
18681056, 18693124, 18700762, 18705806, 18727933, 18733351, 18740837
18742258, 18743542, 18758877, 18759211, 18774543, 18775971, 18778801
18791688, 18797519, 18798250, 18799063, 18799993, 18801391, 18803726
18810904, 18818069, 18819908, 18840932, 18841764, 18845653, 18849537
18849970, 18851894, 18856106, 18856999, 18866977, 18868646, 18885870
18886413, 18893947, 18895170, 18899974, 18900107, 18904062, 18909599
18913440, 18914624, 18921743, 18940497, 18948177, 18952766, 18952989
18964939, 18964978, 18966843, 18967382, 18973548, 18974476, 18988834
18990023, 18990693, 18999568, 19001359, 19001390, 19012119, 19013183
19016730, 19017309, 19018206, 19018447, 19022470, 19023822, 19024808
19028800, 19032777, 19035573, 19044962, 19048007, 19050649, 19052488
19054077, 19058490, 19060015, 19065556, 19065677, 19067244, 19068380
19068610, 19068970, 19074147, 19075256, 19076343, 19077215, 19079752
19081128, 19124336, 19124589, 19130152, 19131386, 19131607, 19134173
19141838, 19143550, 19146474, 19149990, 19153980, 19154375, 19155797
19157754, 19165673, 19168167, 19171086, 19174430, 19174521, 19174942
19176223, 19176326, 19176885, 19178851, 19180394, 19180770, 19183343
19185876, 19188385, 19188927, 19189317, 19189525, 19195895, 19197175
19201867, 19207117, 19211433, 19213447, 19223010, 19231857, 19238590
19243521, 19245191, 19248279, 19248799, 19258504, 19272708, 19279273
19280225, 19284031, 19285025, 19289642, 19291380, 19297917, 19303936
19304354, 19306797, 19307662, 19308965, 19309466, 19313563, 19315668
19315691, 19317646, 19326908, 19327391, 19329654, 19330795, 19332396
19333670, 19335438, 19339555, 19347458, 19354335, 19354794, 19358317
19363645, 19364502, 19366375, 19370504, 19371175, 19373893, 19375649
19382851, 19383839, 19385656, 19390567, 19390620, 19393542, 19396455
19399918, 19402853, 19404068, 19409212, 19430401, 19433930, 19434529
19439759, 19440520, 19440586, 19445860, 19448499, 19450116, 19450314
19452434, 19461270, 19461428, 19468347, 19468612, 19468991, 19469538
19475971, 19487147, 19490948, 19501299, 19503821, 19512341, 19516448
19518079, 19520602, 19523462, 19524158, 19524384, 19529868, 19532017
19534363, 19536415, 19543384, 19547370, 19547774, 19548064, 19550902
19561643, 19562381, 19566592, 19571055, 19571082, 19571367, 19577410
19578247, 19578350, 19583624, 19587324, 19590877, 19591608, 19593445
19597439, 19597583, 19601762, 19604659, 19606174, 19617921, 19619732
19623450, 19627012, 19632912, 19637186, 19639483, 19644859, 19647503
19649152, 19658708, 19662635, 19663176, 19670108, 19676012, 19676905
19680796, 19684504, 19687159, 19689979, 19693090, 19699191, 19699946
19701015, 19703301, 19705781, 19706965, 19708342, 19708632, 19718981
19721304, 19723336, 19730508, 19769480, 19769625, 19777862, 19781326
19784751, 19790243, 19791273, 19791377, 19799847, 19805359, 19809171
19811709, 19817386, 19818513, 19824871, 19831647, 19835133, 19841800

19855285, 19859472, 19865345, 19869255, 19871910, 19873610, 19877336
19879746, 19880190, 19883092, 19886165, 19888853, 19889230, 19891090
19895326, 19895362, 19896336, 19902195, 19908836, 19909862, 19915271
19928926, 19930276, 19931367, 19931709, 19932634, 19933147, 19941352
19943771, 19952975, 19957298, 19978542, 19982584, 19988852, 19989009
19990037, 19995869, 20001168, 20001466, 20009569, 20009833, 20011515
20011646, 20011897, 20017509, 20023340, 20031873, 20043616, 20048359
20052269, 20061399, 20074391, 20076781, 20078186, 20087383, 20093776
20101006, 20117253, 20118035, 20122715, 20124446, 20134113, 20134339
20139391, 20144019, 20144308, 20165574, 20169408, 20171986, 20172151
20173897, 20175161, 20181030, 20212067, 20217801, 20228093, 20229001
20233181, 20235511, 20245930, 20250147, 20267166, 20273319, 20281121
20284155, 20294666, 20296619, 20298413, 20302006, 20308798, 20315311
20318889, 20322560, 20324049, 20328248, 20331945, 20347562, 20348653
20354900, 20356733, 20361671, 20368850, 20373598, 20374572, 20378086
20382309, 20387265, 20394750, 20397490, 20401975, 20402832, 20408829
20408866, 20413820, 20415564, 20424183, 20424899, 20425790, 20428621
20432873, 20437153, 20440930, 20441797, 20446883, 20447445, 20459944
20464614, 20466322, 20466628, 20468401, 20468490, 20470877, 20471920
20474192, 20475845, 20476175, 20480209, 20493163, 20505778, 20509482
20513399, 20524085, 20528052, 20539050, 20543011, 20544065, 20554364
20557786, 20558005, 20560611, 20562898, 20564072, 20565112, 20565133
20569094, 20577490, 20581111, 20582405, 20588486, 20588502, 20591183
20596234, 20598042, 20603378, 20603431, 20613079, 20618595, 20627866
20635353, 20641666, 20657411, 20657441, 20669434, 20671094, 20673810
20677396, 20677974, 20684983, 20686773, 20688221, 20703000, 20703629
20704450, 20705577, 20707932, 20708701, 20711718, 20717081, 20717091
20717359, 20725343, 20734332, 20736227, 20746251, 20757079, 20764012
20766180, 20768076, 20778986, 20794034, 20798891, 20800890, 20801783
20803014, 20825533, 20828947, 20830459, 20831538, 20832516, 20835241
20839705, 20842388, 20844426, 20848335, 20856766, 20859910, 20860659
20862087, 20868862, 20869721, 20875898, 20877664, 20878790, 20879709
20879889, 20880215, 20882568, 20890311, 20897759, 20898391, 20898997
20899461, 20904530, 20907061, 20914870, 20919320, 20920911, 20922010
20925795, 20926021, 20929771, 20936731, 20936905, 20938170, 20951038
20952966, 20958816, 20977794, 20978259, 21037905, 21037923, 21047766
21047803, 21052842, 21059919, 21060755, 21061354, 21063322, 21068507
21072646, 21080143, 21091431, 21091901, 21095391, 21097043, 21099555
21101873, 21106027, 21132297, 21133343, 21142837, 21147908, 21153266
21157728, 21159665, 21164318, 21171382, 21172913, 21174504, 21184223
21186167, 21188532, 21188537, 21188584, 21196809, 21197626, 21220620
21225209, 21239530, 21241052, 21241829, 21246723, 21260397, 21260431
21263635, 21266085, 21270823, 21273804, 21275255, 21281532, 21281607
21285458, 21291274, 21293600, 21294938, 21296029, 21297872, 21299490

21300341, 21308727, 21315084, 21322887, 21329301, 21354456, 21373076
21373473, 21380789, 21383171, 21385422, 21387128, 21387964, 21419850
21421886, 21422580, 21424824, 21425496, 21429602, 21442094, 21450666
21476308, 21479753, 21492036, 21502702, 21514877, 21516611, 21517440
21522582, 21526048, 21532755, 21534893, 21542577, 21555660, 21560152
21566639, 21566944, 21566993, 21575362, 21612959, 21620471, 21623164
21625179, 21626377, 21629064, 21632821, 21641414, 21641760, 21644640
21649497, 21656630, 21659726, 21665897, 21668627, 21675340, 21695575
21698350, 21744290, 21756661, 21756677, 21756699, 21764119, 21773465
21780146, 21785691, 21787056, 21794615, 21795111, 21797203, 21811517
21820934, 21821302, 21828126, 21834568, 21837606, 21842017, 21842740
21847223, 21856522, 21863727, 21868720, 21875360, 21889720, 21893235
21896069, 21899588, 21911701, 21913183, 21915719, 21917884, 21924131
21960504, 21967197, 21977186, 21977392, 22007324, 22018363, 22022760
22024071, 22037014, 22046677, 22062026, 22062517, 22068305, 22070866
22072818, 22075064, 22077517, 22083366, 22087683, 22092979, 22118835
22118851, 22139226, 22146062, 22148226, 22157363, 22160989, 22165897
22168163, 22173980, 22175564, 22176950, 22178855, 22179537, 22185234
22205263, 22214989, 22223463, 22228324, 22232606, 22233505, 22238921
22243719, 22243983, 22250006, 22256431, 22256560, 22258530, 22261050
22264489, 22268833, 22282748, 22294260, 22296366, 22301880, 22305887
22346829, 22347493, 22351572, 22353199, 22353346, 22359063, 22364044
22365117, 22366322, 22366558, 22374754, 22380919, 22454326, 22454940
22458049, 22465352, 22468255, 22468781, 22475617, 22492533, 22495062
22495673, 22496904, 22499356, 22501616, 22503297, 22507210, 22507234
22515353, 22517782, 22518784, 22519146, 22520320, 22528741, 22529728
22533631, 22536802, 22551446, 22568016, 22568177, 22568797, 22606521
22624709, 22645009, 22654475, 22657942, 22662332, 22670385, 22670413
22674709, 22675136, 22686674, 22690648, 22695831, 22707244, 22707866
22721409, 22729345, 22730454, 22733141, 22734547, 22750215, 22757364
22760595, 22760679, 22762046, 22782647, 22806698, 22808310, 22809871
22815955, 22816287, 22820579, 22820798, 22826718, 22836801, 22842151
22855193, 22862134, 22865673, 22873635, 22894101, 22894949, 22897344
22901797, 22905130, 22916353, 22922076, 22923409, 22950945, 22961508
22972770, 22977256, 23002524, 23003979, 23007241, 23008056, 23019710
23020270, 23025340, 23026585, 23028781, 23029562, 23035249, 23053606
23061453, 23061702, 23065323, 23066146, 23068169, 23080557, 23082876
23084507, 23088803, 23089357, 23096938, 23101501, 23104033, 23105538
23108128, 23115139, 23124895, 23125826, 23126410, 23140259, 23148260
23149541, 23151677, 23168363, 23170620, 23172924, 23177536, 23177923
23184013, 23184263, 23195445, 23197103, 23209741, 23220453, 23229229
23237313, 23240358, 23260854, 23262847, 23265914, 23265965, 23266217
23272045, 23294548, 23302839, 23314180, 23315153, 23315889, 23324000
23326313, 23328639, 23338911, 23342170, 23492665, 23501901, 23514710

23514911, 23521523, 23528412, 23533524, 23533807, 23543183, 23548817
23567857, 23571055, 23572982, 23584909, 23602213, 23614158, 23628685
23642282, 23709062, 23711335, 23713236, 23717151, 23725036, 23727148
23731896, 23746128, 23854396, 24285405, 24300640, 24303148, 24307571
24308635, 24315824, 24316947, 24321547, 24326444, 24341675, 24350620
24350831, 24365589, 24385625, 24385983, 24386767, 24393981, 24397438
24401351, 24411921, 24413809, 24415926, 24416451, 24421668, 24423416
24425998, 24437510, 24448240, 24448282, 24457597, 24461826, 24509056
24523374, 24530364, 24534298, 24555417, 24560906, 24563422, 24570598
24573817, 24577566, 24589081, 24597536, 24600330, 24624166, 24642295
24642495, 24652769, 24662775, 24674955, 24683149, 24690216, 24693382
24701840, 24713381, 24717859, 24718260, 24719736, 24737064, 24737403
24737581, 24737954, 24739928, 24752618, 24766121, 24784414, 24790914
24792678, 24796092, 24801152, 24802934, 24808595, 24812585, 24817447
24825843, 24831514, 24835538, 24835919, 24848928, 24907917, 24908321
24917972, 24920582, 24929210, 24966594, 25029423, 25031502, 25034396
25042823, 25047724, 25051465, 25056052, 25058080, 25060506, 25067795
25076732, 25076756, 25077278, 25079710, 25091141, 25093739, 25093872
25099339, 25107334, 25110233, 25115178, 25123585, 25150925, 25161298
25165496, 25178179, 25179774, 25192729, 25205368, 25210690, 25240188
25248384, 25264559, 25300427, 25307368, 25313154, 25328093, 25330273
25353983, 25357142, 25377044, 25392535, 25405687, 25415713, 25417056
25417958, 25423453, 25427662, 25429959, 25437695, 25437699, 25459958
25472885, 25475853, 25476125, 25477657, 25482971, 25483815, 25484507
25486384, 25489342, 25489367, 25489607, 25490238, 25492379, 25494379
25494413, 25495682, 25539063, 25546608, 25547060, 25551676, 25555252
25575628, 25579761, 25599425, 25600342, 25600421, 25602488, 25606091
25612095, 25616268, 25633101, 25634317, 25635149, 25639019, 25643818
25643931, 25649873, 25653109, 25654936, 25655390, 25669791, 25670786
25695903, 25699321, 25722055, 25733479, 25740844, 25743479, 25760195
25764020, 25766822, 25775213, 25780343, 25789277, 25790353, 25809524
25822410, 25823532, 25823754, 25856821, 25861398, 25879984, 25881255
25885148, 25890782, 25897615, 25904490, 25914276, 25919622, 25947799
25957038, 25982666, 25986062, 25997810, 26007010, 26023002, 26023025
26024732, 26027162, 26029780, 26039623, 26088426, 26089440, 26110259
26110632, 26111842, 26121990, 26126424, 26153977, 26169341, 26187943
26198757, 26198926, 26203182, 26243698, 26245237, 26248143, 26256131
26262953, 26263721, 26318200, 26318627, 26324206, 26325856, 26336977
26353617, 26366517, 26412540, 26430737, 26439748, 26444887, 26446098
26482376, 26513067, 26513709, 26544823, 26546664, 26546754, 26556014
26569225, 26570171, 26575788, 26633558, 26635845, 26637592, 26637824
26654363, 26658759, 26714910, 26716835, 26729494, 26758193, 26768025
26784509, 26822620, 26828994, 26832296, 26844406, 26875822, 26898563
26968670, 26999139, 27000663, 27000690, 27001733, 27012701, 27015449

27033652, 27034890, 27052607, 27060167, 27072923, 27086138, 27092508
27097854, 27101105, 27122162, 27133662, 27169796, 27185188, 27199245
27207110, 27207634, 27213224, 27217412, 27223075, 27229389, 27255377
27274536, 27276231, 27285244, 27303938, 27314206, 27314390, 27314697
27337759, 27348081, 27351628, 27370965, 27375542, 27397048, 27404573
27424405, 27433385, 27434193, 27441326, 27445727, 27452046, 27461789
27461842, 27468303, 27475603, 27487919, 27534509, 27548131, 27565906
27567477, 27611612, 27620950, 27623159, 27629756, 27634991, 27642235
27710072, 27726780, 27729678, 27745728, 27751755, 27829295, 27846298
27847259, 27897759, 27923320, 27929509, 27938623, 27952577, 27952584
27986817, 27995248, 27997875, 28000269, 28022101, 28023399, 28023482
28024793, 28025414, 28026866, 28043157, 28072383, 28079127, 28098160
28125601, 28164480, 28174827, 28199085, 28215510, 28250929, 28281094
28302049, 28305362, 28357401, 28369092, 28371123, 28384353, 28390273
28394726, 28420042, 28423598, 28432129, 28440711, 28501075, 28502113
28502128, 28507324, 28542455, 28566241, 28578164, 28587723, 28612674
28636676, 28639299, 28683167, 28708023, 28714988, 28730253, 28758090
28774416, 28790654, 28797711, 28821847, 28849751, 28852325, 28867992
28891741, 28891984, 28915933, 28950969, 28986231, 28993590, 29006527
29009513, 29027694, 29030780, 29061016, 29142109, 29163567, 29170232
29189889, 29200700, 29247712, 29250317, 29251241, 29254615, 29260956
29342099, 29343156, 29372460, 29378913, 29379978, 29388020, 29408136
29434301, 29437712, 29464779, 29477015, 29483626, 29483672, 29483723
29483771, 29500257, 29500963, 29511611, 29559723, 29621961, 29625065
29633753, 29637560, 29645349, 29707896, 29719146, 29726695, 29774367
29774383, 29782211, 29791152, 29796916, 29814995, 29817278, 29828111
29869404, 29869906, 29884958, 29893132, 29944660, 29961353, 29962927
29962939, 29965888, 29997937, 30018017, 30031027, 30116203, 30117469
30128197, 30160639, 30164714, 30179644, 30186245, 30196358, 30200680
30215130, 30218044, 30225443, 30252098, 30295478, 30305880, 30320029
30365745, 30387666, 30421204, 30497057, 30499600, 30502041, 30517516
30522998, 30534664, 30578221, 30624864, 30659882, 30668407, 30698289
30758943, 30803210, 30805558, 30816938, 30826474, 30855121, 30860803
30866988, 30889351, 30973003, 30987088, 31001455, 31013127, 31022858
31028986, 31031715, 31046619, 31106577, 31156383, 31172207, 31194264
31219939, 31228670, 31306274, 31335037, 31335142, 31501139, 31637680
31668061, 31668867, 31668915, 31675539, 31711889, 31786838, 31799139
31927930, 31985579, 32065792, 32097882, 32119956, 32165915, 32186646
32296941

Version 12.1.0.2.v22

Version 12.1.0.2.v22 includes the following:

- Patch [31550110](#): Database Patch Set Update : 12.1.0.2.201020 (31550110)
- Patch [31668915](#): Database PSU 12.1.0.2.201020, Oracle JavaVM Component (OCT2020)
- Patch [31335037](#): RDBMS - DSTV35 UPDATE - TZDATA2020A
- Patch [31335142](#): DSTV35 UPDATE - TZDATA2020A - NEED OJVM FIX
- Patch [17969866](#): Oracle GoldenGate – 46719 ENH REPLICATION SUPPORT FOR INSERTS / FULL UPDATES WITH LARGE VALUES
- Patch [20394750](#): Oracle GoldenGate – APPLY CDR RESOLUTION FAILING FOR LOBS, XML, LONG, AND OBJECTS
- Patch [24835919](#): Oracle GoldenGate – IR EXECUTING DEPENDENT TRANSACTIONS OUT OF ORDER WITH PARALLELISM GREATER THAN
- Patch [23262847](#): Oracle GoldenGate - MALFORMED REDO CAUSED OGG REPLICATION ABEND
- Patch [21091901](#): ONLINE MOVE OF HASH OR REF PARTITION CAN LEAVE LOCAL INDEXES INCONSISTENT
- Patch [21171382](#): ADD CONTROL FOR AUTOMATIC CREATION OF STATS EXTENSIONS
- Patch [23711335](#): CDB_UPG PDCDB CDB UPGRADE AS WHOLE TAKES 1 MORE HOUR THAN PREVIOUS LABELS IN MAY
- Patch [25031502](#): MV QUERY REWRITE WORKLOAD HIT ORA 600 [KGL-HEAP-SIZE-EXCEEDED]
- Patch [31911280](#): JSON Bundle Patch
- PreUpgrade Jar: preupgrade_12.1.0.2.0_18_crlf.zip
- Support for setting and unsetting system diagnostic events using procedures in the `rdsadmin.rdsadmin_util` package

For more information, see [Setting and unsetting system diagnostic events](#) in the *Amazon RDS User Guide*.

- Support for the procedure `rdsadmin_util.truncate_apply$_cdr_info` described in [Integrated REPLICAT slow due to query on sys."_DBA_APPLY_CDR_INFO"](#) in the *Amazon RDS User Guide*.

Combined patches for version 12.1.0.2.v22, released October 2020

Bugs fixed:

6194865, 6418158, 6599380, 13542050, 13787015, 13854364, 14283239
14643995, 14705949, 16090440, 16354467, 16359751, 16439813, 16619249
16756406, 16777441, 16799735, 16863642, 16870214, 16875041, 16887946
16923858, 16938780, 16941434, 17008068, 17210525, 17258582, 17274537
17319928, 17365043, 17409174, 17414008, 17432124, 17495022, 17532729
17532734, 17533661, 17551063, 17655240, 17722075, 17760068, 17835294
17867700, 17890099, 17969866, 18007682, 18043064, 18051556, 18090142
18110491, 18122373, 18191823, 18202441, 18250893, 18254023, 18272672
18288842, 18306996, 18307021, 18308268, 18324100, 18354830, 18371441
18373438, 18382302, 18411216, 18417036, 18419520, 18427406, 18436647
18440095, 18456643, 18475439, 18492302, 18499088, 18510194, 18542562
18548246, 18548433, 18549238, 18604493, 18604692, 18607546, 18610915
18618122, 18628388, 18648816, 18662619, 18673090, 18674024, 18674047
18681056, 18693124, 18700762, 18705806, 18727933, 18733351, 18740837
18742258, 18743542, 18758877, 18759211, 18774543, 18775971, 18778801
18791688, 18797519, 18798250, 18799063, 18799993, 18801391, 18803726
18810904, 18818069, 18819908, 18840932, 18841764, 18845653, 18849537
18849970, 18851894, 18856106, 18856999, 18866977, 18868646, 18885870
18886413, 18893947, 18895170, 18899974, 18900107, 18904062, 18909599
18913440, 18914624, 18921743, 18940497, 18948177, 18952766, 18952989
18964939, 18964978, 18966843, 18967382, 18973548, 18974476, 18988834
18990023, 18990693, 18999568, 19001359, 19001390, 19012119, 19013183
19016730, 19017309, 19018206, 19018447, 19022470, 19023822, 19024808
19028800, 19032777, 19035573, 19044962, 19048007, 19050649, 19052488
19054077, 19058490, 19060015, 19065556, 19065677, 19067244, 19068380
19068610, 19068970, 19074147, 19075256, 19076343, 19077215, 19079752
19081128, 19124336, 19124589, 19130152, 19131386, 19131607, 19134173
19141838, 19143550, 19146474, 19149990, 19153980, 19154375, 19155797
19157754, 19165673, 19168167, 19171086, 19174430, 19174521, 19174942
19176223, 19176326, 19176885, 19178851, 19180394, 19180770, 19183343
19185876, 19188385, 19188927, 19189317, 19189525, 19195895, 19197175
19201867, 19207117, 19211433, 19213447, 19223010, 19231857, 19238590
19243521, 19245191, 19248279, 19248799, 19258504, 19272708, 19279273
19280225, 19284031, 19285025, 19289642, 19291380, 19297917, 19303936
19304354, 19306797, 19307662, 19308965, 19309466, 19313563, 19315668
19315691, 19317646, 19326908, 19327391, 19329654, 19330795, 19332396
19333670, 19335438, 19339555, 19347458, 19354335, 19354794, 19358317
19363645, 19364502, 19366375, 19370504, 19371175, 19373893, 19375649

19382851, 19383839, 19385656, 19390567, 19390620, 19393542, 19396455
19399918, 19402853, 19404068, 19409212, 19430401, 19433930, 19434529
19439759, 19440520, 19440586, 19445860, 19448499, 19450116, 19450314
19452434, 19461270, 19461428, 19468347, 19468612, 19468991, 19469538
19475971, 19487147, 19490948, 19501299, 19503821, 19512341, 19516448
19518079, 19520602, 19523462, 19524158, 19524384, 19529868, 19532017
19534363, 19536415, 19543384, 19547370, 19547774, 19548064, 19550902
19561643, 19562381, 19566592, 19571055, 19571082, 19571367, 19577410
19578247, 19578350, 19583624, 19587324, 19590877, 19591608, 19593445
19597439, 19597583, 19601762, 19604659, 19606174, 19617921, 19619732
19623450, 19627012, 19632912, 19637186, 19639483, 19644859, 19647503
19649152, 19658708, 19662635, 19663176, 19670108, 19676012, 19676905
19680796, 19684504, 19687159, 19689979, 19693090, 19699191, 19699946
19701015, 19703301, 19705781, 19706965, 19708342, 19708632, 19718981
19721304, 19723336, 19730508, 19769480, 19769625, 19777862, 19781326
19784751, 19790243, 19791273, 19791377, 19799847, 19805359, 19809171
19811709, 19817386, 19818513, 19824871, 19831647, 19835133, 19841800
19855285, 19859472, 19865345, 19869255, 19871910, 19873610, 19877336
19879746, 19880190, 19883092, 19886165, 19888853, 19889230, 19891090
19895326, 19895362, 19896336, 19902195, 19908836, 19909862, 19915271
19928926, 19930276, 19931367, 19931709, 19932634, 19933147, 19941352
19943771, 19952975, 19957298, 19978542, 19982584, 19988852, 19989009
19990037, 19995869, 20001168, 20001466, 20009569, 20009833, 20011515
20011646, 20011897, 20017509, 20023340, 20031873, 20043616, 20048359
20052269, 20061399, 20074391, 20076781, 20078186, 20087383, 20093776
20101006, 20117253, 20118035, 20122715, 20124446, 20134113, 20134339
20139391, 20144019, 20144308, 20165574, 20169408, 20171986, 20172151
20173897, 20175161, 20181030, 20212067, 20217801, 20228093, 20229001
20233181, 20235511, 20245930, 20250147, 20267166, 20273319, 20281121
20284155, 20294666, 20296619, 20298413, 20302006, 20308798, 20315311
20318889, 20322560, 20324049, 20328248, 20331945, 20347562, 20348653
20354900, 20356733, 20361671, 20368850, 20373598, 20374572, 20378086
20382309, 20387265, 20394750, 20397490, 20401975, 20402832, 20408829
20408866, 20413820, 20415564, 20424183, 20424899, 20425790, 20428621
20432873, 20437153, 20440930, 20441797, 20446883, 20447445, 20459944
20464614, 20466322, 20466628, 20468401, 20468490, 20470877, 20471920
20474192, 20475845, 20476175, 20480209, 20493163, 20505778, 20509482
20513399, 20524085, 20528052, 20539050, 20543011, 20544065, 20554364
20557786, 20558005, 20560611, 20562898, 20564072, 20565112, 20565133
20569094, 20577490, 20581111, 20582405, 20588486, 20588502, 20591183
20596234, 20598042, 20603378, 20603431, 20613079, 20618595, 20627866
20635353, 20641666, 20657411, 20657441, 20669434, 20671094, 20673810
20677396, 20677974, 20684983, 20686773, 20688221, 20703000, 20703629
20704450, 20705577, 20707932, 20708701, 20711718, 20717081, 20717091

20717359, 20725343, 20734332, 20736227, 20746251, 20757079, 20764012
20766180, 20768076, 20778986, 20794034, 20798891, 20800890, 20801783
20803014, 20825533, 20828947, 20830459, 20831538, 20832516, 20835241
20839705, 20842388, 20844426, 20848335, 20856766, 20859910, 20860659
20862087, 20868862, 20869721, 20875898, 20877664, 20878790, 20879709
20879889, 20880215, 20882568, 20890311, 20897759, 20898391, 20898997
20899461, 20904530, 20907061, 20914870, 20919320, 20920911, 20922010
20925795, 20926021, 20929771, 20936731, 20936905, 20938170, 20951038
20952966, 20958816, 20977794, 20978259, 21037905, 21037923, 21047766
21047803, 21052842, 21059919, 21060755, 21061354, 21063322, 21068507
21072646, 21080143, 21091431, 21091901, 21095391, 21097043, 21099555
21101873, 21106027, 21132297, 21133343, 21142837, 21147908, 21153266
21157728, 21159665, 21164318, 21171382, 21172913, 21174504, 21184223
21186167, 21188532, 21188537, 21188584, 21196809, 21197626, 21220620
21225209, 21239530, 21241052, 21241829, 21246723, 21260397, 21260431
21263635, 21266085, 21270823, 21273804, 21275255, 21281532, 21281607
21285458, 21291274, 21293600, 21294938, 21296029, 21297872, 21299490
21300341, 21308727, 21315084, 21322887, 21329301, 21354456, 21373076
21373473, 21380789, 21383171, 21385422, 21387128, 21387964, 21419850
21421886, 21422580, 21424824, 21425496, 21429602, 21442094, 21450666
21476308, 21479753, 21492036, 21502702, 21514877, 21516611, 21517440
21522582, 21526048, 21532755, 21534893, 21542577, 21555660, 21560152
21566639, 21566944, 21566993, 21575362, 21612959, 21620471, 21623164
21625179, 21626377, 21629064, 21632821, 21641414, 21641760, 21644640
21649497, 21656630, 21659726, 21665897, 21668627, 21675340, 21695575
21698350, 21744290, 21756661, 21756677, 21756699, 21764119, 21773465
21780146, 21785691, 21787056, 21794615, 21795111, 21797203, 21811517
21820934, 21821302, 21828126, 21837606, 21842017, 21842740, 21847223
21856522, 21863727, 21868720, 21875360, 21889720, 21893235, 21896069
21899588, 21911701, 21913183, 21915719, 21917884, 21924131, 21960504
21967197, 21977186, 21977392, 22007324, 22018363, 22022760, 22024071
22037014, 22046677, 22062026, 22062517, 22068305, 22070866, 22072818
22075064, 22077517, 22083366, 22087683, 22092979, 22118835, 22118851
22139226, 22146062, 22148226, 22157363, 22160989, 22165897, 22168163
22173980, 22175564, 22176950, 22178855, 22179537, 22185234, 22205263
22214989, 22223463, 22228324, 22232606, 22233505, 22238921, 22243719
22243983, 22250006, 22256431, 22256560, 22258530, 22261050, 22264489
22268833, 22282748, 22294260, 22296366, 22301880, 22305887, 22346829
22347493, 22351572, 22353199, 22353346, 22359063, 22364044, 22365117
22366322, 22366558, 22374754, 22380919, 22454326, 22454940, 22458049
22465352, 22468255, 22468781, 22475617, 22492533, 22495062, 22495673
22496904, 22499356, 22501616, 22503297, 22507210, 22507234, 22515353
22517782, 22518784, 22519146, 22520320, 22528741, 22529728, 22533631
22536802, 22551446, 22568016, 22568177, 22568797, 22606521, 22624709

22645009, 22654475, 22657942, 22670385, 22670413, 22674709, 22675136
22686674, 22690648, 22695831, 22707244, 22707866, 22721409, 22729345
22730454, 22733141, 22734547, 22750215, 22757364, 22760595, 22760679
22762046, 22782647, 22806698, 22808310, 22809871, 22815955, 22816287
22820579, 22826718, 22836801, 22842151, 22855193, 22862134, 22865673
22873635, 22894101, 22894949, 22897344, 22901797, 22905130, 22916353
22922076, 22923409, 22950945, 22961508, 22972770, 22977256, 23002524
23003979, 23007241, 23008056, 23019710, 23020270, 23025340, 23026585
23028781, 23029562, 23035249, 23053606, 23061453, 23061702, 23065323
23066146, 23068169, 23080557, 23082876, 23084507, 23088803, 23089357
23096938, 23101501, 23104033, 23105538, 23108128, 23115139, 23124895
23125826, 23126410, 23140259, 23148260, 23149541, 23151677, 23168363
23170620, 23172924, 23177536, 23177923, 23184013, 23184263, 23195445
23197103, 23209741, 23220453, 23229229, 23237313, 23240358, 23260854
23262847, 23265914, 23265965, 23266217, 23272045, 23294548, 23302839
23314180, 23315153, 23315889, 23324000, 23326313, 23328639, 23338911
23342170, 23492665, 23501901, 23514710, 23514911, 23521523, 23528412
23533524, 23533807, 23543183, 23548817, 23567857, 23571055, 23572982
23584909, 23602213, 23614158, 23628685, 23642282, 23709062, 23711335
23713236, 23717151, 23725036, 23727148, 23731896, 23746128, 23854396
24285405, 24300640, 24303148, 24307571, 24308635, 24315824, 24316947
24321547, 24326444, 24341675, 24350620, 24350831, 24365589, 24385625
24385983, 24386767, 24393981, 24397438, 24401351, 24411921, 24413809
24415926, 24416451, 24421668, 24423416, 24425998, 24437510, 24448240
24448282, 24457597, 24461826, 24509056, 24523374, 24530364, 24534298
24555417, 24560906, 24563422, 24570598, 24573817, 24577566, 24589081
24600330, 24624166, 24642295, 24642495, 24652769, 24662775, 24674955
24683149, 24690216, 24693382, 24701840, 24713381, 24717859, 24718260
24719736, 24737064, 24737403, 24737581, 24737954, 24739928, 24752618
24766121, 24790914, 24792678, 24796092, 24801152, 24802934, 24808595
24812585, 24817447, 24825843, 24831514, 24835538, 24835919, 24848928
24907917, 24908321, 24917972, 24920582, 24929210, 24966594, 25029423
25031502, 25034396, 25042823, 25047724, 25051465, 25056052, 25058080
25060506, 25067795, 25076732, 25076756, 25079710, 25091141, 25093739
25093872, 25099339, 25107334, 25110233, 25115178, 25123585, 25150925
25161298, 25165496, 25178179, 25179774, 25192729, 25205368, 25210690
25240188, 25248384, 25264559, 25300427, 25307368, 25313154, 25328093
25330273, 25353983, 25357142, 25377044, 25392535, 25405687, 25415713
25417056, 25417958, 25423453, 25427662, 25429959, 25437695, 25437699
25459958, 25472885, 25475853, 25476125, 25477657, 25482971, 25483815
25484507, 25486384, 25489342, 25489367, 25489607, 25490238, 25492379
25494379, 25494413, 25495682, 25539063, 25546608, 25547060, 25551676
25555252, 25575628, 25579761, 25599425, 25600342, 25600421, 25602488
25606091, 25612095, 25616268, 25633101, 25634317, 25635149, 25639019

25643818, 25643931, 25649873, 25653109, 25654936, 25655390, 25669791
25670786, 25695903, 25699321, 25722055, 25733479, 25740844, 25743479
25760195, 25764020, 25766822, 25775213, 25780343, 25789277, 25790353
25809524, 25822410, 25823532, 25823754, 25856821, 25861398, 25879984
25881255, 25885148, 25890782, 25897615, 25904490, 25914276, 25919622
25947799, 25957038, 25982666, 25986062, 25997810, 26007010, 26023002
26023025, 26024732, 26027162, 26029780, 26039623, 26088426, 26089440
26110259, 26110632, 26111842, 26121990, 26153977, 26169341, 26187943
26198757, 26198926, 26203182, 26243698, 26245237, 26248143, 26256131
26262953, 26263721, 26318200, 26318627, 26324206, 26325856, 26336977
26353617, 26366517, 26412540, 26430737, 26439748, 26444887, 26446098
26482376, 26513067, 26513709, 26544823, 26546664, 26546754, 26556014
26569225, 26570171, 26575788, 26633558, 26635845, 26637592, 26637824
26654363, 26658759, 26714910, 26716835, 26758193, 26768025, 26784509
26822620, 26828994, 26832296, 26844406, 26875822, 26898563, 26968670
26999139, 27000663, 27000690, 27001733, 27012701, 27015449, 27033652
27034890, 27052607, 27060167, 27072923, 27086138, 27092508, 27097854
27101105, 27122162, 27133662, 27169796, 27199245, 27207110, 27207634
27213224, 27217412, 27223075, 27229389, 27255377, 27274536, 27276231
27285244, 27303938, 27314206, 27314390, 27314697, 27337759, 27348081
27351628, 27370965, 27375542, 27397048, 27404573, 27424405, 27433385
27434193, 27441326, 27445727, 27452046, 27461789, 27461842, 27468303
27475603, 27487919, 27534509, 27548131, 27565906, 27567477, 27611612
27620950, 27623159, 27629756, 27634991, 27642235, 27710072, 27726780
27729678, 27745728, 27751755, 27829295, 27846298, 27847259, 27897759
27923320, 27929509, 27938623, 27952577, 27952584, 27986817, 27995248
27997875, 28000269, 28022101, 28023399, 28024793, 28025414, 28026866
28043157, 28072383, 28079127, 28098160, 28125601, 28164480, 28174827
28199085, 28215510, 28250929, 28281094, 28302049, 28305362, 28357401
28369092, 28371123, 28384353, 28390273, 28394726, 28420042, 28423598
28432129, 28440711, 28501075, 28502113, 28502128, 28507324, 28542455
28566241, 28578164, 28587723, 28612674, 28636676, 28639299, 28683167
28708023, 28714988, 28730253, 28758090, 28774416, 28790654, 28797711
28821847, 28849751, 28852325, 28867992, 28891741, 28891984, 28915933
28950969, 28986231, 28993590, 29006527, 29009513, 29027694, 29030780
29142109, 29163567, 29189889, 29200700, 29247712, 29250317, 29251241
29254615, 29260956, 29343156, 29372460, 29378913, 29379978, 29388020
29408136, 29434301, 29437712, 29464779, 29483626, 29483672, 29483723
29483771, 29500257, 29500963, 29511611, 29559723, 29621961, 29633753
29637560, 29645349, 29707896, 29719146, 29726695, 29774367, 29774383
29782211, 29791152, 29817278, 29828111, 29869404, 29869906, 29893132
29944660, 29961353, 29962927, 29962939, 29965888, 29997937, 30018017
30116203, 30128197, 30160639, 30164714, 30179644, 30196358, 30200680
30215130, 30218044, 30225443, 30252098, 30295478, 30305880, 30320029

```
30365745, 30387666, 30421204, 30497057, 30499600, 30502041, 30517516
30522998, 30534664, 30578221, 30624864, 30659882, 30668407, 30698289
30758943, 30803210, 30805558, 30816938, 30855121, 30889351, 30973003
30987088, 31001455, 31013127, 31022858, 31028986, 31031715, 31106577
31156383, 31172207, 31194264, 31219939, 31228670, 31306274, 31335037
31335142, 31550110, 31668061, 31668867, 31668915, 31799139
```

Version 12.1.0.2.v21

Version 12.1.0.2.v21 includes the following:

- Patch [31113348](#): Database Patch Set Update 12.1.0.2.200714
- Patch [31219939](#): Database PSU 12.1.0.2.200714, Oracle JavaVM Component (JUL2020)
- Patch [31335037](#): DSTV35 for RDBMS (TZDATA2020A)
- Patch [31335142](#): DSTV35 for OJVM (TZDATA2020A)
- Patch [17969866](#): Oracle GoldenGate - 46719: ENH: REPLICATION SUPPORT FOR INSERTS / FULL UPDATES WITH LARGE VALUES
- Patch [20394750](#): Oracle GoldenGate - APPLY CDR RESOLUTION FAILING FOR LOBS, XML, LONG, AND OBJECTS
- Patch [24835919](#): Oracle GoldenGate - IR EXECUTING DEPENDENT TRANSACTIONS OUT OF ORDER WITH PARALLELISM GREATER THAN
- Patch [20033733](#): PART :IMC:HIT ORA 600 [KGL-HEAP-SIZE-EXCEEDED]
- Patch [28730253](#): SUPPORT NEW ERA REIWA FOR JAPANESE IMPERIAL CALENDAR
- Patch [23711335](#): CDB_UPG:PDCDB:CDB UPGRADE AS WHOLE TAKES 1 MORE HOUR THAN PREVIOUS LABELS IN MAY
- Patch [31579750](#): JSON bundle Patch
- Patch [21091901](#): ONLINE MOVE OF HASH OR REF PARTITION CAN LEAVE LOCAL INDEXES INCONSISTENT
- Patch [21171382](#): DBMS_STATS Patch AUTO DOP COMPUTES A HIGH DOP UNNECESSARILY
- Patch [23262847](#): Oracle GoldenGate - MALFORMED REDO CAUSED OGG REPLICATION ABEND
- PreUpgrade Jar: preupgrade_12.1.0.2.0_18_crlf.zip

Combined patches for version 12.1.0.2.v21, released July 2020

Bugs fixed:

6194865, 6418158, 6599380, 13542050, 13787015, 14283239, 14643995
14705949, 16090440, 16354467, 16359751, 16439813, 16619249, 16756406
16777441, 16799735, 16863642, 16870214, 16875041, 16887946, 16923858
16938780, 16941434, 17008068, 17210525, 17258582, 17274537, 17319928
17365043, 17409174, 17414008, 17432124, 17495022, 17532729, 17532734
17533661, 17551063, 17655240, 17722075, 17760068, 17835294, 17867700
17890099, 17969866, 18007682, 18043064, 18051556, 18090142, 18110491
18122373, 18191823, 18202441, 18250893, 18254023, 18272672, 18288842
18306996, 18307021, 18308268, 18354830, 18371441, 18373438, 18382302
18411216, 18417036, 18419520, 18436647, 18440095, 18456643, 18475439
18492302, 18499088, 18510194, 18542562, 18548246, 18548433, 18549238
18604493, 18604692, 18607546, 18610915, 18618122, 18628388, 18648816
18662619, 18673090, 18674024, 18674047, 18681056, 18693124, 18700762
18705806, 18727933, 18733351, 18740837, 18742258, 18743542, 18758877
18759211, 18774543, 18775971, 18778801, 18791688, 18797519, 18798250
18799063, 18799993, 18801391, 18803726, 18810904, 18818069, 18819908
18840932, 18841764, 18845653, 18849537, 18849970, 18851894, 18856106
18856999, 18866977, 18868646, 18885870, 18886413, 18893947, 18895170
18899974, 18900107, 18904062, 18909599, 18913440, 18914624, 18921743
18940497, 18948177, 18952766, 18952989, 18964939, 18964978, 18966843
18967382, 18973548, 18974476, 18988834, 18990023, 18990693, 18999568
19001359, 19001390, 19012119, 19013183, 19016730, 19017309, 19018206
19018447, 19022470, 19023822, 19024808, 19028800, 19032777, 19035573
19044962, 19048007, 19050649, 19052488, 19054077, 19058490, 19060015
19065556, 19065677, 19067244, 19068380, 19068610, 19068970, 19074147
19075256, 19076343, 19077215, 19079752, 19081128, 19124336, 19124589
19130152, 19131386, 19131607, 19134173, 19141838, 19143550, 19146474
19149990, 19153980, 19154375, 19155797, 19157754, 19165673, 19168167
19171086, 19174430, 19174521, 19174942, 19176223, 19176326, 19176885
19178851, 19180394, 19180770, 19183343, 19185876, 19188927, 19189317
19189525, 19195895, 19197175, 19201867, 19207117, 19211433, 19213447
19223010, 19231857, 19238590, 19243521, 19245191, 19248279, 19248799
19258504, 19272708, 19279273, 19280225, 19284031, 19285025, 19289642
19291380, 19297917, 19303936, 19304354, 19306797, 19307662, 19308965
19309466, 19313563, 19315668, 19315691, 19317646, 19326908, 19327391
19329654, 19330795, 19332396, 19333670, 19335438, 19339555, 19347458
19354335, 19354794, 19358317, 19363645, 19364502, 19366375, 19370504
19371175, 19373893, 19375649, 19382851, 19383839, 19385656, 19390567

19390620, 19393542, 19396455, 19399918, 19402853, 19404068, 19409212
19430401, 19433930, 19434529, 19439759, 19440520, 19440586, 19445860
19448499, 19450116, 19450314, 19452434, 19461270, 19461428, 19468347
19468612, 19468991, 19469538, 19475971, 19487147, 19490948, 19501299
19503821, 19512341, 19516448, 19518079, 19520602, 19523462, 19524158
19524384, 19529868, 19532017, 19534363, 19536415, 19543384, 19547370
19547774, 19548064, 19550902, 19561643, 19562381, 19566592, 19571055
19571082, 19571367, 19577410, 19578247, 19578350, 19583624, 19587324
19590877, 19591608, 19593445, 19597439, 19597583, 19601762, 19604659
19606174, 19617921, 19619732, 19623450, 19627012, 19632912, 19637186
19639483, 19644859, 19647503, 19649152, 19658708, 19662635, 19663176
19670108, 19676012, 19676905, 19680796, 19684504, 19687159, 19689979
19693090, 19699191, 19699946, 19701015, 19703301, 19705781, 19706965
19708342, 19708632, 19718981, 19721304, 19723336, 19730508, 19769480
19769625, 19777862, 19781326, 19784751, 19790243, 19791273, 19791377
19799847, 19805359, 19809171, 19811709, 19817386, 19818513, 19824871
19831647, 19835133, 19841800, 19855285, 19859472, 19865345, 19869255
19871910, 19873610, 19877336, 19879746, 19880190, 19883092, 19886165
19888853, 19889230, 19891090, 19895326, 19895362, 19896336, 19902195
19908836, 19909862, 19915271, 19928926, 19930276, 19931367, 19931709
19932634, 19933147, 19941352, 19943771, 19952975, 19957298, 19978542
19982584, 19988852, 19989009, 19990037, 19995869, 20001168, 20009569
20009833, 20011515, 20011646, 20011897, 20017509, 20023340, 20031873
20043616, 20048359, 20052269, 20061399, 20074391, 20076781, 20078186
20087383, 20093776, 20101006, 20117253, 20118035, 20122715, 20124446
20134113, 20134339, 20139391, 20144019, 20144308, 20165574, 20169408
20171986, 20172151, 20173897, 20175161, 20181030, 20212067, 20217801
20228093, 20229001, 20233181, 20235511, 20245930, 20250147, 20267166
20273319, 20281121, 20284155, 20294666, 20296619, 20298413, 20302006
20308798, 20315311, 20318889, 20322560, 20324049, 20328248, 20331945
20347562, 20348653, 20354900, 20356733, 20361671, 20368850, 20373598
20374572, 20378086, 20382309, 20387265, 20394750, 20397490, 20401975
20402832, 20408829, 20408866, 20413820, 20415564, 20424183, 20424899
20425790, 20428621, 20432873, 20437153, 20440930, 20441797, 20446883
20447445, 20459944, 20464614, 20466322, 20466628, 20468401, 20468490
20470877, 20471920, 20474192, 20475845, 20476175, 20480209, 20493163
20505778, 20509482, 20513399, 20524085, 20528052, 20539050, 20543011
20544065, 20554364, 20557786, 20558005, 20560611, 20562898, 20564072
20565112, 20565133, 20569094, 20577490, 20581111, 20582405, 20588486
20588502, 20591183, 20596234, 20598042, 20603378, 20603431, 20613079
20618595, 20627866, 20635353, 20641666, 20657411, 20657441, 20669434
20671094, 20673810, 20677396, 20677974, 20684983, 20686773, 20688221
20703000, 20703629, 20704450, 20705577, 20707932, 20708701, 20711718
20717081, 20717091, 20717359, 20725343, 20734332, 20736227, 20746251

20757079, 20764012, 20766180, 20768076, 20778986, 20794034, 20798891
20800890, 20801783, 20803014, 20825533, 20828947, 20830459, 20831538
20832516, 20835241, 20839705, 20842388, 20844426, 20848335, 20856766
20859910, 20860659, 20862087, 20868862, 20869721, 20875898, 20877664
20878790, 20879709, 20879889, 20880215, 20882568, 20890311, 20897759
20898391, 20898997, 20899461, 20904530, 20907061, 20914870, 20919320
20920911, 20922010, 20925795, 20926021, 20929771, 20936731, 20936905
20938170, 20951038, 20952966, 20958816, 20977794, 20978259, 21037923
21047766, 21047803, 21052842, 21059919, 21060755, 21061354, 21063322
21068507, 21072646, 21080143, 21091431, 21091901, 21095391, 21097043
21099555, 21101873, 21106027, 21132297, 21133343, 21142837, 21147908
21153266, 21157728, 21159665, 21164318, 21171382, 21172913, 21174504
21184223, 21186167, 21188532, 21188537, 21188584, 21196809, 21197626
21220620, 21225209, 21239530, 21241052, 21241829, 21246723, 21260397
21260431, 21263635, 21266085, 21270823, 21273804, 21275255, 21281532
21281607, 21285458, 21291274, 21293600, 21294938, 21296029, 21297872
21299490, 21300341, 21308727, 21315084, 21322887, 21329301, 21354456
21373076, 21373473, 21380789, 21383171, 21385422, 21387128, 21387964
21419850, 21421886, 21422580, 21424824, 21425496, 21429602, 21442094
21450666, 21476308, 21479753, 21492036, 21502702, 21514877, 21516611
21517440, 21522582, 21526048, 21532755, 21534893, 21542577, 21555660
21560152, 21566639, 21566944, 21566993, 21575362, 21620471, 21623164
21625179, 21626377, 21629064, 21632821, 21641414, 21641760, 21644640
21649497, 21656630, 21659726, 21665897, 21668627, 21675340, 21695575
21698350, 21744290, 21756661, 21756677, 21756699, 21764119, 21773465
21780146, 21785691, 21787056, 21794615, 21795111, 21811517, 21820934
21821302, 21828126, 21837606, 21842017, 21842740, 21847223, 21856522
21863727, 21868720, 21875360, 21889720, 21893235, 21896069, 21899588
21911701, 21913183, 21915719, 21917884, 21924131, 21960504, 21967197
21977186, 21977392, 22007324, 22018363, 22022760, 22024071, 22037014
22046677, 22062026, 22062517, 22068305, 22070866, 22072818, 22075064
22077517, 22083366, 22087683, 22092979, 22118835, 22118851, 22139226
22146062, 22148226, 22160989, 22165897, 22168163, 22173980, 22175564
22176950, 22178855, 22179537, 22185234, 22205263, 22214989, 22223463
22228324, 22232606, 22233505, 22238921, 22243719, 22243983, 22250006
22256431, 22256560, 22258530, 22264489, 22268833, 22282748, 22294260
22296366, 22301880, 22305887, 22346829, 22347493, 22351572, 22353199
22353346, 22359063, 22364044, 22365117, 22366322, 22366558, 22374754
22380919, 22454326, 22458049, 22465352, 22468781, 22475617, 22492533
22495062, 22495673, 22496904, 22499356, 22501616, 22503297, 22507210
22507234, 22515353, 22517782, 22518784, 22519146, 22520320, 22528741
22529728, 22533631, 22536802, 22551446, 22568016, 22568177, 22568797
22606521, 22624709, 22645009, 22654475, 22657942, 22670385, 22670413
22674709, 22675136, 22686674, 22690648, 22695831, 22707244, 22707866

22721409, 22729345, 22730454, 22733141, 22734547, 22750215, 22757364
22760595, 22760679, 22762046, 22782647, 22806698, 22808310, 22809871
22815955, 22816287, 22820579, 22826718, 22836801, 22842151, 22855193
22862134, 22865673, 22873635, 22894949, 22897344, 22901797, 22905130
22916353, 22922076, 22923409, 22950945, 22961508, 22972770, 22977256
23002524, 23003979, 23007241, 23008056, 23019710, 23020270, 23025340
23026585, 23028781, 23029562, 23035249, 23053606, 23061453, 23061702
23065323, 23066146, 23068169, 23080557, 23084507, 23088803, 23089357
23096938, 23101501, 23104033, 23105538, 23108128, 23115139, 23124895
23125826, 23126410, 23140259, 23148260, 23149541, 23151677, 23168363
23170620, 23172924, 23177536, 23177923, 23184263, 23195445, 23197103
23209741, 23220453, 23229229, 23237313, 23240358, 23260854, 23262847
23265914, 23265965, 23266217, 23272045, 23294548, 23302839, 23314180
23315153, 23315889, 23324000, 23326313, 23328639, 23338911, 23342170
23492665, 23501901, 23514710, 23514911, 23521523, 23528412, 23533524
23533807, 23543183, 23548817, 23567857, 23571055, 23572982, 23602213
23614158, 23628685, 23642282, 23709062, 23711335, 23713236, 23717151
23725036, 23727148, 23731896, 23746128, 23854396, 24285405, 24300640
24303148, 24307571, 24308635, 24315824, 24316947, 24321547, 24326444
24341675, 24350620, 24350831, 24365589, 24385625, 24385983, 24386767
24393981, 24397438, 24401351, 24411921, 24413809, 24415926, 24416451
24421668, 24423416, 24425998, 24437510, 24448240, 24448282, 24457597
24461826, 24509056, 24523374, 24534298, 24555417, 24560906, 24563422
24570598, 24573817, 24577566, 24589081, 24600330, 24624166, 24642295
24652769, 24662775, 24674955, 24683149, 24690216, 24693382, 24701840
24713381, 24717859, 24718260, 24719736, 24737064, 24737403, 24737581
24737954, 24739928, 24752618, 24766121, 24790914, 24792678, 24796092
24801152, 24802934, 24808595, 24812585, 24825843, 24831514, 24835538
24835919, 24848928, 24907917, 24908321, 24917972, 24920582, 24929210
24966594, 25029423, 25031502, 25034396, 25042823, 25047724, 25051465
25056052, 25058080, 25060506, 25067795, 25076732, 25076756, 25079710
25091141, 25093739, 25093872, 25099339, 25107334, 25110233, 25123585
25150925, 25161298, 25165496, 25178179, 25192729, 25210690, 25240188
25248384, 25264559, 25300427, 25307368, 25313154, 25328093, 25330273
25353983, 25357142, 25377044, 25392535, 25405687, 25415713, 25417056
25417958, 25423453, 25427662, 25429959, 25437695, 25437699, 25459958
25472885, 25475853, 25476125, 25477657, 25482971, 25483815, 25484507
25486384, 25489342, 25489367, 25489607, 25490238, 25492379, 25494379
25494413, 25495682, 25539063, 25546608, 25547060, 25551676, 25555252
25575628, 25579761, 25599425, 25600342, 25600421, 25602488, 25606091
25612095, 25616268, 25633101, 25634317, 25635149, 25639019, 25643931
25649873, 25653109, 25654936, 25655390, 25669791, 25670786, 25695903
25699321, 25722055, 25733479, 25740844, 25743479, 25760195, 25764020
25766822, 25775213, 25780343, 25789277, 25790353, 25809524, 25822410

25823532, 25823754, 25856821, 25861398, 25879984, 25881255, 25885148
25897615, 25914276, 25919622, 25947799, 25957038, 25982666, 25986062
25997810, 26007010, 26023002, 26023025, 26024732, 26027162, 26029780
26039623, 26088426, 26089440, 26110259, 26110632, 26111842, 26121990
26153977, 26187943, 26198757, 26198926, 26203182, 26243698, 26245237
26248143, 26256131, 26262953, 26263721, 26318627, 26324206, 26325856
26336977, 26353617, 26366517, 26412540, 26430737, 26439748, 26444887
26446098, 26482376, 26513067, 26513709, 26544823, 26546664, 26546754
26556014, 26569225, 26570171, 26575788, 26633558, 26635845, 26637592
26637824, 26654363, 26658759, 26714910, 26758193, 26768025, 26784509
26822620, 26828994, 26832296, 26844406, 26875822, 26898563, 26968670
26999139, 27000663, 27000690, 27001733, 27012701, 27015449, 27033652
27034890, 27052607, 27060167, 27072923, 27086138, 27092508, 27097854
27101105, 27122162, 27133662, 27169796, 27199245, 27207110, 27207634
27213224, 27217412, 27223075, 27229389, 27255377, 27274536, 27276231
27303938, 27314206, 27314390, 27314697, 27337759, 27348081, 27351628
27370965, 27375542, 27397048, 27404573, 27424405, 27433385, 27441326
27445727, 27461789, 27461842, 27468303, 27475603, 27487919, 27534509
27548131, 27567477, 27611612, 27620950, 27623159, 27629756, 27634991
27642235, 27710072, 27726780, 27751755, 27829295, 27846298, 27847259
27897759, 27923320, 27929509, 27938623, 27952577, 27952584, 27986817
27995248, 27997875, 28000269, 28022101, 28023399, 28024793, 28025414
28026866, 28043157, 28079127, 28098160, 28125601, 28164480, 28174827
28199085, 28215510, 28250929, 28281094, 28302049, 28305362, 28357401
28369092, 28384353, 28390273, 28420042, 28423598, 28432129, 28440711
28501075, 28502113, 28502128, 28507324, 28542455, 28566241, 28578164
28587723, 28612674, 28636676, 28639299, 28683167, 28708023, 28714988
28730253, 28758090, 28774416, 28790654, 28797711, 28821847, 28849751
28852325, 28867992, 28891741, 28915933, 28950969, 28986231, 28993590
29006527, 29009513, 29027694, 29030780, 29142109, 29163567, 29189889
29200700, 29247712, 29250317, 29251241, 29254615, 29260956, 29343156
29372460, 29378913, 29379978, 29388020, 29408136, 29434301, 29437712
29464779, 29483626, 29483672, 29483723, 29483771, 29500257, 29500963
29511611, 29559723, 29621961, 29633753, 29637560, 29645349, 29707896
29719146, 29726695, 29774367, 29774383, 29782211, 29791152, 29817278
29828111, 29869404, 29869906, 29893132, 29944660, 29961353, 29962927
29962939, 29997937, 30116203, 30128197, 30160639, 30164714, 30179644
30200680, 30215130, 30218044, 30225443, 30252098, 30295478, 30305880
30365745, 30497057, 30499600, 30502041, 30522998, 30534664, 30624864
30659882, 30668407, 30698289, 30758943, 30803210, 30805558, 30816938
30855121, 30973003, 30987088, 31001455, 31013127, 31022858, 31031715
31113348, 31156383, 31219939, 31306274, 31335037, 31335142

Version 12.1.0.2.v20

Version 12.1.0.2.v20 includes the following:

- Patch [30700212](#): Database PSU 12.1.0.2.200414
- Patch [30805558](#): Oracle JVM Component Database PSU 12.1.0.2.200414
- Patch [29997937](#): DSTv34 for RDBMS (TZDATA2019G)
- Patch [29997959](#): DSTv34 for OJVM (TZDATA2019G)
- Patch [17969866](#): Oracle GoldenGate - 46719: ENH: REPLICATION SUPPORT FOR INSERTS / FULL UPDATES WITH LARGE VALUES
- Patch [20394750](#): Oracle GoldenGate - APPLY CDR RESOLUTION FAILING FOR LOBS, XML, LONG, AND OBJECTS
- Patch [24835919](#): Oracle GoldenGate - IR EXECUTING DEPENDENT TRANSACTIONS OUT OF ORDER WITH PARALLELISM GREATER THAN
- Patch [23262847](#): Oracle GoldenGate - MALFORMED REDO CAUSED OGG REPLICATION ABEND
- Patch [21171382](#): DBMS_STATS Patch
- Patch [21091901](#): ONLINE MOVE OF HASH OR REF PARTITION CAN LEAVE LOCAL INDEXES INCONSISTENT
- Patch [31164857](#): JSON bundle patch
- Patch [20033733](#): PART :IMC:HIT ORA 600 [KGL-HEAP-SIZE-EXCEEDED]
- Patch [28730253](#): SUPPORT NEW ERA REIWA FOR JAPANESE IMPERIAL CALENDAR
- PreUpgrade Jar: preupgrade_12.1.0.2.0_18_crlf.zipn
- Support for purging the recycle bin

For more information, see [Purging the recycle bin](#) in the *Amazon RDS User Guide*.

- Support for generating performance reports with Automatic Workload Repository (AWR) using the `rdsadmin.rdsadmin_diagnostic_util` package

For more information, see [Generating performance reports with Automatic Workload Repository \(AWR\)](#) in the *Amazon RDS User Guide*.

Combined patches for version 12.1.0.2, released April 2020

Bugs fixed:

19309466, 19902195, 18250893, 25437699, 19383839, 19781326, 16756406
18456643, 26546664, 22364044, 29483723, 18913440, 18845653, 28774416
19915271, 20172151, 18417036, 19516448, 24907917, 23713236, 24796092
23140259, 21856522, 29434301, 23028781, 19243521, 19658708, 18272672
21153266, 19174430, 28250929, 18900107, 22243719, 19548064, 26556014
20493163, 20688221, 22346829, 21387964, 13542050, 25377044, 22072818
22250006, 22734547, 22243983, 21623164, 21534893, 19012119, 19932634
19869255, 22232606, 18681056, 23324000, 25427662, 22068305, 24589081
19439759, 19303936, 18856106, 22916353, 24835538, 22353346, 19790243
21106027, 20023340, 26444887, 23088803, 22529728, 26256131, 18492302
19134173, 24303148, 21101873, 20447445, 27122162, 21188584, 19390567
26513709, 25780343, 19769480, 21097043, 21225209, 27217412, 26245237
20677396, 19284031, 19450314, 23514911, 19016730, 27303938, 22205263
22517782, 20919320, 22075064, 29621961, 22551446, 29250317, 22721409
18440095, 22496904, 27611612, 16439813, 18354830, 20596234, 22022760
20936905, 22268833, 23197103, 23746128, 22515353, 27897759, 21514877
19809171, 21186167, 26111842, 18990023, 13787015, 22492533, 25405687
22233505, 20173897, 24624166, 17210525, 29707896, 21260431, 25579761
20181030, 25056052, 19370504, 21868720, 24423416, 23068169, 19124589
22690648, 21383171, 19402853, 19888853, 25107334, 24341675, 17722075
20882568, 25653109, 23026585, 18604692, 20717081, 25546608, 20768076
27370965, 19081128, 22173980, 25722055, 23514710, 29483771, 19178851
20951038, 22168163, 25161298, 20569094, 24308635, 28302049, 19791377
19050649, 20920911, 29962939, 30365745, 22475617, 19189525, 19060015
19469538, 27052607, 29633753, 20598042, 22458049, 18988834, 21159665
23302839, 25307368, 25699321, 21924131, 21837606, 17409174, 20588486
22729345, 22842151, 25051465, 19238590, 16941434, 20387265, 29378913
24397438, 20673810, 23108128, 20356733, 28215510, 22380919, 18436647
21764119, 23065323, 20825533, 19124336, 22294260, 20839705, 24790914
20284155, 23571055, 6194865, 25539063, 17365043, 25914276, 20952966
22961508, 19176223, 21300341, 23237313, 18288842, 27223075, 22353199
20011515, 22083366, 28305362, 27634991, 25670786, 21419850, 26898563
22495673, 27986817, 19577410, 26248143, 23294548, 25328093, 23101501
24737064, 19931709, 25423453, 25547060, 23533807, 27726780, 24600330
20635353, 28384353, 25600421, 18122373, 20043616, 23124895, 18856999
21450666, 24752618, 18893947, 26633558, 20076781, 20926021, 26029780
21196809, 21354456, 22533631, 23725036, 20464614, 19562381, 27375542
24808595, 19189317, 25669791, 18307021, 21917884, 19708632, 28423598
27213224, 25633101, 29006527, 20711718, 18973548, 25982666, 25472885
19718981, 20684983, 23567857, 22826718, 25655390, 21773465, 20250147
20144019, 19197175, 26263721, 19597439, 28867992, 21387128, 22007324
28797711, 18818069, 21566639, 19180770, 19879746, 21785691, 20539050

20424183, 24285405, 21425496, 26544823, 19957298, 20322560, 29962927
22228324, 23172924, 22520320, 29817278, 28164480, 30179644, 27751755
21575362, 25058080, 22365117, 22645009, 25165496, 28950969, 27133662
27433385, 18774543, 20124446, 21429602, 29189889, 26153977, 30659882
19371175, 21863727, 18940497, 19074147, 22923409, 25489342, 21380789
19154375, 25417056, 19044962, 19532017, 23080557, 19662635, 22374754
20560611, 25654936, 21492036, 18705806, 28420042, 19578247, 20705577
22024071, 22238921, 29645349, 22809871, 21184223, 19995869, 23089357
19404068, 18921743, 19065677, 19018447, 19018206, 18308268, 19777862
27314697, 29027694, 22223463, 19304354, 22519146, 23020270, 22214989
19445860, 26654363, 27199245, 22977256, 20890311, 27445727, 28281094
21142837, 20869721, 22258530, 24555417, 22179537, 21756699, 18801391
18648816, 20217801, 18819908, 19550902, 22760595, 25483815, 19543384
23628685, 25482971, 30252098, 23007241, 19593445, 21080143, 27351628
20582405, 24966594, 20031873, 29828111, 25489367, 20374572, 18618122
24737581, 21698350, 22501616, 26784509, 28043157, 19306797, 24739928
18966843, 19077215, 20704450, 19068970, 20543011, 19023822, 24713381
22836801, 20432873, 21756677, 23168363, 20328248, 18674047, 18849537
20087383, 25459958, 20315311, 29163567, 22897344, 27534509, 26768025
20686773, 25178179, 19308965, 18948177, 20764012, 27623159, 19468991
20868862, 21780146, 23315153, 20466628, 21756661, 20397490, 19706965
20302006, 24831514, 23240358, 22178855, 19032777, 20862087, 19329654
18974476, 20603378, 21275255, 20859910, 29500963, 19307662, 26203182
21847223, 20281121, 28079127, 22568797, 19075256, 19076343, 28026866
29511611, 18866977, 22808310, 25635149, 20844426, 20904530, 20441797
20175161, 20296619, 19831647, 18548246, 30497057, 21442094, 25079710
24674955, 18840932, 18740837, 20294666, 27404573, 21037923, 25602488
21517440, 22062517, 19180394, 27337759, 19174942, 27092508, 20671094
21889720, 19347458, 19450116, 18411216, 20117253, 24386767, 24737954
20641666, 19931367, 25264559, 19930276, 22092979, 25616268, 21625179
20879709, 23003979, 20165574, 28578164, 19272708, 19547370, 22624709
23084507, 23184263, 20228093, 21281532, 25093872, 19805359, 26324206
19461270, 18700762, 19434529, 18799063, 20354900, 29388020, 20378086
17008068, 21246723, 20831538, 20424899, 20361671, 18674024, 19689979
24411921, 19873610, 16619249, 20562898, 21641414, 21091431, 19440586
20001168, 22757364, 22175564, 22499356, 20725343, 21241052, 19561643
28199085, 21270823, 20736227, 19399918, 19195895, 20830459, 20017509
18475439, 25790353, 21828126, 21665897, 25555252, 20746251, 19315668
22568177, 25764020, 25612095, 25357142, 23096938, 19067244, 19943771
18043064, 19941352, 21329301, 18885870, 26243698, 26187943, 20324049
30164714, 19536415, 30305880, 23709062, 28174827, 20446883, 27314206
21299490, 25313154, 18628388, 21744290, 18254023, 27072923, 25047724
20591183, 27847259, 20459944, 19185876, 18548433, 27207110, 22465352
24385625, 24326444, 24920582, 20402832, 19627012, 22733141, 29200700

20468401, 27441326, 27620950, 16863642, 19639483, 19315691, 27567477
21479753, 19174521, 23177923, 20401975, 18306996, 18851894, 21424824
27034890, 20581111, 20318889, 20936731, 21060755, 25240188, 26828994
27629756, 22256560, 19188927, 23328639, 27229389, 20766180, 20229001
24570598, 25475853, 21172913, 17655240, 29379978, 21266085, 19028800
19035573, 19366375, 28821847, 24523374, 25599425, 25034396, 19289642
21502702, 21291274, 18007682, 23521523, 20475845, 29408136, 22148226
22528741, 25417958, 29500257, 24652769, 26088426, 19326908, 19597583
17414008, 23019710, 20897759, 26822620, 22046677, 19663176, 20938170
19891090, 24825843, 26318627, 21960504, 20524085, 24509056, 19054077
21385422, 26262953, 22657942, 20428621, 21899588, 23326313, 19723336
28891741, 19835133, 17532734, 17495022, 25300427, 19333670, 21842017
19285025, 21373473, 29483626, 23260854, 23061453, 19687159, 14643995
22146062, 20977794, 20734332, 16938780, 17551063, 27548131, 21977392
28612674, 24461826, 19676012, 20588502, 23315889, 19520602, 23053606
19841800, 20245930, 19001359, 21476308, 26546754, 19393542, 30215130
23533524, 21099555, 29961353, 17532729, 27995248, 25429959, 19141838
19644859, 21915719, 19908836, 21421886, 19358317, 27101105, 19524158
29869404, 28758090, 23548817, 25861398, 20803014, 23025340, 19335438
19058490, 23642282, 19207117, 18799993, 25919622, 26569225, 25986062
20835241, 24662775, 20958816, 19475971, 18967382, 20347562, 25740844
20348653, 29009513, 19896336, 24812585, 20048359, 21896069, 20468490
19524384, 25392535, 21147908, 21695575, 30295478, 20440930, 30973003
25789277, 19171086, 24718260, 17867700, 19791273, 26110632, 27397048
21241829, 19591608, 18662619, 22707244, 18419520, 22296366, 22654475
18914624, 19571367, 28636676, 21522582, 29893132, 19501299, 26007010
19529868, 20425790, 19708342, 27487919, 27997875, 26968670, 16870214
18202441, 24415926, 18743542, 19001390, 21157728, 20657411, 19332396
22606521, 21875360, 21821302, 25091141, 28000269, 19149990, 20382309
22855193, 16777441, 19606174, 28542455, 20848335, 25495682, 19382851
20528052, 22762046, 24563422, 27468303, 23125826, 22503297, 28993590
25192729, 23338911, 27274536, 22730454, 19354794, 20757079, 19176326
20298413, 19048007, 22018363, 24300640, 18849970, 21532755, 20860659
22905130, 26121990, 21263635, 23602213, 27710072, 23209741, 22160989
18499088, 18775971, 22894949, 21059919, 18952989, 27348081, 22518784
25856821, 24457597, 25885148, 25484507, 20794034, 20554364, 21061354
19468347, 17533661, 19883092, 20657441, 24401351, 21285458, 28023399
18051556, 25330273, 26412540, 24425998, 19699191, 24437510, 16875041
20669434, 18964978, 25415713, 23342170, 22972770, 28369092, 20828947
21373076, 25492379, 25551676, 14283239, 25766822, 21967197, 22922076
19601762, 25575628, 26110259, 20368850, 21239530, 20437153, 24848928
20880215, 20798891, 25606091, 19013183, 29782211, 21095391, 25042823
21133343, 22695831, 24365589, 25248384, 25634317, 20134113, 19587324
20273319, 28501075, 18542562, 19017309, 26758193, 21063322, 22062026

24802934, 27829295, 20134339, 22077517, 22815955, 23854396, 24690216
22507210, 16354467, 20101006, 21795111, 27938623, 23501901, 18797519
25997810, 23029562, 25879984, 26844406, 21260397, 25029423, 29726695
19354335, 19730508, 22366558, 19390620, 26658759, 25822410, 6599380
20717359, 24321547, 27097854, 21297872, 18964939, 19871910, 29437712
26366517, 21913183, 25695903, 22366322, 20171986, 20603431, 21132297
25957038, 21542577, 29791152, 22507234, 23170620, 24719736, 25600342
18868646, 28587723, 29142109, 26637824, 20627866, 18110491, 16923858
24642295, 19518079, 20914870, 19339555, 20466322, 25823754, 25110233
20169408, 24908321, 20842388, 17274537, 26575788, 20474192, 21644640
28849751, 21794615, 18899974, 20471920, 22806698, 19052488, 29944660
29260956, 26198757, 19503821, 23717151, 24350620, 23126410, 20074391
25823532, 19157754, 22495062, 21220620, 24316947, 19865345, 19065556
22816287, 25947799, 20878790, 23492665, 21322887, 22305887, 19617921
20879889, 24350831, 19578350, 28022101, 26439748, 21893235, 19363645
21072646, 20898391, 19291380, 27060167, 18382302, 27086138, 22536802
22087683, 21197626, 21656630, 20373598, 19248799, 22707866, 28432129
19155797, 19279273, 18886413, 25490238, 20922010, 19990037, 25150925
20509482, 20778986, 22282748, 27255377, 24717859, 20703000, 22862134
21526048, 28683167, 24929210, 24560906, 19079752, 25486384, 20144308
21620471, 19670108, 19068610, 20267166, 25123585, 20476175, 28639299
18549238, 19297917, 20564072, 22950945, 19385656, 23528412, 19684504
19330795, 21174504, 28357401, 20899461, 20557786, 21911701, 19143550
20118035, 19024808, 25809524, 25760195, 20009833, 19604659, 16359751
26039623, 22820579, 28024793, 19928926, 23314180, 20212067, 24737403
20480209, 18904062, 29030780, 26430737, 25476125, 20856766, 17258582
27169796, 21668627, 26325856, 23272045, 20877664, 29247712, 19487147
23149541, 24577566, 19430401, 19676905, 28025414, 20925795, 26482376
22760679, 21296029, 21629064, 24416451, 23229229, 22865673, 20708701
25353983, 19280225, 21315084, 20613079, 19375649, 19213447, 19989009
18191823, 27314390, 26336977, 25775213, 30803210, 24393981, 22568016
27033652, 25639019, 17319928, 14705949, 19703301, 20308798, 28390273
21626377, 20122715, 6418158, 23105538, 25743479, 26198926, 28714988
19258504, 21188532, 24792678, 23151677, 17890099, 21649497, 26446098
16887946, 19693090, 26024732, 18791688, 19721304, 27012701, 19490948
29483672, 19619732, 21164318, 29559723, 21516611, 23148260, 18090142
21641760, 19818513, 22468781, 23002524, 20139391, 21052842, 24693382
19978542, 25477657, 23543183, 22165897, 19373893, 22359063, 19409212
18373438, 23035249, 21820934, 20677974, 18990693, 20470877, 19452434
21422580, 21632821, 22351572, 20235511, 23220453, 18742258, 18604493
23008056, 22901797, 18610915, 20978259, 20832516, 24801152, 27276231
26089440, 20907061, 25733479, 19523462, 18733351, 20505778, 19183343
21675340, 21787056, 21273804, 22782647, 20544065, 29719146, 25093739
17835294, 25210690, 28708023, 24413809, 27846298, 18371441, 26714910

24385983, 20413820, 22176950, 28986231, 24421668, 25897615, 25643931
23195445, 21281607, 20513399, 18841764, 28098160, 20558005, 20093776
18909599, 20618595, 23572982, 23104033, 19211433, 20331945, 19512341
23066146, 22256431, 19637186, 19022470, 22686674, 18607546, 26875822
24573817, 23115139, 19649152, 19201867, 21294938, 20898997, 18510194
21293600, 30218044, 21842740, 22454326, 24683149, 19534363, 25489607
23061702, 30805558, 30855121, 30502041, 30534664, 30128197, 30160639
22070866, 29774383, 29774367, 29251241, 29254615, 19165673, 28790654
28915933, 28440711, 28502128, 28502113, 27923320, 27952584, 27952577
27642235, 27475603, 27461789, 27461842, 25649873, 27001733, 27000663
27000690, 26635845, 26637592, 26570171, 26027162, 26023002, 26023025
25437695, 25494413, 25494379, 24917972, 25067795, 24534298, 25076732
25076756, 24315824, 21659726, 24448240, 24448282, 23177536, 22675136
23265914, 23265965, 23727148, 22674709, 22670413, 22670385, 21188537
22139226, 22118835, 22118851, 21555660, 21811517, 19623450, 21566993
21566944, 19176885, 21068507, 21047803, 21047766, 20415564, 20408829
20408866, 19877336, 19855285, 19909862, 19895362, 19895326, 19153980
19231857, 19223010, 19245191, 19699946, 28730253, 16799735, 17432124
18759211, 19396455, 20875898, 22037014, 22873635, 23614158, 24701840
25881255, 27015449, 28125601, 28852325, 29997937, 29997959, 17969866
20394750, 24835919, 23262847, 21171382, 21091901, 18727933, 18758877
18778801, 18803726, 18810904, 18895170, 18952766, 18999568, 19130152
19131386, 19131607, 19146474, 19168167, 19248279, 19313563, 19317646
19327391, 19364502, 19440520, 19448499, 19461428, 19468612, 19547774
19566592, 19571055, 19571082, 19583624, 19590877, 19632912, 19647503
19680796, 19701015, 19705781, 19769625, 19784751, 19799847, 19811709
19817386, 19824871, 19859472, 19880190, 19886165, 19889230, 19933147
19952975, 19982584, 19988852, 20009569, 20011646, 20011897, 20052269
20061399, 20233181, 20565112, 20565133, 20577490, 20703629, 20707932
20717091, 20800890, 20801783, 25031502

Version 12.1.0.2.v19

Version 12.1.0.2.v19 includes the following:

- Patch [30340202](#): DATABASE PATCH SET UPDATE 12.1.0.2.200114
- Patch [30502041](#): OJVM PATCH SET UPDATE 12.1.0.2.200114
- Patch [29997937](#): DSTv34 for RDBMS (TZDATA2019G)
- Patch [29997959](#): DSTv34 for OJVM (TZDATA2019G)

- Patch [17969866](#): Oracle GoldenGate - 46719: ENH: REPLICATION SUPPORT FOR INSERTS / FULL UPDATES WITH LARGE VALUES
- Patch [20394750](#): Oracle GoldenGate - APPLY CDR RESOLUTION FAILING FOR LOBS, XML, LONG, AND OBJECTS
- Patch [24835919](#): Oracle GoldenGate - IR EXECUTING DEPENDENT TRANSACTIONS OUT OF ORDER WITH PARALLELISM GREATER THAN
- Patch [23262847](#): Oracle GoldenGate - MALFORMED REDO CAUSED OGG REPLICATION ABEND
- Patch [21171382](#): DBMS_STATS Patch
- Patch [21091901](#): ONLINE MOVE OF HASH OR REF PARTITION CAN LEAVE LOCAL INDEXES INCONSISTENT
- Patch [30708149](#): JSON bundle patch
- Patch [20033733](#): PART :IMC:HIT ORA 600 [KGL-HEAP-SIZE-EXCEEDED]
- Patch [28730253](#): SUPPORT NEW ERA REIWA FOR JAPANESE IMPERIAL CALENDAR
- PreUpgrade Jar: preupgrade_12.1.0.2.0_18_crlf.zip

Oracle patch 29918340, released January 2020

Bugs fixed:

```

19309466, 19902195, 18250893, 25437699, 19383839, 19781326, 16756406
18456643, 26546664, 22364044, 29483723, 18913440, 18845653, 19915271
20172151, 18417036, 19516448, 24907917, 23713236, 24796092, 23140259
29434301, 19243521, 19658708, 18272672, 21153266, 19174430, 18900107
22243719, 19548064, 26556014, 20493163, 20688221, 22346829, 21387964
13542050, 22072818, 22250006, 22734547, 22243983, 21623164, 19012119
21534893, 19932634, 19869255, 22232606, 18681056, 23324000, 25427662
22068305, 24589081, 19439759, 19303936, 18856106, 22916353, 24835538
22353346, 19790243, 21106027, 26444887, 20023340, 23088803, 22529728
26256131, 19134173, 18492302, 24303148, 21101873, 20447445, 27122162
21188584, 19390567, 26513709, 25780343, 19769480, 21097043, 21225209
26245237, 20677396, 19284031, 19450314, 23514911, 19016730, 22205263
22517782, 20919320, 22075064, 22551446, 29250317, 22721409, 18440095
22496904, 16439813, 18354830, 20596234, 22022760, 20936905, 22268833
23197103, 23746128, 22515353, 27897759, 21514877, 19809171, 21186167
26111842, 18990023, 13787015, 22492533, 22233505, 20173897, 24624166
17210525, 29707896, 21260431, 25579761, 20181030, 25056052, 19370504
21868720, 23068169, 19124589, 22690648, 21383171, 19402853, 19888853

```

25107334, 24341675, 17722075, 20882568, 25653109, 23026585, 18604692
20717081, 25546608, 20768076, 27370965, 19081128, 22173980, 25722055
23514710, 29483771, 19178851, 20951038, 22168163, 25161298, 20569094
24308635, 19791377, 19050649, 20920911, 29962939, 30365745, 22475617
19189525, 19060015, 19469538, 27052607, 29633753, 20598042, 22458049
18988834, 21159665, 23302839, 25307368, 25699321, 21924131, 17409174
21837606, 22729345, 22842151, 25051465, 19238590, 16941434, 20387265
29378913, 24397438, 20673810, 23108128, 20356733, 22380919, 18436647
21764119, 23065323, 20825533, 19124336, 22294260, 20839705, 24790914
20284155, 23571055, 6194865, 25539063, 17365043, 25914276, 20952966
22961508, 19176223, 21300341, 23237313, 18288842, 27223075, 22353199
20011515, 22083366, 27634991, 25670786, 28305362, 21419850, 26898563
22495673, 27986817, 19577410, 26248143, 23294548, 23101501, 24737064
19931709, 25423453, 25547060, 23533807, 27726780, 24600330, 28384353
20635353, 25600421, 18122373, 20043616, 23124895, 18856999, 21450666
18893947, 24752618, 26633558, 20076781, 26029780, 20926021, 21196809
21354456, 22533631, 23725036, 20464614, 19562381, 27375542, 24808595
19189317, 25669791, 18307021, 21917884, 19708632, 27213224, 25633101
29006527, 20711718, 18973548, 25982666, 25472885, 19718981, 20684983
23567857, 22826718, 25655390, 21773465, 20250147, 20144019, 19197175
26263721, 19597439, 21387128, 28867992, 22007324, 18818069, 21566639
19180770, 19879746, 21785691, 20539050, 20424183, 24285405, 21425496
26544823, 19957298, 20322560, 22228324, 29962927, 23172924, 22520320
29817278, 27751755, 21575362, 25058080, 22365117, 22645009, 25165496
28950969, 27433385, 18774543, 20124446, 21429602, 29189889, 26153977
19371175, 21863727, 18940497, 19074147, 22923409, 25489342, 21380789
19154375, 25417056, 19044962, 19532017, 19662635, 23080557, 22374754
20560611, 25654936, 21492036, 18705806, 28420042, 19578247, 20705577
22024071, 22238921, 22809871, 29645349, 21184223, 19995869, 23089357
19404068, 18921743, 19065677, 19018447, 19018206, 18308268, 19777862
29027694, 22223463, 19304354, 22519146, 22214989, 19445860, 26654363
27199245, 22977256, 20890311, 27445727, 21142837, 20869721, 22258530
24555417, 22179537, 21756699, 18801391, 20217801, 18819908, 19550902
22760595, 25483815, 19543384, 23628685, 25482971, 23007241, 19593445
30252098, 21080143, 27351628, 20582405, 24966594, 20031873, 29828111
25489367, 18618122, 24737581, 21698350, 22501616, 26784509, 28043157
19306797, 24739928, 18966843, 19077215, 20704450, 19068970, 20543011
19023822, 24713381, 22836801, 20432873, 21756677, 20328248, 18674047
18849537, 20087383, 25459958, 20315311, 29163567, 22897344, 27534509
26768025, 25178179, 19308965, 20686773, 18948177, 20764012, 27623159
19468991, 20868862, 21780146, 23315153, 20466628, 21756661, 20397490
19706965, 20302006, 24831514, 23240358, 22178855, 19032777, 20862087
19329654, 18974476, 20603378, 21275255, 20859910, 19307662, 26203182
21847223, 20281121, 22568797, 19075256, 28079127, 19076343, 28026866

29511611, 18866977, 22808310, 25635149, 20844426, 20904530, 20441797
20296619, 19831647, 18548246, 21442094, 25079710, 24674955, 18840932
18740837, 20294666, 21037923, 25602488, 21517440, 22062517, 19180394
27337759, 19174942, 27092508, 20671094, 21889720, 19347458, 19450116
18411216, 20117253, 24386767, 20641666, 24737954, 19931367, 25264559
19930276, 22092979, 25616268, 21625179, 20879709, 23003979, 20165574
28578164, 19272708, 19547370, 22624709, 23084507, 23184263, 20228093
21281532, 25093872, 19805359, 26324206, 19461270, 19434529, 18799063
20354900, 29388020, 20378086, 17008068, 21246723, 20831538, 20424899
20361671, 18674024, 19689979, 24411921, 19873610, 16619249, 20562898
21641414, 21091431, 19440586, 20001168, 22757364, 22175564, 22499356
20725343, 21241052, 19561643, 28199085, 20736227, 19399918, 19195895
20830459, 20017509, 18475439, 25790353, 21828126, 21665897, 25555252
20746251, 19315668, 22568177, 25764020, 25612095, 25357142, 23096938
19067244, 19943771, 18043064, 19941352, 21329301, 18885870, 26243698
26187943, 20324049, 19536415, 30164714, 23709062, 28174827, 20446883
27314206, 21299490, 25313154, 18628388, 21744290, 18254023, 27072923
25047724, 20591183, 27847259, 20459944, 19185876, 18548433, 27207110
22465352, 24385625, 24326444, 20402832, 19627012, 22733141, 29200700
20468401, 27441326, 27620950, 16863642, 19639483, 19315691, 27567477
21479753, 19174521, 23177923, 20401975, 18306996, 18851894, 21424824
27034890, 20581111, 20318889, 20936731, 21060755, 25240188, 26828994
22256560, 19188927, 23328639, 27229389, 20766180, 20229001, 24570598
25475853, 21172913, 17655240, 29379978, 21266085, 19028800, 19035573
19366375, 24523374, 28821847, 25599425, 25034396, 19289642, 21502702
21291274, 18007682, 23521523, 20475845, 29408136, 22148226, 22528741
25417958, 29500257, 24652769, 26088426, 19326908, 19597583, 17414008
23019710, 20897759, 26822620, 22046677, 19663176, 20938170, 19891090
24825843, 26318627, 21960504, 24509056, 20524085, 19054077, 21385422
26262953, 22657942, 20428621, 21899588, 23326313, 19723336, 19835133
17532734, 17495022, 25300427, 19333670, 21842017, 19285025, 21373473
29483626, 23260854, 23061453, 19687159, 14643995, 22146062, 20977794
20734332, 16938780, 17551063, 27548131, 21977392, 28612674, 24461826
19676012, 20588502, 23315889, 19520602, 23053606, 19841800, 20245930
19001359, 21476308, 26546754, 19393542, 23533524, 21099555, 27995248
17532729, 25429959, 19141838, 19644859, 21915719, 19908836, 21421886
19358317, 19524158, 27101105, 29869404, 23548817, 25861398, 20803014
23025340, 19335438, 19058490, 23642282, 19207117, 18799993, 25919622
26569225, 25986062, 20835241, 24662775, 19475971, 18967382, 20347562
20348653, 29009513, 19896336, 24812585, 20048359, 21896069, 20468490
19524384, 25392535, 21147908, 21695575, 30295478, 20440930, 25789277
19171086, 24718260, 17867700, 19791273, 26110632, 27397048, 21241829
19591608, 22707244, 18662619, 18419520, 22296366, 22654475, 18914624
19571367, 28636676, 21522582, 29893132, 19501299, 26007010, 19529868

20425790, 19708342, 27997875, 26968670, 16870214, 18202441, 24415926
18743542, 19001390, 21157728, 20657411, 19332396, 22606521, 21875360
21821302, 25091141, 28000269, 19149990, 20382309, 22855193, 16777441
19606174, 28542455, 20848335, 25495682, 19382851, 20528052, 22762046
24563422, 27468303, 23125826, 22503297, 28993590, 25192729, 23338911
22730454, 27274536, 19354794, 20757079, 19176326, 20298413, 19048007
22018363, 24300640, 18849970, 21532755, 20860659, 22905130, 26121990
21263635, 27710072, 23209741, 22160989, 18499088, 18775971, 22894949
21059919, 18952989, 27348081, 22518784, 25856821, 24457597, 25484507
20794034, 25885148, 20554364, 21061354, 19468347, 17533661, 19883092
20657441, 24401351, 21285458, 28023399, 18051556, 25330273, 26412540
24425998, 19699191, 24437510, 16875041, 20669434, 18964978, 23342170
22972770, 20828947, 21373076, 25492379, 25551676, 14283239, 25766822
21967197, 22922076, 19601762, 25575628, 26110259, 20368850, 21239530
20437153, 24848928, 20880215, 20798891, 25606091, 19013183, 25042823
21133343, 22695831, 24365589, 25248384, 25634317, 20134113, 19587324
20273319, 28501075, 18542562, 19017309, 26758193, 21063322, 22062026
20134339, 22077517, 22815955, 23854396, 24690216, 22507210, 16354467
20101006, 21795111, 27938623, 23501901, 18797519, 25997810, 23029562
25879984, 26844406, 21260397, 25029423, 19354335, 29726695, 19730508
22366558, 19390620, 26658759, 25822410, 6599380, 20717359, 24321547
27097854, 21297872, 18964939, 19871910, 29437712, 26366517, 21913183
25695903, 22366322, 20171986, 20603431, 21132297, 25957038, 21542577
22507234, 23170620, 24719736, 25600342, 18868646, 28587723, 29142109
26637824, 20627866, 18110491, 16923858, 24642295, 19518079, 20914870
19339555, 20466322, 25823754, 25110233, 20169408, 24908321, 20842388
17274537, 26575788, 20474192, 21644640, 28849751, 21794615, 18899974
20471920, 22806698, 19052488, 29944660, 29260956, 26198757, 19503821
23717151, 24350620, 23126410, 20074391, 19157754, 22495062, 21220620
24316947, 19865345, 19065556, 22816287, 25947799, 20878790, 23492665
21322887, 22305887, 19617921, 20879889, 24350831, 19578350, 28022101
26439748, 21893235, 19363645, 21072646, 20898391, 19291380, 27060167
18382302, 27086138, 22536802, 22087683, 21197626, 21656630, 20373598
19248799, 22707866, 28432129, 19155797, 19279273, 18886413, 25490238
20922010, 19990037, 25150925, 20509482, 20778986, 27255377, 24717859
20703000, 22862134, 21526048, 28683167, 24929210, 24560906, 20144308
21620471, 19670108, 19068610, 20267166, 25123585, 20476175, 18549238
28639299, 19297917, 20564072, 22950945, 19385656, 23528412, 19684504
19330795, 21174504, 28357401, 20899461, 20557786, 21911701, 19143550
20118035, 19024808, 25760195, 20009833, 19604659, 16359751, 26039623
22820579, 19928926, 23314180, 20212067, 24737403, 20480209, 18904062
29030780, 26430737, 20856766, 25476125, 17258582, 27169796, 21668627
23272045, 20877664, 26325856, 19487147, 23149541, 24577566, 19430401
19676905, 20925795, 26482376, 21296029, 21629064, 23229229, 22865673

20708701, 25353983, 19280225, 21315084, 20613079, 19375649, 19213447
19989009, 18191823, 27314390, 26336977, 25775213, 24393981, 22568016
25639019, 17319928, 14705949, 19703301, 28390273, 20308798, 21626377
20122715, 6418158, 23105538, 26198926, 25743479, 19258504, 28714988
21188532, 24792678, 23151677, 17890099, 21649497, 26446098, 16887946
26024732, 18791688, 19721304, 27012701, 19490948, 29483672, 19619732
21164318, 29559723, 21516611, 23148260, 18090142, 21641760, 19818513
22468781, 23002524, 20139391, 24693382, 19978542, 25477657, 23543183
22165897, 19373893, 22359063, 19409212, 18373438, 23035249, 21820934
20677974, 18990693, 20470877, 19452434, 21422580, 21632821, 22351572
20235511, 23220453, 18742258, 18604493, 23008056, 22901797, 18610915
20978259, 20832516, 24801152, 26089440, 27276231, 20907061, 25733479
19523462, 18733351, 20505778, 19183343, 21787056, 21273804, 22782647
20544065, 25093739, 17835294, 29719146, 25210690, 28708023, 24413809
27846298, 18371441, 26714910, 24385983, 20413820, 28986231, 24421668
25897615, 25643931, 23195445, 21281607, 20513399, 18841764, 28098160
20558005, 20093776, 18909599, 20618595, 23572982, 23104033, 19211433
20331945, 19512341, 23066146, 22256431, 19637186, 19022470, 22686674
18607546, 26875822, 24573817, 23115139, 19649152, 19201867, 21294938
20898997, 18510194, 21293600, 21842740, 22454326, 24683149, 19534363
25489607, 23061702

Version 12.1.0.2.v18

Version 12.1.0.2.v18 includes the following:

- Patch [29918340](#): DATABASE PATCH SET UPDATE 12.1.0.2.191015
- Patch [30128197](#): OJVM PATCH SET UPDATE 12.1.0.2.191015
- Patch [29997937](#): DSTv34 for RDBMS (TZDATA2019G)
- Patch [29997959](#): DSTv34 for OJVM (TZDATA2019G)
- Patch [17969866](#): Oracle GoldenGate - Oracle RDBMS Server Recommended Patches
- Patch [20394750](#): Oracle GoldenGate - Oracle RDBMS Server Recommended Patches
- Patch [24835919](#): Oracle GoldenGate - Oracle RDBMS Server Recommended Patches
- Patch [21171382](#): DBMS_STATS Patch
- Patch [21091901](#): ONLINE MOVE OF HASH OR REF PARTITION CAN LEAVE LOCAL INDEXES INCONSISTENT
- Patch [30370890](#): JSON bundle patch

- Patch [20033733](#): PART :IMC:HIT ORA 600 [KGL-HEAP-SIZE-EXCEEDED]
- Patch [28730253](#): SUPPORT NEW ERA REIWA FOR JAPANESE IMPERIAL CALENDAR
- PreUpgrade Jar: preupgrade_12.1.0.2.0_18_crlf.zip
- Support for resizing the temporary tablespace in a read replica

For more information, see [Resizing the temporary tablespace in a read replica](#) in the *Amazon RDS User Guide*.

Oracle patch 29918340, released October 2019

Bugs fixed:

19309466, 19902195, 18250893, 25437699, 19383839, 19781326, 16756406
18456643, 26546664, 22364044, 29483723, 18845653, 18913440, 19915271
20172151, 18417036, 19516448, 24907917, 23713236, 24796092, 23140259
19243521, 19658708, 18272672, 21153266, 19174430, 18900107, 22243719
19548064, 26556014, 20493163, 20688221, 22346829, 21387964, 13542050
22072818, 22250006, 22734547, 22243983, 21623164, 19012119, 19932634
19869255, 22232606, 18681056, 23324000, 25427662, 22068305, 24589081
19439759, 19303936, 22916353, 24835538, 22353346, 19790243, 21106027
26444887, 23088803, 22529728, 26256131, 19134173, 24303148, 21101873
20447445, 27122162, 21188584, 19390567, 26513709, 25780343, 19769480
21097043, 21225209, 26245237, 20677396, 19284031, 19450314, 19016730
23514911, 22205263, 22517782, 20919320, 22075064, 22551446, 29250317
22721409, 18440095, 22496904, 16439813, 18354830, 20596234, 22022760
20936905, 22268833, 23197103, 22515353, 23746128, 21514877, 19809171
21186167, 26111842, 18990023, 13787015, 22492533, 22233505, 20173897
24624166, 17210525, 21260431, 29707896, 25579761, 20181030, 25056052
19370504, 21868720, 23068169, 19124589, 22690648, 21383171, 19402853
19888853, 25107334, 24341675, 17722075, 20882568, 25653109, 23026585
18604692, 20717081, 25546608, 20768076, 27370965, 19081128, 22173980
25722055, 23514710, 19178851, 20951038, 22168163, 25161298, 20569094
24308635, 19791377, 19050649, 20920911, 22475617, 19189525, 19469538
27052607, 20598042, 29633753, 22458049, 18988834, 21159665, 23302839
25307368, 25699321, 21924131, 17409174, 22729345, 22842151, 25051465
19238590, 16941434, 20387265, 29378913, 24397438, 20673810, 23108128
20356733, 22380919, 18436647, 23065323, 20825533, 19124336, 22294260
24790914, 20284155, 23571055, 6194865, 25539063, 17365043, 25914276
20952966, 22961508, 19176223, 21300341, 23237313, 18288842, 27223075
22353199, 20011515, 22083366, 27634991, 25670786, 21419850, 26898563

27986817, 19577410, 22495673, 26248143, 23294548, 23101501, 24737064
19931709, 25423453, 25547060, 23533807, 27726780, 24600330, 28384353
25600421, 18122373, 20043616, 23124895, 18856999, 21450666, 18893947
26633558, 20076781, 26029780, 21196809, 21354456, 22533631, 23725036
20464614, 19562381, 27375542, 24808595, 19189317, 25669791, 18307021
21917884, 19708632, 27213224, 25633101, 29006527, 20711718, 18973548
25982666, 19718981, 20684983, 23567857, 22826718, 25655390, 21773465
20250147, 20144019, 19197175, 26263721, 19597439, 21387128, 22007324
18818069, 21566639, 19180770, 19879746, 21785691, 20424183, 20539050
24285405, 21425496, 26544823, 19957298, 20322560, 22228324, 23172924
22520320, 27751755, 21575362, 25058080, 22365117, 22645009, 25165496
28950969, 18774543, 20124446, 21429602, 29189889, 26153977, 19371175
21863727, 18940497, 19074147, 22923409, 25489342, 21380789, 19154375
25417056, 19044962, 19532017, 19662635, 22374754, 20560611, 25654936
21492036, 18705806, 28420042, 19578247, 22024071, 22238921, 22809871
21184223, 19995869, 23089357, 19404068, 18921743, 19065677, 19018447
19018206, 18308268, 19777862, 29027694, 22223463, 19304354, 22519146
22214989, 19445860, 26654363, 27199245, 22977256, 20890311, 27445727
21142837, 20869721, 24555417, 22258530, 22179537, 21756699, 18801391
20217801, 18819908, 22760595, 19550902, 25483815, 23628685, 19543384
25482971, 23007241, 19593445, 21080143, 27351628, 20582405, 24966594
20031873, 25489367, 29828111, 18618122, 24737581, 21698350, 22501616
26784509, 24739928, 18966843, 19077215, 20704450, 19068970, 20543011
19023822, 24713381, 22836801, 20432873, 21756677, 20328248, 18674047
18849537, 20087383, 25459958, 20315311, 22897344, 29163567, 27534509
26768025, 25178179, 19308965, 18948177, 20764012, 27623159, 19468991
20868862, 21780146, 23315153, 20466628, 21756661, 20397490, 19706965
20302006, 24831514, 23240358, 22178855, 19032777, 20862087, 19329654
18974476, 20603378, 20859910, 19307662, 26203182, 21847223, 20281121
22568797, 19075256, 19076343, 28026866, 29511611, 18866977, 22808310
25635149, 20844426, 20904530, 20441797, 20296619, 18548246, 21442094
25079710, 24674955, 18840932, 18740837, 20294666, 21037923, 25602488
21517440, 22062517, 19180394, 27337759, 19174942, 20671094, 21889720
19347458, 19450116, 18411216, 20117253, 24386767, 20641666, 19931367
25264559, 19930276, 22092979, 25616268, 21625179, 20879709, 23003979
20165574, 28578164, 19272708, 19547370, 22624709, 23084507, 23184263
20228093, 21281532, 25093872, 19805359, 26324206, 19461270, 19434529
18799063, 20354900, 29388020, 20378086, 17008068, 21246723, 20831538
20424899, 20361671, 18674024, 19689979, 24411921, 19873610, 16619249
20562898, 21641414, 21091431, 19440586, 20001168, 22757364, 22175564
22499356, 20725343, 21241052, 19561643, 28199085, 20736227, 19399918
19195895, 20830459, 20017509, 18475439, 25790353, 21828126, 21665897
25555252, 20746251, 22568177, 25764020, 25612095, 25357142, 23096938
19067244, 18043064, 19941352, 21329301, 18885870, 26243698, 26187943

20324049, 19536415, 23709062, 28174827, 20446883, 27314206, 21299490
25313154, 18628388, 21744290, 18254023, 27072923, 25047724, 20591183
27847259, 20459944, 19185876, 18548433, 27207110, 22465352, 24385625
24326444, 20402832, 19627012, 22733141, 29200700, 20468401, 27441326
27620950, 16863642, 19639483, 19315691, 27567477, 21479753, 19174521
23177923, 20401975, 18306996, 18851894, 27034890, 21424824, 20581111
20318889, 20936731, 21060755, 25240188, 26828994, 22256560, 19188927
23328639, 27229389, 20766180, 20229001, 24570598, 25475853, 21172913
17655240, 29379978, 21266085, 19028800, 19035573, 19366375, 24523374
25599425, 25034396, 19289642, 21502702, 21291274, 18007682, 23521523
20475845, 29408136, 22148226, 22528741, 25417958, 24652769, 26088426
19326908, 19597583, 29500257, 17414008, 23019710, 20897759, 26822620
22046677, 19663176, 20938170, 19891090, 24825843, 26318627, 21960504
24509056, 19054077, 21385422, 26262953, 22657942, 20428621, 21899588
23326313, 19723336, 19835133, 17532734, 17495022, 25300427, 19333670
21842017, 19285025, 21373473, 23260854, 23061453, 19687159, 14643995
22146062, 20977794, 20734332, 17551063, 16938780, 27548131, 21977392
28612674, 24461826, 19676012, 20588502, 23315889, 19520602, 23053606
19841800, 20245930, 19001359, 21476308, 26546754, 19393542, 23533524
21099555, 27995248, 25429959, 19141838, 19644859, 21915719, 19908836
21421886, 19358317, 19524158, 23548817, 25861398, 20803014, 23025340
19335438, 19058490, 23642282, 19207117, 18799993, 25919622, 26569225
25986062, 20835241, 24662775, 19475971, 18967382, 20347562, 20348653
19896336, 24812585, 20048359, 21896069, 20468490, 19524384, 25392535
21147908, 21695575, 20440930, 30295478, 25789277, 19171086, 24718260
17867700, 19791273, 27397048, 21241829, 19591608, 22707244, 18419520
22296366, 22654475, 18914624, 19571367, 28636676, 21522582, 19501299
29893132, 26007010, 19529868, 20425790, 19708342, 27997875, 16870214
18202441, 24415926, 18743542, 19001390, 21157728, 20657411, 19332396
22606521, 21875360, 25091141, 21821302, 28000269, 19149990, 20382309
22855193, 16777441, 19606174, 20848335, 28542455, 25495682, 19382851
20528052, 22762046, 24563422, 23125826, 22503297, 28993590, 25192729
23338911, 22730454, 19354794, 20757079, 19176326, 20298413, 19048007
22018363, 18849970, 21532755, 24300640, 20860659, 22905130, 26121990
21263635, 27710072, 23209741, 22160989, 18499088, 18775971, 22894949
21059919, 18952989, 27348081, 22518784, 25856821, 24457597, 25484507
20794034, 20554364, 21061354, 19468347, 17533661, 19883092, 20657441
24401351, 21285458, 28023399, 18051556, 25330273, 26412540, 24425998
19699191, 24437510, 16875041, 20669434, 18964978, 22972770, 23342170
20828947, 21373076, 25492379, 25551676, 14283239, 25766822, 21967197
22922076, 19601762, 25575628, 26110259, 20368850, 21239530, 20437153
24848928, 20880215, 20798891, 25606091, 19013183, 25042823, 21133343
22695831, 24365589, 25248384, 25634317, 20134113, 19587324, 20273319
28501075, 18542562, 19017309, 26758193, 21063322, 22062026, 20134339

22077517, 22815955, 23854396, 24690216, 22507210, 16354467, 20101006
21795111, 27938623, 23501901, 18797519, 25997810, 23029562, 25879984
21260397, 25029423, 26844406, 19354335, 19730508, 22366558, 19390620
26658759, 25822410, 6599380, 20717359, 24321547, 27097854, 21297872
18964939, 19871910, 29437712, 26366517, 21913183, 25695903, 22366322
20171986, 20603431, 21132297, 25957038, 21542577, 22507234, 23170620
24719736, 25600342, 18868646, 28587723, 29142109, 26637824, 20627866
18110491, 16923858, 24642295, 19518079, 19339555, 20466322, 25823754
25110233, 20169408, 24908321, 20842388, 17274537, 26575788, 20474192
21644640, 28849751, 21794615, 18899974, 20471920, 22806698, 19052488
26198757, 19503821, 23717151, 24350620, 23126410, 20074391, 19157754
22495062, 21220620, 24316947, 19865345, 19065556, 22816287, 25947799
20878790, 23492665, 21322887, 22305887, 20879889, 19617921, 24350831
19578350, 28022101, 26439748, 21893235, 19363645, 21072646, 20898391
19291380, 27060167, 18382302, 27086138, 22536802, 22087683, 21197626
21656630, 20373598, 19248799, 22707866, 28432129, 19155797, 19279273
18886413, 25490238, 20922010, 19990037, 25150925, 20509482, 20778986
27255377, 24717859, 20703000, 22862134, 21526048, 28683167, 24929210
24560906, 20144308, 21620471, 19670108, 19068610, 20267166, 25123585
20476175, 18549238, 19297917, 22950945, 19385656, 20564072, 23528412
19684504, 19330795, 21174504, 28357401, 20899461, 20557786, 21911701
19143550, 20118035, 19024808, 25760195, 20009833, 19604659, 16359751
26039623, 22820579, 19928926, 23314180, 20212067, 24737403, 20480209
18904062, 29030780, 26430737, 20856766, 17258582, 27169796, 21668627
23272045, 20877664, 19487147, 23149541, 24577566, 19430401, 19676905
20925795, 26482376, 21296029, 21629064, 23229229, 22865673, 20708701
25353983, 19280225, 21315084, 20613079, 19375649, 19213447, 19989009
18191823, 27314390, 26336977, 25775213, 24393981, 22568016, 25639019
17319928, 14705949, 19703301, 28390273, 21626377, 20122715, 6418158
23105538, 26198926, 19258504, 21188532, 24792678, 23151677, 17890099
21649497, 26446098, 16887946, 26024732, 18791688, 19721304, 27012701
19490948, 29483672, 19619732, 21164318, 29559723, 23148260, 18090142
21641760, 19818513, 23002524, 22468781, 20139391, 24693382, 19978542
25477657, 23543183, 22165897, 19373893, 22359063, 19409212, 18373438
23035249, 20677974, 18990693, 20470877, 21422580, 21632821, 22351572
20235511, 23220453, 18742258, 18604493, 23008056, 22901797, 18610915
20978259, 20832516, 24801152, 26089440, 20907061, 19523462, 25733479
20505778, 18733351, 19183343, 21787056, 21273804, 22782647, 20544065
25093739, 17835294, 28708023, 24413809, 27846298, 18371441, 26714910
24385983, 20413820, 28986231, 24421668, 25897615, 25643931, 23195445
21281607, 20513399, 18841764, 20558005, 20093776, 18909599, 20618595
23572982, 23104033, 19211433, 20331945, 19512341, 22256431, 19637186
23066146, 19022470, 22686674, 18607546, 26875822, 24573817, 23115139
19649152, 19201867, 21294938, 20898997, 18510194, 21293600, 21842740

22454326, 24683149, 19534363, 25489607, 23061702

Version 12.1.0.2.v17

Version 12.1.0.2.v17 includes the following:

- Patch [29494060](#): DATABASE PATCH SET UPDATE 12.1.0.2.190716
- Patch [29774383](#): OJVM PATCH SET UPDATE 12.1.0.2.190716
- Patch [28852325](#): DSTv33 for RDBMS (TZDATA2018G)
- Patch [28852334](#): DSTv33 for OJVM (TZDATA2018G)
- Patch [17969866](#): Oracle GoldenGate - Oracle RDBMS Server Recommended Patches
- Patch [20394750](#): Oracle GoldenGate - Oracle RDBMS Server Recommended Patches
- Patch [24835919](#): Oracle GoldenGate - Oracle RDBMS Server Recommended Patches
- Patch [21171382](#): DBMS_STATS Patch
- Patch [21091901](#): ONLINE MOVE OF HASH OR REF PARTITION CAN LEAVE LOCAL INDEXES INCONSISTENT
- Patch [29958796](#): JSON bundle patch
- Patch [20033733](#): PART :IMC:HIT ORA 600 [KGL-HEAP-SIZE-EXCEEDED]
- Patch [28730253](#): SUPPORT NEW ERA REIWA FOR JAPANESE IMPERIAL CALENDAR

Oracle patch 29494060, released July 2019

Bugs fixed:

19309466, 19902195, 18250893, 25437699, 19383839, 19781326, 16756406
 18456643, 26546664, 22364044, 18845653, 19915271, 20172151, 18417036
 19516448, 23713236, 24907917, 24796092, 23140259, 19243521, 19658708
 18272672, 21153266, 19174430, 22243719, 19548064, 26556014, 20493163
 20688221, 21387964, 13542050, 22250006, 22734547, 22243983, 21623164
 19012119, 19932634, 19869255, 22232606, 18681056, 23324000, 25427662
 22068305, 24589081, 19439759, 19303936, 22916353, 24835538, 22353346
 19790243, 21106027, 26444887, 23088803, 22529728, 26256131, 19134173
 24303148, 20447445, 21101873, 21188584, 19390567, 26513709, 25780343
 19769480, 21097043, 21225209, 26245237, 20677396, 19284031, 19450314
 19016730, 22517782, 20919320, 22205263, 22075064, 22551446, 22721409

18440095, 22496904, 16439813, 18354830, 20596234, 22022760, 20936905
23197103, 22515353, 21514877, 19809171, 21186167, 26111842, 18990023
13787015, 22492533, 20173897, 24624166, 17210525, 21260431, 20181030
25056052, 19370504, 21868720, 23068169, 19124589, 21383171, 19402853
22690648, 19888853, 24341675, 17722075, 25107334, 20882568, 25653109
23026585, 18604692, 20717081, 25546608, 27370965, 19081128, 20768076
22173980, 25722055, 23514710, 19178851, 20951038, 22168163, 25161298
20569094, 24308635, 19791377, 19050649, 20920911, 22475617, 19189525
19469538, 27052607, 20598042, 22458049, 18988834, 21159665, 23302839
25307368, 25699321, 17409174, 22729345, 22842151, 19238590, 25051465
16941434, 20387265, 24397438, 29378913, 20673810, 23108128, 20356733
22380919, 18436647, 23065323, 20825533, 19124336, 22294260, 24790914
20284155, 23571055, 25539063, 17365043, 25914276, 20952966, 22961508
19176223, 21300341, 23237313, 18288842, 27223075, 22353199, 20011515
22083366, 27634991, 25670786, 21419850, 26898563, 27986817, 19577410
26248143, 23294548, 23101501, 24737064, 19931709, 25423453, 25547060
23533807, 27726780, 24600330, 25600421, 18122373, 20043616, 23124895
18856999, 21450666, 18893947, 26633558, 20076781, 26029780, 21196809
21354456, 22533631, 23725036, 20464614, 19562381, 27375542, 24808595
19189317, 25669791, 18307021, 21917884, 19708632, 27213224, 25633101
29006527, 20711718, 18973548, 25982666, 19718981, 23567857, 22826718
25655390, 20684983, 21773465, 20250147, 20144019, 19197175, 26263721
19597439, 21387128, 22007324, 19180770, 18818069, 21566639, 19879746
21785691, 20424183, 24285405, 21425496, 26544823, 20322560, 22228324
23172924, 22520320, 27751755, 21575362, 25058080, 22365117, 22645009
25165496, 28950969, 18774543, 20124446, 21429602, 26153977, 29189889
19371175, 21863727, 18940497, 19074147, 22923409, 25489342, 21380789
19154375, 19044962, 25417056, 19532017, 19662635, 22374754, 20560611
25654936, 21492036, 18705806, 28420042, 19578247, 22024071, 22238921
22809871, 21184223, 19995869, 23089357, 19404068, 18921743, 19065677
19018447, 19018206, 18308268, 19777862, 29027694, 22223463, 19304354
22519146, 19445860, 26654363, 27199245, 22977256, 20890311, 27445727
21142837, 20869721, 24555417, 22179537, 21756699, 20217801, 18819908
22760595, 25483815, 23628685, 23007241, 19593445, 21080143, 27351628
20582405, 24966594, 20031873, 25489367, 18618122, 24737581, 21698350
26784509, 24739928, 18966843, 19077215, 20704450, 19068970, 20543011
19023822, 24713381, 20432873, 21756677, 22836801, 20328248, 18674047
18849537, 20087383, 25459958, 20315311, 22897344, 27534509, 25178179
19308965, 18948177, 19468991, 20868862, 21780146, 23315153, 20466628
21756661, 20397490, 19706965, 20302006, 24831514, 23240358, 22178855
19032777, 20862087, 19329654, 18974476, 20603378, 20859910, 19307662
26203182, 21847223, 20281121, 22568797, 19075256, 19076343, 18866977
28026866, 29511611, 22808310, 25635149, 20844426, 20904530, 20441797
21442094, 25079710, 24674955, 18840932, 18740837, 20294666, 25602488

21517440, 22062517, 19180394, 27337759, 19174942, 20671094, 21889720
19450116, 18411216, 20117253, 24386767, 20641666, 19931367, 25264559
19930276, 22092979, 25616268, 21625179, 20879709, 23003979, 20165574
28578164, 19272708, 19547370, 22624709, 23084507, 23184263, 20228093
21281532, 25093872, 19805359, 26324206, 19461270, 19434529, 18799063
20354900, 20378086, 29388020, 17008068, 21246723, 20831538, 20424899
20361671, 18674024, 19689979, 24411921, 19873610, 16619249, 20562898
21641414, 21091431, 19440586, 20001168, 22757364, 22175564, 20725343
21241052, 19561643, 20736227, 19399918, 19195895, 20830459, 20017509
18475439, 25790353, 21828126, 21665897, 25555252, 20746251, 22568177
25764020, 25612095, 25357142, 23096938, 19067244, 18043064, 21329301
18885870, 26243698, 26187943, 20324049, 19536415, 23709062, 28174827
20446883, 27314206, 21299490, 25313154, 18628388, 21744290, 18254023
25047724, 20591183, 27847259, 19185876, 18548433, 27207110, 22465352
24385625, 24326444, 20402832, 19627012, 29200700, 20468401, 27441326
27620950, 16863642, 19639483, 19315691, 27567477, 21479753, 19174521
23177923, 20401975, 18306996, 18851894, 27034890, 20581111, 20318889
20936731, 21060755, 25240188, 26828994, 22256560, 19188927, 23328639
27229389, 20766180, 20229001, 24570598, 25475853, 21172913, 17655240
21266085, 19028800, 29379978, 19035573, 19366375, 24523374, 25599425
25034396, 19289642, 21502702, 21291274, 18007682, 23521523, 20475845
29408136, 22148226, 22528741, 25417958, 24652769, 26088426, 19326908
19597583, 17414008, 23019710, 20897759, 26822620, 22046677, 19663176
20938170, 19891090, 24825843, 26318627, 21960504, 24509056, 19054077
26262953, 22657942, 20428621, 21899588, 23326313, 19723336, 19835133
17532734, 25300427, 19333670, 17495022, 21842017, 19285025, 21373473
23260854, 23061453, 19687159, 14643995, 20977794, 20734332, 17551063
27548131, 21977392, 24461826, 28612674, 19676012, 20588502, 23315889
19520602, 23053606, 19841800, 20245930, 19001359, 21476308, 26546754
19393542, 23533524, 21099555, 27995248, 25429959, 19141838, 19644859
21915719, 19908836, 21421886, 19358317, 19524158, 23548817, 25861398
20803014, 23025340, 19335438, 19058490, 23642282, 19207117, 18799993
25919622, 26569225, 25986062, 20835241, 24662775, 19475971, 18967382
20347562, 20348653, 19896336, 24812585, 20048359, 21896069, 20468490
19524384, 25392535, 21147908, 21695575, 20440930, 25789277, 19171086
24718260, 17867700, 19791273, 27397048, 21241829, 19591608, 22707244
18419520, 22296366, 22654475, 18914624, 19571367, 28636676, 21522582
19501299, 26007010, 19529868, 20425790, 19708342, 27997875, 16870214
18202441, 24415926, 18743542, 19001390, 21157728, 20657411, 19332396
21875360, 22606521, 25091141, 28000269, 19149990, 20382309, 22855193
16777441, 19606174, 20848335, 25495682, 19382851, 20528052, 22762046
24563422, 23125826, 22503297, 28993590, 25192729, 23338911, 22730454
19354794, 20757079, 19176326, 20298413, 19048007, 22018363, 18849970
21532755, 20860659, 22905130, 26121990, 21263635, 27710072, 22160989

23209741, 18499088, 22894949, 21059919, 18952989, 27348081, 22518784
25856821, 24457597, 25484507, 20794034, 21061354, 20554364, 19468347
17533661, 19883092, 20657441, 24401351, 21285458, 28023399, 18051556
25330273, 26412540, 19699191, 24437510, 16875041, 20669434, 18964978
22972770, 20828947, 21373076, 25492379, 25551676, 14283239, 25766822
21967197, 22922076, 25575628, 19601762, 26110259, 20368850, 21239530
20437153, 24848928, 20880215, 20798891, 25606091, 19013183, 25042823
21133343, 22695831, 24365589, 25248384, 25634317, 20134113, 19587324
20273319, 28501075, 18542562, 19017309, 26758193, 21063322, 22062026
20134339, 22077517, 22815955, 23854396, 24690216, 22507210, 16354467
20101006, 21795111, 27938623, 23501901, 18797519, 25997810, 25879984
21260397, 25029423, 19354335, 19730508, 22366558, 26658759, 25822410
6599380, 20717359, 24321547, 27097854, 21297872, 18964939, 19871910
29437712, 26366517, 21913183, 22366322, 20171986, 25695903, 20603431
21132297, 25957038, 21542577, 22507234, 23170620, 24719736, 25600342
18868646, 28587723, 29142109, 26637824, 20627866, 18110491, 16923858
24642295, 19518079, 19339555, 20466322, 25823754, 25110233, 20169408
24908321, 20842388, 17274537, 26575788, 20474192, 21644640, 28849751
21794615, 18899974, 20471920, 22806698, 19052488, 26198757, 19503821
24350620, 20074391, 19157754, 21220620, 22495062, 24316947, 19865345
19065556, 22816287, 25947799, 20878790, 23492665, 21322887, 22305887
20879889, 24350831, 19578350, 28022101, 26439748, 21893235, 19363645
21072646, 20898391, 19291380, 27060167, 18382302, 27086138, 22536802
22087683, 21197626, 21656630, 20373598, 19248799, 22707866, 28432129
19155797, 19279273, 18886413, 25490238, 20922010, 19990037, 25150925
20509482, 27255377, 24717859, 20703000, 22862134, 21526048, 28683167
24929210, 24560906, 20144308, 21620471, 19670108, 19068610, 20267166
25123585, 20476175, 18549238, 19297917, 22950945, 19385656, 23528412
19684504, 19330795, 21174504, 28357401, 20899461, 20557786, 21911701
19143550, 20118035, 19024808, 25760195, 20009833, 19604659, 16359751
26039623, 22820579, 19928926, 23314180, 20212067, 24737403, 20480209
18904062, 29030780, 26430737, 20856766, 17258582, 27169796, 21668627
20877664, 23272045, 19487147, 23149541, 24577566, 19430401, 19676905
20925795, 26482376, 21296029, 21629064, 23229229, 22865673, 20708701
25353983, 19280225, 21315084, 20613079, 19375649, 19213447, 19989009
18191823, 27314390, 26336977, 25775213, 24393981, 25639019, 17319928
14705949, 19703301, 28390273, 21626377, 20122715, 6418158, 23105538
26198926, 19258504, 21188532, 23151677, 24792678, 17890099, 21649497
26446098, 16887946, 26024732, 18791688, 19721304, 27012701, 19490948
19619732, 21164318, 23148260, 18090142, 21641760, 19818513, 23002524
20139391, 24693382, 19978542, 23543183, 22165897, 19373893, 22359063
19409212, 18373438, 23035249, 20677974, 18990693, 20470877, 21422580
21632821, 22351572, 20235511, 23220453, 18742258, 18604493, 23008056
22901797, 18610915, 20978259, 20832516, 24801152, 26089440, 20907061

```
19523462, 20505778, 19183343, 21787056, 21273804, 22782647, 25093739
17835294, 28708023, 24413809, 27846298, 18371441, 26714910, 24385983
20413820, 24421668, 28986231, 25897615, 25643931, 23195445, 21281607
20513399, 20558005, 20093776, 18909599, 20618595, 23572982, 19211433
20331945, 19512341, 22256431, 19637186, 19022470, 18607546, 26875822
24573817, 23115139, 19649152, 19201867, 21294938, 20898997, 18510194
21842740, 22454326, 24683149, 19534363, 25489607, 23061702
```

Version 12.1.0.2.v16

Version 12.1.0.2.v16 includes the following:

- Patch [29141015](#): Database Patch Set Update: 12.1.0.2.190416
- Patch [29251241](#): OJVM PATCH SET UPDATE 12.1.0.2.190416
- Patch [28852325](#): DSTv33 for RDBMS (TZDATA2018G)
- Patch [28852334](#): DSTv33 for OJVM (TZDATA2018G)
- Patch [17969866](#): Oracle GoldenGate - Oracle RDBMS Server Recommended Patches
- Patch [20394750](#): Oracle GoldenGate - Oracle RDBMS Server Recommended Patches
- Patch [24835919](#): Oracle GoldenGate - Oracle RDBMS Server Recommended Patches
- Patch [21171382](#): DBMS_STATS Patch
- Patch [21091901](#): ONLINE MOVE OF HASH OR REF PARTITION CAN LEAVE LOCAL INDEXES INCONSISTENT
- Patch [29600862](#): JSON bundle patch
- Patch [20033733](#): PART :IMC:HIT ORA 600 [KGL-HEAP-SIZE-EXCEEDED]
- Patch [28730253](#): SUPPORT NEW ERA REIWA FOR JAPANESE IMPERIAL CALENDAR

Oracle patch 22785785, released April 2019

Bugs fixed:

```
19309466, 19902195, 18250893, 25437699, 19383839, 19781326, 16756406
18456643, 26546664, 22364044, 18845653, 19915271, 20172151, 18417036
19516448, 23713236, 24796092, 23140259, 19243521, 19658708, 18272672
21153266, 19174430, 22243719, 26556014, 20493163, 20688221, 21387964
13542050, 22734547, 22243983, 21623164, 19012119, 19932634, 19869255
```

22232606, 18681056, 23324000, 25427662, 22068305, 24589081, 19439759
19303936, 22916353, 24835538, 22353346, 21106027, 19790243, 26444887
23088803, 22529728, 26256131, 19134173, 20447445, 21188584, 19390567
26513709, 25780343, 19769480, 21097043, 21225209, 26245237, 20677396
19284031, 19450314, 19016730, 20919320, 22517782, 22075064, 22551446
22721409, 18440095, 22496904, 16439813, 18354830, 20596234, 22022760
20936905, 23197103, 21514877, 21186167, 26111842, 18990023, 13787015
22492533, 20173897, 24624166, 17210525, 21260431, 20181030, 25056052
19370504, 21868720, 23068169, 19124589, 21383171, 19402853, 19888853
24341675, 17722075, 20882568, 25653109, 23026585, 18604692, 20717081
25546608, 27370965, 19081128, 22173980, 23514710, 25722055, 19178851
20951038, 22168163, 25161298, 20569094, 24308635, 19791377, 19050649
20920911, 22475617, 19189525, 19469538, 27052607, 20598042, 22458049
18988834, 23302839, 25307368, 17409174, 22729345, 22842151, 19238590
16941434, 20387265, 24397438, 20673810, 23108128, 20356733, 22380919
18436647, 23065323, 20825533, 19124336, 22294260, 24790914, 20284155
23571055, 25539063, 17365043, 25914276, 20952966, 22961508, 19176223
21300341, 23237313, 18288842, 27223075, 22353199, 20011515, 22083366
25670786, 27634991, 21419850, 26898563, 19577410, 27986817, 26248143
23294548, 24737064, 23101501, 19931709, 25423453, 25547060, 23533807
27726780, 24600330, 25600421, 18122373, 20043616, 23124895, 18856999
21450666, 18893947, 26633558, 20076781, 26029780, 21196809, 21354456
23725036, 20464614, 22533631, 19562381, 27375542, 24808595, 19189317
25669791, 18307021, 21917884, 19708632, 27213224, 25633101, 20711718
29006527, 18973548, 25982666, 19718981, 23567857, 22826718, 25655390
21773465, 20250147, 20144019, 19197175, 26263721, 19597439, 21387128
22007324, 19180770, 19879746, 21785691, 20424183, 24285405, 26544823
20322560, 22228324, 23172924, 22520320, 21575362, 27751755, 25058080
22365117, 22645009, 25165496, 28950969, 18774543, 20124446, 21429602
26153977, 19371175, 21863727, 18940497, 19074147, 22923409, 25489342
21380789, 19154375, 19044962, 19532017, 19662635, 22374754, 20560611
25654936, 21492036, 18705806, 28420042, 19578247, 22024071, 22238921
22809871, 21184223, 19995869, 23089357, 19404068, 18921743, 19065677
19018447, 19018206, 18308268, 19777862, 22223463, 19304354, 29027694
22519146, 27199245, 19445860, 26654363, 22977256, 20890311, 27445727
21142837, 20869721, 24555417, 22179537, 21756699, 20217801, 18819908
22760595, 25483815, 23628685, 23007241, 19593445, 21080143, 27351628
20582405, 20031873, 25489367, 18618122, 24737581, 26784509, 24739928
18966843, 19077215, 20704450, 19068970, 20543011, 19023822, 24713381
20432873, 21756677, 20328248, 18674047, 18849537, 20087383, 25459958
20315311, 22897344, 27534509, 25178179, 19308965, 18948177, 19468991
20868862, 21780146, 23315153, 20466628, 21756661, 20397490, 19706965
20302006, 24831514, 23240358, 22178855, 19032777, 20862087, 19329654
18974476, 20603378, 20859910, 19307662, 21847223, 20281121, 22568797

19075256, 19076343, 18866977, 22808310, 25635149, 20844426, 20904530
20441797, 21442094, 25079710, 24674955, 18840932, 18740837, 20294666
25602488, 21517440, 22062517, 27337759, 19174942, 19180394, 20671094
21889720, 18411216, 20117253, 24386767, 20641666, 25264559, 22092979
25616268, 21625179, 20879709, 23003979, 20165574, 28578164, 19272708
19547370, 22624709, 23084507, 23184263, 20228093, 21281532, 25093872
19805359, 19461270, 26324206, 19434529, 18799063, 20378086, 17008068
21246723, 20831538, 20424899, 20361671, 18674024, 19689979, 24411921
19873610, 16619249, 20562898, 21641414, 21091431, 19440586, 22757364
20001168, 22175564, 20725343, 21241052, 19561643, 20736227, 19399918
19195895, 20830459, 20017509, 18475439, 25790353, 21828126, 21665897
25555252, 20746251, 22568177, 25764020, 25612095, 25357142, 23096938
19067244, 18043064, 21329301, 18885870, 26243698, 26187943, 20324049
19536415, 23709062, 28174827, 20446883, 27314206, 21299490, 25313154
18628388, 21744290, 18254023, 25047724, 20591183, 27847259, 19185876
27207110, 22465352, 24385625, 24326444, 20402832, 19627012, 20468401
27441326, 27620950, 16863642, 19639483, 19315691, 27567477, 21479753
19174521, 20401975, 18306996, 18851894, 27034890, 20581111, 20318889
20936731, 21060755, 25240188, 26828994, 22256560, 19188927, 27229389
20766180, 20229001, 24570598, 25475853, 21172913, 17655240, 21266085
19028800, 19035573, 19366375, 24523374, 25599425, 25034396, 19289642
21502702, 21291274, 18007682, 23521523, 20475845, 22148226, 22528741
29408136, 25417958, 24652769, 26088426, 19326908, 19597583, 17414008
23019710, 20897759, 26822620, 22046677, 19663176, 20938170, 19891090
24825843, 26318627, 21960504, 24509056, 19054077, 26262953, 22657942
20428621, 21899588, 23326313, 19723336, 19835133, 17532734, 19333670
25300427, 21842017, 19285025, 21373473, 23260854, 23061453, 19687159
14643995, 20977794, 20734332, 17551063, 27548131, 21977392, 24461826
19676012, 20588502, 23315889, 19520602, 23053606, 19841800, 20245930
19001359, 21476308, 26546754, 19393542, 23533524, 21099555, 27995248
25429959, 19141838, 19644859, 21915719, 19908836, 21421886, 19358317
19524158, 23548817, 25861398, 20803014, 23025340, 19335438, 19058490
23642282, 19207117, 18799993, 25919622, 26569225, 20835241, 25986062
24662775, 19475971, 18967382, 20347562, 20348653, 19896336, 24812585
20048359, 21896069, 20468490, 19524384, 25392535, 21147908, 20440930
25789277, 19171086, 24718260, 17867700, 19791273, 27397048, 21241829
19591608, 22707244, 18419520, 22296366, 22654475, 18914624, 19571367
28636676, 21522582, 19501299, 19529868, 20425790, 26007010, 19708342
27997875, 16870214, 18202441, 24415926, 18743542, 19001390, 21157728
19332396, 21875360, 25091141, 28000269, 19149990, 20382309, 22855193
16777441, 19606174, 20848335, 25495682, 19382851, 20528052, 22762046
24563422, 23125826, 22503297, 28993590, 25192729, 23338911, 22730454
19176326, 20298413, 19048007, 18849970, 21532755, 20860659, 22905130
26121990, 21263635, 22160989, 18499088, 22894949, 21059919, 18952989

22518784, 27348081, 25856821, 24457597, 25484507, 20794034, 21061354
19468347, 17533661, 19883092, 20657441, 24401351, 21285458, 18051556
25330273, 28023399, 26412540, 19699191, 24437510, 20669434, 16875041
18964978, 22972770, 20828947, 21373076, 25492379, 25551676, 14283239
25766822, 21967197, 22922076, 25575628, 26110259, 20368850, 21239530
20437153, 24848928, 20880215, 20798891, 25606091, 19013183, 21133343
22695831, 24365589, 25634317, 19587324, 20134113, 20273319, 18542562
26758193, 19017309, 21063322, 22062026, 20134339, 22077517, 22815955
23854396, 24690216, 22507210, 16354467, 20101006, 21795111, 27938623
23501901, 18797519, 25879984, 21260397, 25029423, 19354335, 19730508
22366558, 26658759, 25822410, 6599380, 20717359, 24321547, 27097854
21297872, 18964939, 26366517, 21913183, 22366322, 20171986, 20603431
21132297, 25957038, 21542577, 22507234, 23170620, 24719736, 25600342
18868646, 26637824, 20627866, 28587723, 29142109, 18110491, 16923858
24642295, 19518079, 20466322, 19339555, 25823754, 25110233, 24908321
20842388, 17274537, 26575788, 20474192, 21644640, 28849751, 21794615
18899974, 20471920, 22806698, 19052488, 19503821, 24350620, 20074391
19157754, 21220620, 24316947, 19865345, 19065556, 22816287, 25947799
20878790, 23492665, 21322887, 22305887, 20879889, 24350831, 19578350
28022101, 26439748, 21893235, 19363645, 21072646, 20898391, 19291380
27060167, 27086138, 18382302, 22536802, 22087683, 21197626, 21656630
20373598, 19248799, 22707866, 19155797, 19279273, 28432129, 18886413
25490238, 20922010, 19990037, 25150925, 20509482, 27255377, 24717859
20703000, 22862134, 21526048, 28683167, 24929210, 24560906, 20144308
21620471, 19670108, 19068610, 20267166, 25123585, 20476175, 18549238
22950945, 19385656, 23528412, 19684504, 21174504, 20899461, 20557786
21911701, 19143550, 20118035, 19024808, 25760195, 20009833, 19604659
16359751, 26039623, 19928926, 23314180, 20212067, 24737403, 20480209
18904062, 26430737, 29030780, 20856766, 27169796, 21668627, 17258582
20877664, 19487147, 23149541, 24577566, 19430401, 19676905, 20925795
21296029, 21629064, 23229229, 22865673, 20708701, 25353983, 19280225
21315084, 20613079, 19375649, 19213447, 19989009, 18191823, 27314390
26336977, 25775213, 24393981, 25639019, 17319928, 14705949, 19703301
21626377, 20122715, 6418158, 23105538, 26198926, 19258504, 21188532
23151677, 17890099, 21649497, 26446098, 16887946, 26024732, 18791688
19721304, 27012701, 19490948, 19619732, 21164318, 23148260, 18090142
21641760, 19818513, 23002524, 20139391, 24693382, 19978542, 23543183
22165897, 22359063, 19373893, 19409212, 18373438, 23035249, 18990693
20470877, 21422580, 21632821, 22351572, 20235511, 23220453, 18742258
18604493, 23008056, 22901797, 18610915, 20978259, 20832516, 24801152
26089440, 20907061, 19523462, 20505778, 19183343, 21787056, 21273804
22782647, 25093739, 17835294, 28708023, 24413809, 18371441, 26714910
24385983, 20413820, 24421668, 25897615, 25643931, 23195445, 21281607
20513399, 20558005, 20093776, 18909599, 20618595, 23572982, 19211433

20331945, 19512341, 22256431, 19637186, 19022470, 18607546, 26875822
 24573817, 23115139, 19649152, 19201867, 21294938, 20898997, 18510194
 21842740, 22454326, 24683149, 19534363, 25489607

Version 12.1.0.2.v15

Version 12.1.0.2.v15 includes the following:

- Patch [28729169](#): Oracle Database Patch Set Update 12.1.0.2.190115
- Patch [28790654](#): Oracle JVM Patch Set Update 12.1.0.2.190115
- Patch [28125601](#): DSTv32 for RDBMS (TZDATA2018E)
- Patch [28127287](#): DSTv32 for OJVM (TZDATA2018E)
- Patch [17969866](#): Oracle GoldenGate - Oracle RDBMS Server Recommended Patches
- Patch [20394750](#): Oracle GoldenGate - Oracle RDBMS Server Recommended Patches
- Patch [21171382](#): DBMS_STATS Patch
- Patch [29125200](#): JSON bundle patch
- Patch [20033733](#): KGL heap size patch

Oracle patch 28729169, released January 2019

Bugs fixed:

19309466, 19902195, 18250893, 25437699, 19383839, 16756406, 18456643
 26546664, 22364044, 18845653, 19915271, 20172151, 18417036, 23713236
 24796092, 23140259, 19243521, 19658708, 18272672, 21153266, 19174430
 22243719, 20493163, 20688221, 21387964, 13542050, 22734547, 21623164
 19012119, 19932634, 19869255, 22232606, 18681056, 23324000, 25427662
 22068305, 24589081, 19439759, 19303936, 22916353, 24835538, 22353346
 21106027, 26444887, 23088803, 22529728, 26256131, 19134173, 20447445
 21188584, 19390567, 26513709, 25780343, 19769480, 21097043, 21225209
 26245237, 20677396, 19284031, 19450314, 19016730, 20919320, 22075064
 22551446, 22721409, 18440095, 22496904, 16439813, 18354830, 20596234
 22022760, 20936905, 23197103, 21514877, 26111842, 18990023, 13787015
 22492533, 20173897, 24624166, 17210525, 21260431, 20181030, 25056052
 19370504, 21868720, 23068169, 19124589, 19402853, 21383171, 19888853
 24341675, 17722075, 20882568, 25653109, 23026585, 18604692, 20717081

25546608, 27370965, 19081128, 22173980, 23514710, 19178851, 20951038
22168163, 25161298, 20569094, 24308635, 19791377, 19050649, 20920911
19189525, 22475617, 19469538, 27052607, 20598042, 22458049, 18988834
23302839, 25307368, 17409174, 22729345, 22842151, 19238590, 16941434
20387265, 24397438, 20673810, 23108128, 20356733, 22380919, 18436647
23065323, 20825533, 19124336, 22294260, 24790914, 20284155, 23571055
25539063, 17365043, 25914276, 20952966, 22961508, 19176223, 21300341
23237313, 18288842, 22353199, 27223075, 22083366, 25670786, 21419850
26898563, 19577410, 26248143, 23294548, 24737064, 19931709, 25423453
25547060, 23533807, 27726780, 24600330, 25600421, 18122373, 20043616
23124895, 18856999, 21450666, 18893947, 26633558, 20076781, 26029780
21196809, 21354456, 23725036, 20464614, 19562381, 27375542, 24808595
19189317, 25669791, 18307021, 21917884, 19708632, 27213224, 25633101
20711718, 18973548, 25982666, 19718981, 23567857, 22826718, 25655390
21773465, 20250147, 20144019, 19197175, 26263721, 19597439, 21387128
22007324, 19180770, 19879746, 21785691, 20424183, 24285405, 26544823
20322560, 22228324, 23172924, 22520320, 21575362, 25058080, 22365117
22645009, 25165496, 28950969, 18774543, 20124446, 21429602, 26153977
19371175, 21863727, 18940497, 19074147, 22923409, 25489342, 21380789
19154375, 19044962, 19532017, 19662635, 22374754, 20560611, 25654936
21492036, 18705806, 19578247, 22024071, 22238921, 22809871, 21184223
23089357, 19404068, 18921743, 19065677, 19018447, 19018206, 18308268
19777862, 22223463, 19304354, 22519146, 27199245, 22977256, 20890311
27445727, 21142837, 20869721, 24555417, 22179537, 21756699, 20217801
18819908, 22760595, 25483815, 23628685, 23007241, 19593445, 21080143
27351628, 20031873, 25489367, 18618122, 24737581, 26784509, 24739928
18966843, 19077215, 20704450, 19068970, 20543011, 19023822, 24713381
20432873, 21756677, 20328248, 18674047, 18849537, 20087383, 25459958
20315311, 22897344, 27534509, 25178179, 19308965, 18948177, 19468991
20868862, 21780146, 23315153, 20466628, 21756661, 20397490, 19706965
20302006, 24831514, 23240358, 22178855, 19032777, 20862087, 19329654
18974476, 20603378, 20859910, 19307662, 21847223, 20281121, 19075256
22568797, 19076343, 18866977, 22808310, 25635149, 20844426, 20904530
20441797, 21442094, 25079710, 24674955, 18840932, 18740837, 20294666
25602488, 21517440, 22062517, 27337759, 19174942, 20671094, 21889720
18411216, 20117253, 24386767, 20641666, 25264559, 22092979, 25616268
21625179, 20879709, 23003979, 20165574, 19272708, 19547370, 22624709
23084507, 20228093, 21281532, 25093872, 19805359, 19461270, 19434529
18799063, 20378086, 17008068, 21246723, 20831538, 20424899, 20361671
18674024, 19689979, 24411921, 19873610, 16619249, 20562898, 21641414
21091431, 19440586, 22757364, 22175564, 20725343, 21241052, 19561643
20736227, 19399918, 19195895, 20830459, 20017509, 18475439, 25790353
21828126, 21665897, 25555252, 20746251, 25764020, 25612095, 22568177
25357142, 23096938, 19067244, 18043064, 21329301, 18885870, 26243698

26187943, 20324049, 19536415, 23709062, 28174827, 20446883, 27314206
21299490, 25313154, 21744290, 18254023, 20591183, 25047724, 27847259
19185876, 27207110, 22465352, 24326444, 20402832, 19627012, 20468401
27441326, 27620950, 16863642, 19639483, 19315691, 27567477, 21479753
19174521, 20401975, 18306996, 18851894, 27034890, 20581111, 20318889
20936731, 21060755, 25240188, 26828994, 22256560, 19188927, 27229389
24570598, 20229001, 25475853, 21172913, 17655240, 21266085, 19028800
19035573, 19366375, 24523374, 25034396, 25599425, 19289642, 21291274
18007682, 23521523, 20475845, 22148226, 22528741, 25417958, 24652769
26088426, 19326908, 19597583, 17414008, 23019710, 20897759, 26822620
22046677, 20938170, 19891090, 24825843, 26318627, 21960504, 24509056
19054077, 26262953, 22657942, 20428621, 21899588, 23326313, 19723336
19835133, 17532734, 19333670, 21842017, 19285025, 21373473, 23260854
23061453, 19687159, 14643995, 20977794, 20734332, 17551063, 27548131
21977392, 24461826, 19676012, 20588502, 23315889, 19520602, 23053606
19841800, 20245930, 19001359, 21476308, 26546754, 19393542, 23533524
21099555, 27995248, 25429959, 19141838, 19644859, 21915719, 19908836
21421886, 19358317, 19524158, 23548817, 25861398, 20803014, 23025340
19335438, 19058490, 23642282, 19207117, 18799993, 25919622, 26569225
20835241, 24662775, 19475971, 18967382, 20347562, 20348653, 19896336
24812585, 20048359, 21896069, 19524384, 20468490, 25392535, 21147908
20440930, 25789277, 19171086, 24718260, 17867700, 19791273, 21241829
27397048, 19591608, 22707244, 18419520, 22296366, 22654475, 18914624
19571367, 28636676, 21522582, 19501299, 20425790, 19529868, 19708342
27997875, 16870214, 18202441, 24415926, 18743542, 19001390, 21875360
25091141, 28000269, 19149990, 20382309, 22855193, 16777441, 19606174
20848335, 25495682, 19382851, 20528052, 22762046, 24563422, 23125826
22503297, 28993590, 25192729, 23338911, 22730454, 19176326, 19048007
18849970, 21532755, 20860659, 22905130, 26121990, 21263635, 22160989
18499088, 22894949, 21059919, 18952989, 22518784, 25856821, 25484507
20794034, 19468347, 17533661, 19883092, 20657441, 24401351, 21285458
18051556, 25330273, 26412540, 19699191, 24437510, 20669434, 18964978
22972770, 20828947, 21373076, 25492379, 25551676, 14283239, 25766822
21967197, 22922076, 25575628, 26110259, 20368850, 21239530, 20437153
24848928, 20880215, 20798891, 25606091, 19013183, 21133343, 22695831
24365589, 25634317, 19587324, 20273319, 18542562, 26758193, 21063322
22062026, 20134339, 22077517, 22815955, 24690216, 22507210, 16354467
20101006, 21795111, 27938623, 23501901, 18797519, 25879984, 21260397
25029423, 19354335, 19730508, 22366558, 26658759, 25822410, 6599380
20717359, 24321547, 21297872, 27097854, 18964939, 26366517, 21913183
22366322, 20171986, 20603431, 21132297, 25957038, 21542577, 22507234
23170620, 24719736, 25600342, 18868646, 26637824, 20627866, 18110491
16923858, 24642295, 19518079, 20466322, 25823754, 25110233, 24908321
20842388, 17274537, 26575788, 20474192, 21644640, 21794615, 18899974

20471920, 22806698, 19052488, 19503821, 24350620, 20074391, 19157754
21220620, 24316947, 19865345, 19065556, 22816287, 25947799, 20878790
23492665, 21322887, 22305887, 20879889, 24350831, 19578350, 28022101
19363645, 21072646, 20898391, 19291380, 27060167, 27086138, 22536802
22087683, 21656630, 20373598, 19248799, 22707866, 19155797, 19279273
18886413, 25490238, 20922010, 19990037, 25150925, 20509482, 24717859
20703000, 22862134, 21526048, 24929210, 24560906, 28683167, 20144308
21620471, 19670108, 19068610, 20267166, 25123585, 20476175, 18549238
22950945, 19385656, 23528412, 19684504, 21174504, 20899461, 20557786
21911701, 19143550, 20118035, 19024808, 25760195, 20009833, 19604659
16359751, 26039623, 19928926, 23314180, 20212067, 24737403, 20480209
26430737, 20856766, 27169796, 21668627, 20877664, 19487147, 23149541
24577566, 19430401, 19676905, 20925795, 21296029, 21629064, 23229229
22865673, 20708701, 25353983, 19280225, 21315084, 20613079, 19375649
19213447, 19989009, 18191823, 27314390, 25775213, 26336977, 24393981
25639019, 17319928, 19703301, 21626377, 20122715, 6418158, 23105538
26198926, 19258504, 21188532, 23151677, 17890099, 21649497, 26446098
16887946, 26024732, 18791688, 19721304, 27012701, 19490948, 19619732
21164318, 23148260, 18090142, 21641760, 19818513, 20139391, 24693382
19978542, 23543183, 22165897, 22359063, 19409212, 23035249, 18990693
20470877, 21422580, 21632821, 22351572, 20235511, 23220453, 18604493
18742258, 23008056, 22901797, 18610915, 20978259, 20832516, 24801152
26089440, 20907061, 20505778, 19183343, 21787056, 21273804, 25093739
17835294, 24413809, 28708023, 18371441, 26714910, 24385983, 20413820
24421668, 25897615, 25643931, 23195445, 21281607, 20513399, 20558005
20093776, 18909599, 20618595, 23572982, 19211433, 20331945, 19512341
22256431, 19637186, 19022470, 18607546, 24573817, 23115139, 19649152
19201867, 21294938, 20898997, 18510194, 21842740, 22454326, 24683149
19534363, 25489607

Version 12.1.0.2.v14

Version 12.1.0.2.v14 includes the following:

- Patch [28259833](#): Oracle Database Patch Set Update 12.1.0.2.181016
- Patch [28440711](#): Oracle JVM Patch Set Update 12.1.0.2.181016
- Patch [28125601](#): DSTv32 for RDBMS (TZDATA2018E)
- Patch [28127287](#): DSTv32 for OJVM (TZDATA2018E)
- Patch [17969866](#): Oracle GoldenGate - Oracle RDBMS Server Recommended Patches
- Patch [20394750](#): Oracle GoldenGate - Oracle RDBMS Server Recommended Patches

- Patch [21171382](#): DBMS_STATS Patch
- Patch [28697469](#): JSON Database Patch
- Patch [20033733](#): KGL heap size patch

Oracle patch 28259833, released October 2018

Bugs fixed:

19309466, 19902195, 18250893, 25437699, 19383839, 16756406, 18456643
26546664, 22364044, 18845653, 19915271, 20172151, 18417036, 23713236
24796092, 23140259, 19243521, 19658708, 18272672, 21153266, 19174430
22243719, 20688221, 20493163, 21387964, 13542050, 22734547, 21623164
19012119, 19932634, 19869255, 22232606, 18681056, 23324000, 25427662
22068305, 24589081, 19439759, 19303936, 22916353, 24835538, 22353346
21106027, 26444887, 23088803, 22529728, 26256131, 19134173, 20447445
21188584, 19390567, 26513709, 25780343, 19769480, 21097043, 21225209
26245237, 20677396, 19284031, 19450314, 19016730, 20919320, 22075064
22551446, 22721409, 18440095, 22496904, 16439813, 18354830, 20596234
22022760, 20936905, 23197103, 21514877, 26111842, 18990023, 22492533
20173897, 24624166, 17210525, 21260431, 20181030, 25056052, 19370504
21868720, 23068169, 19124589, 19402853, 19888853, 24341675, 17722075
20882568, 25653109, 23026585, 18604692, 20717081, 25546608, 27370965
19081128, 22173980, 23514710, 19178851, 20951038, 22168163, 25161298
20569094, 24308635, 19791377, 19050649, 20920911, 19189525, 19469538
27052607, 20598042, 22458049, 18988834, 23302839, 25307368, 17409174
22729345, 22842151, 19238590, 16941434, 20387265, 24397438, 20673810
23108128, 20356733, 22380919, 18436647, 23065323, 20825533, 19124336
22294260, 24790914, 20284155, 25539063, 17365043, 25914276, 20952966
22961508, 19176223, 21300341, 23237313, 18288842, 22353199, 22083366
25670786, 21419850, 26898563, 19577410, 23294548, 24737064, 19931709
25423453, 25547060, 23533807, 27726780, 24600330, 25600421, 18122373
20043616, 23124895, 18856999, 21450666, 18893947, 20076781, 26633558
26029780, 21196809, 21354456, 23725036, 20464614, 19562381, 24808595
27375542, 19189317, 25669791, 18307021, 21917884, 19708632, 27213224
25633101, 20711718, 18973548, 25982666, 19718981, 22826718, 25655390
23567857, 21773465, 20250147, 19197175, 26263721, 19597439, 21387128
22007324, 19180770, 19879746, 21785691, 20424183, 24285405, 26544823
20322560, 22228324, 23172924, 22520320, 21575362, 25058080, 22365117
22645009, 25165496, 18774543, 20124446, 21429602, 26153977, 19371175
21863727, 18940497, 19074147, 22923409, 25489342, 21380789, 19154375
19044962, 19532017, 19662635, 22374754, 20560611, 25654936, 21492036

18705806, 19578247, 22024071, 22238921, 22809871, 21184223, 23089357
19404068, 18921743, 19065677, 19018447, 19018206, 18308268, 19777862
22223463, 19304354, 22519146, 27199245, 20890311, 22977256, 21142837
20869721, 24555417, 22179537, 21756699, 20217801, 18819908, 22760595
25483815, 23007241, 19593445, 21080143, 27351628, 20031873, 18618122
24737581, 26784509, 24739928, 18966843, 19077215, 20704450, 19068970
20543011, 19023822, 24713381, 20432873, 21756677, 20328248, 18674047
18849537, 25459958, 20315311, 22897344, 27534509, 25178179, 19308965
18948177, 19468991, 20868862, 21780146, 20466628, 21756661, 20397490
23315153, 19706965, 20302006, 24831514, 23240358, 22178855, 19032777
20862087, 19329654, 18974476, 20603378, 20859910, 19307662, 21847223
20281121, 19075256, 19076343, 18866977, 22808310, 25635149, 20844426
20904530, 20441797, 21442094, 25079710, 24674955, 18840932, 18740837
20294666, 25602488, 21517440, 22062517, 27337759, 19174942, 20671094
21889720, 18411216, 20117253, 24386767, 20641666, 25264559, 22092979
21625179, 20879709, 23003979, 20165574, 19272708, 19547370, 22624709
23084507, 20228093, 21281532, 19805359, 19461270, 19434529, 18799063
20378086, 17008068, 21246723, 20831538, 20424899, 20361671, 18674024
19689979, 24411921, 19873610, 16619249, 20562898, 21641414, 21091431
19440586, 22757364, 22175564, 21241052, 20725343, 19561643, 20736227
19399918, 19195895, 20830459, 20017509, 25790353, 21828126, 21665897
25555252, 20746251, 25764020, 25612095, 25357142, 23096938, 19067244
18043064, 21329301, 18885870, 26243698, 26187943, 20324049, 19536415
23709062, 28174827, 20446883, 27314206, 21299490, 25313154, 21744290
18254023, 20591183, 27847259, 19185876, 27207110, 22465352, 24326444
20402832, 19627012, 27441326, 27620950, 16863642, 19639483, 19315691
21479753, 19174521, 20401975, 18306996, 18851894, 27034890, 20581111
20318889, 20936731, 21060755, 26828994, 22256560, 19188927, 27229389
24570598, 25475853, 21172913, 17655240, 21266085, 19028800, 19035573
19366375, 24523374, 25034396, 19289642, 21291274, 18007682, 23521523
20475845, 22148226, 22528741, 25417958, 24652769, 26088426, 19326908
19597583, 17414008, 23019710, 20897759, 26822620, 22046677, 20938170
24825843, 19891090, 21960504, 26318627, 24509056, 19054077, 26262953
22657942, 20428621, 21899588, 19723336, 19835133, 17532734, 19333670
21842017, 19285025, 21373473, 23260854, 19687159, 23061453, 14643995
20977794, 20734332, 17551063, 27548131, 21977392, 24461826, 19676012
20588502, 23315889, 19520602, 23053606, 19841800, 20245930, 19001359
21476308, 26546754, 19393542, 23533524, 21099555, 25429959, 19141838
19644859, 21915719, 19908836, 21421886, 19358317, 19524158, 23548817
25861398, 20803014, 23025340, 19335438, 19058490, 19207117, 23642282
18799993, 25919622, 26569225, 20835241, 24662775, 19475971, 18967382
20347562, 20348653, 19896336, 24812585, 20048359, 21896069, 19524384
25392535, 21147908, 20440930, 25789277, 19171086, 24718260, 17867700
19791273, 21241829, 19591608, 22707244, 18419520, 22296366, 18914624

19571367, 22654475, 21522582, 19501299, 20425790, 19708342, 27997875
16870214, 18202441, 24415926, 18743542, 19001390, 21875360, 25091141
28000269, 19149990, 20382309, 22855193, 16777441, 19606174, 20848335
25495682, 19382851, 20528052, 22762046, 24563422, 23125826, 22503297
25192729, 23338911, 22730454, 19176326, 19048007, 18849970, 21532755
20860659, 22905130, 21263635, 22160989, 18499088, 21059919, 18952989
22894949, 22518784, 25856821, 25484507, 20794034, 19468347, 17533661
19883092, 20657441, 24401351, 21285458, 18051556, 25330273, 19699191
24437510, 20669434, 18964978, 22972770, 20828947, 21373076, 25551676
25492379, 14283239, 25766822, 22922076, 25575628, 20368850, 21239530
20437153, 24848928, 20880215, 20798891, 25606091, 19013183, 21133343
22695831, 24365589, 25634317, 19587324, 20273319, 18542562, 26758193
21063322, 22062026, 20134339, 22077517, 22815955, 24690216, 22507210
20101006, 16354467, 21795111, 27938623, 23501901, 18797519, 25879984
21260397, 25029423, 19354335, 19730508, 22366558, 26658759, 6599380
20717359, 24321547, 21297872, 18964939, 26366517, 21913183, 22366322
20171986, 20603431, 21132297, 25957038, 21542577, 22507234, 23170620
24719736, 25600342, 18868646, 20627866, 26637824, 18110491, 16923858
24642295, 19518079, 20466322, 25823754, 25110233, 24908321, 20842388
17274537, 26575788, 20474192, 21644640, 21794615, 18899974, 20471920
22806698, 19052488, 19503821, 24350620, 20074391, 19157754, 21220620
24316947, 19865345, 19065556, 22816287, 25947799, 20878790, 23492665
21322887, 22305887, 20879889, 24350831, 19578350, 19363645, 21072646
20898391, 19291380, 27060167, 27086138, 22536802, 22087683, 21656630
20373598, 19248799, 22707866, 19155797, 19279273, 18886413, 25490238
20922010, 19990037, 25150925, 20509482, 24717859, 20703000, 22862134
21526048, 24929210, 24560906, 20144308, 21620471, 19670108, 19068610
20267166, 25123585, 20476175, 18549238, 22950945, 19385656, 23528412
19684504, 21174504, 20899461, 20557786, 21911701, 19143550, 20118035
19024808, 25760195, 20009833, 19604659, 16359751, 26039623, 19928926
23314180, 20212067, 24737403, 20480209, 26430737, 20856766, 27169796
21668627, 20877664, 19487147, 23149541, 24577566, 19430401, 19676905
20925795, 21296029, 21629064, 23229229, 22865673, 20708701, 25353983
19280225, 21315084, 19213447, 19989009, 18191823, 27314390, 25775213
24393981, 25639019, 17319928, 19703301, 21626377, 20122715, 6418158
23105538, 26198926, 19258504, 21188532, 23151677, 17890099, 21649497
26446098, 16887946, 26024732, 18791688, 19721304, 19490948, 27012701
19619732, 21164318, 18090142, 21641760, 19818513, 20139391, 24693382
19978542, 23543183, 22165897, 22359063, 19409212, 23035249, 18990693
20470877, 21422580, 21632821, 22351572, 20235511, 23220453, 18604493
23008056, 22901797, 18610915, 20832516, 24801152, 26089440, 20907061
20505778, 19183343, 21787056, 21273804, 25093739, 17835294, 24413809
18371441, 26714910, 24385983, 20413820, 24421668, 25897615, 25643931
23195445, 21281607, 20513399, 20558005, 20093776, 18909599, 20618595

23572982, 19211433, 20331945, 19512341, 22256431, 19637186, 19022470
18607546, 24573817, 19649152, 23115139, 19201867, 21294938, 20898997
18510194, 21842740, 22454326, 24683149, 19534363, 25489607

Version 12.1.0.2.v13

Version 12.1.0.2.v13 includes the following:

- Patch [27547329](#): Oracle Database Patch Set Update 12.1.0.2.180717
- Patch [27923320](#): Oracle JVM Patch Set Update 12.1.0.2.180717
- Patch [28125601](#): DSTv32 for RDBMS (TZDATA2018E)
- Patch [28127287](#): DSTv32 for OJVM (TZDATA2018E)
- Patch [17969866](#): Oracle GoldenGate - Oracle RDBMS Server Recommended Patches
- Patch [20394750](#): Oracle GoldenGate - Oracle RDBMS Server Recommended Patches
- Patch [21171382](#): DBMS_STATS Patch
- Patch [28307069](#): JSON Database Patch
- Patch [20033733](#): KGL heap size patch

Oracle patch 27547329, released July 2018

Bugs fixed:

19309466, 19902195, 18250893, 25437699, 19383839, 16756406, 18456643
26546664, 18845653, 19915271, 20172151, 18417036, 23713236, 24796092
19243521, 19658708, 21153266, 19174430, 22243719, 20688221, 21387964
13542050, 22734547, 21623164, 19012119, 19932634, 19869255, 22232606
18681056, 23324000, 25427662, 22068305, 24589081, 19439759, 19303936
22916353, 24835538, 22353346, 21106027, 26444887, 23088803, 22529728
26256131, 19134173, 20447445, 21188584, 19390567, 26513709, 19769480
21097043, 21225209, 20677396, 19284031, 26245237, 19450314, 19016730
20919320, 22075064, 22551446, 22721409, 18440095, 22496904, 16439813
18354830, 20596234, 22022760, 20936905, 23197103, 21514877, 26111842
18990023, 22492533, 20173897, 24624166, 17210525, 21260431, 20181030
25056052, 19370504, 21868720, 23068169, 19124589, 19402853, 19888853
24341675, 17722075, 20882568, 23026585, 25653109, 20717081, 25546608
19081128, 27370965, 22173980, 19178851, 20951038, 22168163, 25161298

20569094, 24308635, 19791377, 19050649, 20920911, 19189525, 19469538
20598042, 22458049, 18988834, 17409174, 22729345, 22842151, 19238590
16941434, 20387265, 24397438, 20673810, 23108128, 20356733, 22380919
18436647, 23065323, 20825533, 19124336, 22294260, 24790914, 20284155
25539063, 17365043, 20952966, 22961508, 19176223, 21300341, 23237313
18288842, 22353199, 22083366, 21419850, 26898563, 19577410, 23294548
19931709, 25423453, 25547060, 23533807, 24600330, 25600421, 18122373
20043616, 23124895, 18856999, 21450666, 18893947, 20076781, 26029780
21196809, 21354456, 20464614, 23725036, 19562381, 24808595, 19189317
18307021, 25669791, 21917884, 19708632, 27213224, 25633101, 20711718
18973548, 25982666, 22826718, 25655390, 21773465, 20250147, 19197175
19597439, 26263721, 21387128, 19180770, 19879746, 21785691, 20424183
24285405, 26544823, 20322560, 22228324, 22520320, 23172924, 21575362
22365117, 22645009, 25165496, 18774543, 20124446, 21429602, 19371175
21863727, 18940497, 19074147, 22923409, 21380789, 19154375, 19044962
19532017, 19662635, 22374754, 20560611, 25654936, 21492036, 18705806
19578247, 22024071, 22238921, 22809871, 21184223, 23089357, 19404068
18921743, 19065677, 19018447, 19018206, 18308268, 19777862, 22223463
19304354, 22519146, 27199245, 20890311, 21142837, 20869721, 24555417
22179537, 21756699, 20217801, 18819908, 22760595, 25483815, 23007241
19593445, 21080143, 20031873, 18618122, 26784509, 24739928, 18966843
19077215, 20704450, 19068970, 20543011, 19023822, 24713381, 20432873
21756677, 20328248, 18674047, 18849537, 25459958, 20315311, 22897344
27534509, 25178179, 19308965, 18948177, 19468991, 20868862, 21780146
20466628, 21756661, 20397490, 19706965, 24831514, 23240358, 22178855
20302006, 19032777, 20862087, 19329654, 18974476, 20603378, 20859910
19307662, 21847223, 20281121, 19075256, 19076343, 18866977, 20844426
20904530, 20441797, 21442094, 25079710, 24674955, 18840932, 18740837
20294666, 25602488, 21517440, 22062517, 27337759, 19174942, 20671094
21889720, 18411216, 20117253, 24386767, 20641666, 25264559, 22092979
21625179, 20879709, 23003979, 20165574, 19272708, 19547370, 22624709
23084507, 20228093, 21281532, 19805359, 19461270, 19434529, 18799063
20378086, 17008068, 21246723, 20831538, 20424899, 20361671, 18674024
19689979, 24411921, 19873610, 16619249, 20562898, 21091431, 21641414
19440586, 22757364, 22175564, 21241052, 19561643, 19399918, 19195895
20830459, 20017509, 25790353, 21828126, 21665897, 20746251, 25764020
25612095, 25357142, 23096938, 19067244, 18043064, 21329301, 18885870
26187943, 20324049, 19536415, 20446883, 21299490, 27314206, 25313154
21744290, 18254023, 20591183, 27847259, 19185876, 22465352, 27207110
20402832, 19627012, 27441326, 27620950, 16863642, 19639483, 19315691
21479753, 19174521, 20401975, 18306996, 18851894, 27034890, 20581111
20318889, 20936731, 21060755, 22256560, 19188927, 24570598, 25475853
21172913, 17655240, 21266085, 19028800, 19035573, 19366375, 24523374
25034396, 19289642, 21291274, 18007682, 23521523, 20475845, 22148226

22528741, 25417958, 24652769, 26088426, 19326908, 19597583, 17414008
23019710, 20897759, 22046677, 20938170, 24825843, 21960504, 24509056
19054077, 22657942, 26262953, 20428621, 21899588, 19723336, 19835133
17532734, 19333670, 21842017, 19285025, 21373473, 23260854, 19687159
14643995, 20977794, 20734332, 17551063, 27548131, 21977392, 24461826
19676012, 20588502, 23315889, 19520602, 23053606, 19841800, 20245930
19001359, 21476308, 26546754, 19393542, 23533524, 21099555, 25429959
19141838, 19644859, 21915719, 19908836, 21421886, 19358317, 19524158
23548817, 25861398, 20803014, 23025340, 19335438, 19058490, 19207117
18799993, 26569225, 25919622, 20835241, 24662775, 19475971, 18967382
20347562, 20348653, 19896336, 24812585, 20048359, 21896069, 19524384
25392535, 20440930, 25789277, 19171086, 24718260, 17867700, 19791273
21241829, 19591608, 22707244, 18419520, 22296366, 18914624, 19571367
19501299, 20425790, 19708342, 27997875, 16870214, 18202441, 24415926
18743542, 19001390, 21875360, 25091141, 19149990, 20382309, 22855193
16777441, 19606174, 20848335, 25495682, 19382851, 20528052, 22762046
24563422, 23125826, 22503297, 25192729, 23338911, 22730454, 19176326
19048007, 18849970, 21532755, 20860659, 22905130, 21263635, 22160989
18499088, 21059919, 18952989, 22518784, 25856821, 25484507, 20794034
19468347, 17533661, 19883092, 20657441, 24401351, 21285458, 18051556
25330273, 19699191, 24437510, 20669434, 18964978, 20828947, 21373076
25551676, 14283239, 25766822, 22922076, 25575628, 20368850, 21239530
20437153, 20880215, 20798891, 25606091, 19013183, 21133343, 22695831
24365589, 19587324, 18542562, 26758193, 22062026, 20134339, 22077517
22815955, 24690216, 22507210, 20101006, 21795111, 27938623, 23501901
18797519, 21260397, 25029423, 19354335, 19730508, 22366558, 26658759
6599380, 20717359, 24321547, 21297872, 18964939, 26366517, 21913183
22366322, 20171986, 20603431, 21132297, 25957038, 21542577, 22507234
23170620, 24719736, 25600342, 18868646, 20627866, 18110491, 16923858
24642295, 19518079, 20466322, 25823754, 25110233, 24908321, 20842388
17274537, 26575788, 20474192, 21644640, 21794615, 18899974, 20471920
22806698, 19052488, 19503821, 24350620, 20074391, 19157754, 21220620
24316947, 19865345, 19065556, 22816287, 25947799, 20878790, 23492665
21322887, 20879889, 24350831, 19578350, 19363645, 21072646, 20898391
19291380, 27060167, 27086138, 22536802, 22087683, 20373598, 19248799
22707866, 19155797, 19279273, 18886413, 25490238, 20922010, 19990037
25150925, 20509482, 24717859, 20703000, 22862134, 21526048, 24929210
24560906, 20144308, 21620471, 19670108, 19068610, 20267166, 25123585
20476175, 18549238, 22950945, 19385656, 23528412, 19684504, 21174504
20899461, 20557786, 21911701, 19143550, 19024808, 20118035, 20009833
25760195, 19604659, 16359751, 26039623, 19928926, 23314180, 20212067
24737403, 20480209, 26430737, 27169796, 21668627, 20877664, 19487147
23149541, 24577566, 19430401, 19676905, 20925795, 21296029, 21629064
23229229, 22865673, 20708701, 19280225, 25353983, 21315084, 19213447

19989009, 18191823, 24393981, 25639019, 17319928, 19703301, 21626377
20122715, 6418158, 23105538, 26198926, 19258504, 21188532, 17890099
21649497, 26446098, 16887946, 26024732, 18791688, 19721304, 19490948
19619732, 21164318, 18090142, 21641760, 19818513, 20139391, 24693382
19978542, 23543183, 22165897, 22359063, 19409212, 23035249, 18990693
20470877, 21422580, 21632821, 22351572, 20235511, 23220453, 18604493
23008056, 18610915, 20832516, 24801152, 26089440, 20907061, 20505778
19183343, 21787056, 21273804, 25093739, 17835294, 24413809, 18371441
24385983, 20413820, 26714910, 24421668, 25897615, 25643931, 21281607
20513399, 23195445, 20558005, 20093776, 18909599, 20618595, 23572982
19211433, 20331945, 19512341, 22256431, 19637186, 19022470, 18607546
24573817, 19649152, 19201867, 21294938, 20898997, 18510194, 22454326
19534363, 24683149, 25489607

Version 12.1.0.2.v12

Version 12.1.0.2.v12 includes the following:

- Patch [27338041](#): DATABASE PATCH SET UPDATE 12.1.0.2.180417
- Patch [27475603](#): OJVM PATCH SET UPDATE 12.1.0.2.180417
- Patch [27015449](#): RDBMS - PROACTIVE DSTV31 UPDATE - TZDATA2017C
- Patch [27015468](#): PROACTIVE DSTV31 UPDATE - TZDATA2017C - NEED OJVM FIX
- Patch [17969866](#): Oracle GoldenGate - Oracle RDBMS Server Recommended Patches
- Patch [20394750](#): Oracle GoldenGate - Oracle RDBMS Server Recommended Patches
- Patch [21171382](#): AUTO DOP COMPUTES A HIGH DOP UNNECESSARILY
- Patch [27666699](#): JSON Database Patch
- Patch [20033733](#): PART :IMC:HIT ORA 600 [KGL-HEAP-SIZE-EXCEEDED]

Oracle patch 27338041, released April 2018

Bugs fixed:

19309466, 24570598, 25475853, 21172913, 19902195, 18250893, 17655240
25437699, 19383839, 21266085, 19028800, 19035573, 16756406, 19366375
18456643, 26546664, 24523374, 25034396, 19289642, 18845653, 19915271
21291274, 18007682, 20172151, 18417036, 23713236, 24796092, 23521523

20475845, 22148226, 22528741, 19243521, 19658708, 21153266, 24652769
26088426, 19326908, 19597583, 17414008, 20897759, 23019710, 19174430
22046677, 22243719, 20938170, 24825843, 21960504, 24509056, 19054077
22657942, 20688221, 20428621, 21899588, 21387964, 13542050, 19723336
19835133, 17532734, 19333670, 21842017, 19285025, 21373473, 22734547
23260854, 19687159, 14643995, 21623164, 20977794, 20734332, 19012119
19869255, 19932634, 17551063, 18681056, 22232606, 27548131, 21977392
23324000, 24461826, 19676012, 20588502, 25427662, 22068305, 23315889
19520602, 23053606, 19841800, 19439759, 20245930, 19303936, 19001359
21476308, 26546754, 22916353, 19393542, 23533524, 21099555, 24835538
22353346, 25429959, 19141838, 19644859, 21106027, 21915719, 26444887
23088803, 19908836, 21421886, 22529728, 26256131, 19358317, 19134173
19524158, 20447445, 23548817, 25861398, 20803014, 23025340, 21188584
19335438, 19390567, 19058490, 19207117, 26513709, 18799993, 26569225
20835241, 24662775, 19769480, 19475971, 21097043, 21225209, 20677396
19284031, 19450314, 19016730, 18967382, 20919320, 22075064, 20347562
20348653, 22551446, 19896336, 22721409, 24812585, 20048359, 21896069
18440095, 22496904, 19524384, 25392535, 16439813, 18354830, 20596234
20440930, 22022760, 20936905, 19171086, 23197103, 24718260, 17867700
19791273, 21514877, 26111842, 18990023, 21241829, 19591608, 22707244
18419520, 22492533, 22296366, 20173897, 24624166, 17210525, 18914624
19571367, 21260431, 19501299, 20181030, 25056052, 20425790, 19708342
19370504, 21868720, 23068169, 19124589, 19402853, 19888853, 16870214
24341675, 17722075, 18202441, 24415926, 18743542, 19001390, 20882568
23026585, 20717081, 25546608, 19081128, 22173980, 21875360, 25091141
19178851, 19149990, 20382309, 20951038, 22855193, 22168163, 16777441
25161298, 19606174, 20569094, 24308635, 20848335, 19791377, 19050649
19382851, 20920911, 20528052, 22762046, 19189525, 24563422, 23125826
22503297, 19469538, 25192729, 23338911, 20598042, 22458049, 18988834
22730454, 19176326, 19048007, 17409174, 22729345, 18849970, 21532755
20860659, 22842151, 22905130, 19238590, 16941434, 20387265, 21263635
24397438, 20673810, 23108128, 22160989, 20356733, 22380919, 18499088
18436647, 23065323, 21059919, 20825533, 18952989, 22518784, 19124336
25856821, 22294260, 25484507, 20794034, 19468347, 20284155, 17533661
19883092, 20657441, 24401351, 25539063, 17365043, 21285458, 20952966
22961508, 18051556, 25330273, 19176223, 21300341, 23237313, 18288842
19699191, 22353199, 24437510, 22083366, 21419850, 20669434, 18964978
26898563, 19577410, 23294548, 20828947, 21373076, 25551676, 14283239
25766822, 19931709, 22922076, 25423453, 25547060, 25575628, 23533807
20368850, 21239530, 20437153, 20880215, 25600421, 20798891, 25606091
18122373, 20043616, 23124895, 19013183, 18856999, 21450666, 21133343
22695831, 18893947, 24365589, 20076781, 21196809, 21354456, 19587324
20464614, 19562381, 18542562, 26758193, 24808595, 22062026, 19189317
18307021, 21917884, 19708632, 27213224, 25633101, 20711718, 20134339

22077517, 22815955, 24690216, 18973548, 25982666, 22507210, 22826718
25655390, 21773465, 20250147, 20101006, 21795111, 19197175, 23501901
18797519, 19597439, 21387128, 19180770, 19879746, 19354335, 21785691
19730508, 20424183, 22366558, 26658759, 24285405, 6599380, 20717359
26544823, 21297872, 20322560, 18964939, 22520320, 21575362, 26366517
21913183, 22366322, 20171986, 22365117, 22645009, 25165496, 20603431
21132297, 25957038, 21542577, 22507234, 18774543, 23170620, 24719736
25600342, 20627866, 20124446, 18110491, 21429602, 16923858, 24642295
19518079, 19371175, 20466322, 21863727, 18940497, 19074147, 22923409
25823754, 25110233, 24908321, 20842388, 17274537, 21380789, 26575788
19154375, 20474192, 19044962, 19532017, 21644640, 19662635, 22374754
20560611, 25654936, 21794615, 18899974, 21492036, 18705806, 20471920
22806698, 19052488, 22024071, 22238921, 19503821, 24350620, 22809871
20074391, 21184223, 23089357, 19157754, 21220620, 19404068, 24316947
18921743, 19865345, 19065677, 19065556, 22816287, 19018447, 19018206
19777862, 25947799, 22223463, 19304354, 20878790, 22519146, 23492665
21322887, 20879889, 24350831, 20890311, 19578350, 21142837, 20869721
24555417, 22179537, 21756699, 20217801, 18819908, 19363645, 25483815
21072646, 20898391, 19291380, 27060167, 27086138, 23007241, 19593445
21080143, 22536802, 22087683, 20373598, 19248799, 20031873, 22707866
19155797, 19279273, 18886413, 18618122, 25490238, 20922010, 19990037
25150925, 20509482, 24739928, 20703000, 18966843, 19077215, 22862134
21526048, 24929210, 24560906, 20704450, 20144308, 19068970, 20543011
21620471, 19023822, 19670108, 19068610, 20267166, 24713381, 20432873
21756677, 20476175, 25123585, 18549238, 20328248, 18674047, 22950945
19385656, 18849537, 23528412, 19684504, 25459958, 20315311, 22897344
20899461, 25178179, 20557786, 21911701, 19308965, 19143550, 19024808
18948177, 19468991, 20009833, 20868862, 21780146, 20466628, 21756661
20397490, 19706965, 24831514, 23240358, 22178855, 19604659, 16359751
19032777, 20862087, 19329654, 19928926, 18974476, 23314180, 20212067
20603378, 24737403, 20480209, 20859910, 26430737, 19307662, 21847223
21668627, 20281121, 27169796, 19075256, 20877664, 19487147, 19076343
23149541, 18866977, 24577566, 19430401, 19676905, 20844426, 20904530
20925795, 20441797, 21296029, 21629064, 21442094, 23229229, 25079710
22865673, 20708701, 19280225, 21315084, 24674955, 19213447, 18840932
18740837, 20294666, 19989009, 25602488, 18191823, 21517440, 22062517
19174942, 27337759, 17319928, 20671094, 21889720, 19703301, 21626377
20122715, 23105538, 18411216, 6418158, 26198926, 20117253, 19258504
21188532, 24386767, 17890099, 21649497, 26446098, 16887946, 26024732
25264559, 18791688, 19721304, 22092979, 19490948, 19619732, 21164318
21625179, 20879709, 23003979, 20165574, 18090142, 19272708, 21641760
19818513, 19547370, 22624709, 20139391, 23084507, 24693382, 20228093
21281532, 19978542, 23543183, 22165897, 22359063, 19409212, 19805359
19461270, 23035249, 19434529, 18799063, 18990693, 20470877, 20378086

17008068, 21246723, 21422580, 21632821, 20831538, 22351572, 20424899
 20361671, 18674024, 19689979, 20235511, 23220453, 24411921, 19873610
 16619249, 18604493, 20562898, 21091431, 19440586, 22757364, 18610915
 22175564, 21241052, 19561643, 19399918, 19195895, 20832516, 20830459
 20017509, 24801152, 21828126, 20907061, 21665897, 20746251, 20505778
 19183343, 25764020, 25612095, 25357142, 23096938, 21787056, 21273804
 19067244, 18043064, 21329301, 18885870, 20324049, 26187943, 19536415
 25093739, 17835294, 20446883, 21299490, 25313154, 24413809, 21744290
 18254023, 20591183, 18371441, 24385983, 20413820, 24421668, 25897615
 19185876, 25643931, 21281607, 20513399, 22465352, 20558005, 20402832
 19627012, 20093776, 18909599, 20618595, 27441326, 27620950, 23572982
 16863642, 19639483, 19315691, 19211433, 20331945, 19512341, 22256431
 21479753, 19637186, 19174521, 19022470, 18607546, 20401975, 18306996
 24573817, 18851894, 19649152, 27034890, 20581111, 19201867, 20318889
 20936731, 21060755, 21294938, 20898997, 18510194, 22256560, 22454326
 19534363, 25489607, 19188927

Version 12.1.0.2.v11

Version 12.1.0.2.v11 includes the following:

- Patch [26925311](#): DATABASE PATCH SET UPDATE 12.1.0.2.180116
- Patch [27001733](#): OJVM PATCH SET UPDATE 12.1.0.2.180116
- Patch [27015449](#): RDBMS - PROACTIVE DSTV31 UPDATE - TZDATA2017C
- Patch [27015468](#): PROACTIVE DSTV31 UPDATE - TZDATA2017C - NEED OJVM FIX
- Patch [17969866](#): Oracle GoldenGate - Oracle RDBMS Server Recommended Patches
- Patch [20394750](#): Oracle GoldenGate - Oracle RDBMS Server Recommended Patches
- Patch [21171382](#): AUTO DOP COMPUTES A HIGH DOP UNNECESSARILY
- Patch [27315904](#): JSON Database Patch
- Patch [20033733](#): ORA 600 [KGL-HEAP-SIZE-EXCEEDED]

Oracle patch 26925311, released January 2018

Bugs fixed:

21099555, 22175564, 19141838, 22083366, 20842388, 19865345, 20117253

20830459, 19791273, 20671094, 21542577, 23105538, 19243521, 20951038
22165897, 19238590, 21281532, 17008068, 19908836, 24401351, 24577566
21184223, 25427662, 20717359, 19134173, 20569094, 20031873, 20387265
20322560, 21575362, 19149990, 21263635, 18886413, 17551063, 24719736
22160989, 22519146, 21623164, 22507210, 19703301, 23338911, 19366375
18007682, 19001390, 18202441, 24285405, 25655390, 20267166, 19358317
19706965, 19068970, 24739928, 18549238, 22148226, 18797519, 26544823
20825533, 23521523, 21196809, 18940497, 19670108, 19649152, 18866977
18948177, 19404068, 22496904, 22826718, 18964978, 19176326, 19035573
20413820, 20717081, 19176223, 21106027, 20904530, 20134339, 19074147
20868862, 18411216, 23035249, 25475853, 21072646, 21322887, 22507234
20425790, 20862087, 18966843, 25861398, 24929210, 24624166, 21329301
20562898, 19333670, 19468991, 20124446, 19883092, 23543183, 20878790
22855193, 18510194, 19658708, 19591608, 19402853, 23149541, 24796092
20618595, 22238921, 21795111, 21787056, 22380919, 19469538, 21266085
17835294, 19721304, 19068610, 19791377, 22178855, 16777441, 22173980
20746251, 20048359, 21896069, 19185876, 20898391, 20281121, 20907061
22950945, 21281607, 6599380, 19577410, 22092979, 19001359, 20603378
23089357, 23572982, 19490948, 21387964, 22294260, 20832516, 17532734
22351572, 18849970, 19309466, 19081128, 20627866, 20844426, 24908321
21188532, 18791688, 21442094, 20890311, 20596234, 20368850, 26366517
18973548, 19303936, 21296029, 22536802, 20882568, 21479753, 19461270
20235511, 20936905, 22077517, 21220620, 18964939, 19430401, 22806698
22296366, 21153266, 19409212, 20703000, 22657942, 20657441, 19879746
20557786, 26758193, 23237313, 26198926, 19684504, 26088426, 21294938
19024808, 24693382, 20528052, 20977794, 18799993, 20466322, 24642295
18740837, 19662635, 18440095, 21794615, 20382309, 20228093, 19065556
20212067, 25547060, 21868720, 22905130, 20938170, 19524384, 25459958
24350831, 17722075, 20446883, 20144308, 25056052, 18952989, 24523374
16870214, 21773465, 19928926, 19835133, 21629064, 21354456, 20466628
23007241, 24386767, 25490238, 19931709, 19730508, 18819908, 20250147
23124895, 25643931, 23220453, 19188927, 20074391, 18307021, 23533807
20356733, 14643995, 26430737, 18090142, 19065677, 19547370, 26024732
21225209, 21960504, 18371441, 20397490, 26575788, 23315889, 20172151
18967382, 22729345, 19174430, 22068305, 25654936, 18419520, 21241829
19536415, 26546664, 19171086, 21889720, 21132297, 20470877, 22465352
22168163, 19335438, 24397438, 20076781, 20447445, 18856999, 20471920
19869255, 21620471, 18990693, 23096938, 17890099, 19124336, 24812585
18990023, 20101006, 21300341, 20848335, 21744290, 21241052, 20897759
21668627, 19304354, 19052488, 20543011, 20794034, 23025340, 25606091
23260854, 18681056, 19562381, 24570598, 20952966, 19896336, 20828947
25539063, 18618122, 20328248, 24365589, 20440930, 18456643, 19699191
23065323, 22865673, 19201867, 22816287, 21514877, 22022760, 18743542
20798891, 20347562, 25161298, 23294548, 19777862, 24560906, 22551446

19687159, 21373076, 19174942, 20424899, 24461826, 21641760, 21899588
22862134, 18899974, 21476308, 20598042, 21297872, 24308635, 19058490
19032777, 20171986, 22815955, 25150925, 19399918, 24718260, 19434529
22492533, 19018447, 21273804, 18051556, 22757364, 18851894, 23125826
20424183, 21842017, 19022470, 19284031, 18043064, 26898563, 20173897
23713236, 22062026, 20475845, 17274537, 19440586, 16887946, 22374754
18974476, 22961508, 24825843, 17319928, 20401975, 20708701, 22062517
24674955, 17655240, 22809871, 19805359, 16439813, 19155797, 20859910
19393542, 17210525, 22024071, 19189525, 21847223, 21649497, 19075256
25079710, 25823754, 19370504, 20315311, 22762046, 22075064, 20936731
20437153, 25165496, 18845653, 19280225, 19248799, 20560611, 18988834
21756699, 22256431, 18921743, 20245930, 21532755, 18799063, 22454326
20373598, 20476175, 19571367, 20925795, 19018206, 25264559, 24385983
20509482, 20711718, 24509056, 20588502, 20181030, 21911701, 18849537
23501901, 25034396, 19183343, 22842151, 21917884, 21142837, 20603431
19189317, 23003979, 19644859, 19390567, 19279273, 26546754, 20669434
16863642, 22528741, 22707244, 25546608, 19619732, 20348653, 18607546
19315691, 19676905, 20165574, 17867700, 23528412, 20558005, 20734332
19532017, 20922010, 19818513, 19450314, 22353346, 16941434, 20361671
25423453, 20009833, 22366558, 20294666, 23197103, 18191823, 20860659
22707866, 19195895, 19371175, 19307662, 19154375, 20043616, 20324049
21977392, 18914624, 22529728, 22256560, 25330273, 19708342, 20139391
19593445, 21291274, 19382851, 19520602, 19174521, 21875360, 19676012
19326908, 20217801, 20093776, 18840932, 21097043, 21246723, 20803014
21665897, 19143550, 23026585, 20428621, 19627012, 24415926, 22087683
23548817, 14283239, 21422580, 19213447, 19518079, 26446098, 18610915
23492665, 18674024, 24831514, 21863727, 24413809, 18306996, 19915271
21626377, 19524158, 20122715, 20513399, 18110491, 22366322, 20284155
25091141, 21080143, 20017509, 22359063, 19363645, 19597439, 21239530
23108128, 19888853, 19383839, 20880215, 21756677, 22458049, 19534363
19354335, 19044962, 19639483, 25982666, 19475971, 22353199, 21060755
22243719, 22916353, 20378086, 21260431, 21756661, 24808595, 22923409
19028800, 20877664, 22518784, 21059919, 20879889, 21380789, 19723336
19077215, 21421886, 19604659, 21285458, 23533524, 26569225, 23170620
22365117, 18288842, 19048007, 19308965, 19689979, 17409174, 19503821
23068169, 24662775, 21526048, 25429959, 19197175, 19180770, 24555417
24573817, 19902195, 26444887, 25313154, 24835538, 23324000, 20318889
21492036, 19013183, 20591183, 19012119, 20464614, 22645009, 21625179
19067244, 25178179, 23053606, 21632821, 19841800, 19512341, 19211433
22695831, 20331945, 19587324, 24316947, 19578350, 19637186, 19054077
18674047, 19708632, 20898997, 21091431, 19285025, 19289642, 25947799
21133343, 20835241, 20869721, 21172913, 25602488, 19258504, 17365043
21419850, 21644640, 19468347, 21373473, 25093739, 22721409, 16359751
24421668, 21164318, 25484507, 25489607, 22520320, 19769480, 19439759

```
19272708, 23088803, 19978542, 19329654, 20402832, 19873610, 23229229
21517440, 13542050, 25897615, 19291380, 21915719, 25600342, 25192729
20879709, 20677396, 19076343, 19561643, 19990037, 18909599, 19487147
22897344, 20831538, 25600421, 19016730, 18250893, 23240358, 22179537
16619249, 18354830, 24411921, 25764020, 18254023, 16756406, 21188584
19989009, 25766822, 17414008, 20688221, 20441797, 20704450, 21780146
25612095, 25957038, 24652769, 25483815, 19157754, 19207117, 24437510
18885870, 21785691, 20673810, 24341675, 21450666, 18893947, 18705806
22223463, 18417036, 16923858, 23084507, 23314180, 20919320, 22503297
20474192, 22046677, 21299490, 19501299, 19385656, 20432873, 18542562
20920911, 20899461, 21315084, 21429602, 21387128, 18122373, 20581111
22624709, 26111842, 19606174, 24690216, 18436647, 19023822, 25110233
19124589, 19178851, 19597583, 20480209, 18499088, 19050649
```

Version 12.1.0.2.v10

Version 12.1.0.2.v10 includes the following:

- Oracle October 2017 PSU, a combination of database PSU (patch 26713565) + OJVM component PSU (patch 26635845)
- Oracle recommended RDBMS patches for Oracle GoldenGate (patch 17969866)
- DBMS_STATS AUTO DOP COMPUTES A HIGH DOP UNNECESSARILY (patch 21171382)
- JSON bundle patch (patch 26750145)
- KGL heap size patch (patch 20033733)
- Timezone file DSTv30 (patch 25881255, OJVM patch 25881271)

Oracle patch 26713565, released October 2017

Bugs fixed:

```
21099555, 22175564, 19141838, 22083366, 20842388, 19865345, 20117253
20830459, 19791273, 20671094, 21542577, 19243521, 20951038, 22165897
19238590, 21281532, 17008068, 19908836, 24577566, 21184223, 25427662
19134173, 20569094, 20031873, 20387265, 20322560, 21575362, 19149990
21263635, 17551063, 18886413, 24719736, 22160989, 22519146, 21623164
22507210, 23338911, 19703301, 19366375, 18007682, 19001390, 18202441
24285405, 25655390, 20267166, 19358317, 19706965, 19068970, 24739928
```

18549238, 22148226, 18797519, 26544823, 20825533, 23521523, 21196809
18940497, 19670108, 19649152, 18866977, 18948177, 22496904, 19404068
18964978, 19176326, 19035573, 20413820, 20717081, 19176223, 21106027
20904530, 20134339, 19074147, 20868862, 23035249, 18411216, 21072646
25475853, 21322887, 22507234, 20425790, 20862087, 18966843, 25861398
21329301, 20562898, 19333670, 19468991, 20124446, 19883092, 22855193
20878790, 18510194, 19658708, 19591608, 19402853, 23149541, 20618595
22238921, 21795111, 21787056, 22380919, 19469538, 21266085, 17835294
19721304, 19068610, 19791377, 22178855, 16777441, 22173980, 20746251
20048359, 21896069, 19185876, 20898391, 20281121, 20907061, 22950945
6599380, 19577410, 22092979, 19001359, 20603378, 23089357, 21387964
19490948, 22294260, 20832516, 17532734, 22351572, 19309466, 19081128
20627866, 20844426, 24908321, 21188532, 18791688, 21442094, 20890311
20596234, 20368850, 18973548, 19303936, 21296029, 20882568, 21479753
19461270, 20235511, 22077517, 20936905, 21220620, 18964939, 19430401
22806698, 22296366, 21153266, 19409212, 22657942, 20703000, 20657441
19879746, 20557786, 26198926, 26088426, 19684504, 21294938, 19024808
24693382, 20528052, 20977794, 18799993, 20466322, 24642295, 18740837
19662635, 18440095, 21794615, 20228093, 19065556, 20212067, 25547060
21868720, 20938170, 22905130, 19524384, 25459958, 24350831, 17722075
20144308, 20446883, 25056052, 18952989, 24523374, 16870214, 19928926
19835133, 21629064, 21354456, 20466628, 24386767, 25490238, 19931709
19730508, 18819908, 20250147, 23124895, 25643931, 23220453, 19188927
20074391, 18307021, 23533807, 20356733, 26430737, 14643995, 18090142
19065677, 19547370, 21225209, 21960504, 18371441, 20397490, 26575788
23315889, 20172151, 18967382, 19174430, 22068305, 25654936, 21241829
19536415, 19171086, 26546664, 21132297, 21889720, 22465352, 22168163
19335438, 24397438, 20076781, 20447445, 18856999, 20471920, 19869255
21620471, 18990693, 23096938, 19124336, 17890099, 24812585, 18990023
21300341, 20101006, 20848335, 21744290, 21241052, 20897759, 21668627
19304354, 19052488, 20543011, 20794034, 23025340, 25606091, 23260854
18681056, 19562381, 20952966, 19896336, 20828947, 25539063, 18618122
20328248, 20440930, 18456643, 19699191, 22865673, 19201867, 22816287
22022760, 21514877, 18743542, 20798891, 20347562, 25161298, 23294548
24560906, 22551446, 19777862, 19687159, 21373076, 19174942, 20424899
21899588, 22862134, 18899974, 21476308, 20598042, 24308635, 21297872
19058490, 19032777, 20171986, 22815955, 19399918, 19434529, 19018447
18051556, 21273804, 22757364, 18851894, 23125826, 20424183, 21842017
19022470, 19284031, 18043064, 23713236, 20173897, 22062026, 20475845
17274537, 19440586, 22961508, 24825843, 18974476, 22374754, 16887946
17319928, 20401975, 20708701, 24674955, 22062517, 22809871, 17655240
19805359, 16439813, 19155797, 20859910, 19393542, 17210525, 22024071
19189525, 21847223, 21649497, 19075256, 25823754, 25079710, 20315311
22762046, 22075064, 20936731, 20437153, 18845653, 19280225, 19248799

20560611, 18988834, 21756699, 22256431, 21532755, 18921743, 20245930
22454326, 18799063, 20373598, 20476175, 19571367, 20925795, 19018206
25264559, 20711718, 20509482, 20181030, 20588502, 21911701, 18849537
23501901, 25034396, 19183343, 22842151, 21917884, 21142837, 20603431
19189317, 23003979, 19644859, 19390567, 19279273, 26546754, 20669434
16863642, 22528741, 22707244, 25546608, 19619732, 20348653, 18607546
19315691, 19676905, 20165574, 17867700, 20558005, 20734332, 19532017
20922010, 19818513, 19450314, 22353346, 16941434, 20361671, 25423453
20009833, 22366558, 20294666, 23197103, 18191823, 20860659, 19195895
19371175, 19307662, 19154375, 20043616, 21977392, 18914624, 22529728
19708342, 20139391, 25330273, 19593445, 21291274, 19382851, 19520602
19174521, 21875360, 19676012, 19326908, 20217801, 20093776, 18840932
21097043, 21246723, 20803014, 21665897, 19143550, 23026585, 20428621
19627012, 22087683, 23548817, 14283239, 21422580, 19213447, 26446098
19518079, 23492665, 18610915, 18674024, 21863727, 24413809, 18306996
19915271, 21626377, 19524158, 20122715, 20513399, 18110491, 20284155
25091141, 21080143, 20017509, 22359063, 19363645, 19597439, 21239530
23108128, 19383839, 20880215, 21756677, 19888853, 22458049, 19534363
19354335, 19044962, 19639483, 25982666, 19475971, 22353199, 21060755
22243719, 22916353, 20378086, 24808595, 21756661, 21260431, 22923409
19028800, 20877664, 21059919, 20879889, 21380789, 19723336, 19077215
21421886, 19604659, 21285458, 23533524, 23170620, 22365117, 18288842
19048007, 19308965, 19689979, 17409174, 23068169, 19503821, 24662775
25429959, 21526048, 19197175, 19180770, 24555417, 24573817, 19902195
26444887, 24835538, 23324000, 20318889, 21492036, 19013183, 20591183
19012119, 20464614, 21625179, 19067244, 23053606, 21632821, 19841800
19512341, 22695831, 20331945, 19587324, 24316947, 19578350, 19637186
19054077, 18674047, 19708632, 20898997, 19285025, 21091431, 19289642
25947799, 21133343, 20835241, 20869721, 21172913, 25602488, 19258504
17365043, 21419850, 21644640, 19468347, 21373473, 25093739, 16359751
24421668, 21164318, 25489607, 25484507, 22520320, 19769480, 19439759
19272708, 19978542, 19329654, 20402832, 19873610, 23229229, 13542050
21517440, 25897615, 19291380, 21915719, 25600342, 20879709, 20677396
19076343, 19561643, 19990037, 22897344, 18909599, 19487147, 25600421
20831538, 19016730, 18250893, 23240358, 22179537, 16619249, 18354830
24411921, 18254023, 16756406, 21188584, 19989009, 25766822, 17414008
20688221, 20441797, 20704450, 21780146, 25612095, 25957038, 24652769
25483815, 19157754, 19207117, 24437510, 18885870, 21785691, 20673810
24341675, 21450666, 18893947, 18705806, 22223463, 18417036, 16923858
23084507, 23314180, 20919320, 22503297, 20474192, 22046677, 21299490
19501299, 19385656, 20432873, 18542562, 20920911, 20899461, 21429602
21387128, 21315084, 18122373, 20581111, 26111842, 22624709, 19606174
24690216, 18436647, 19023822, 25110233, 19124589, 19178851, 19597583
18499088, 19050649

Version 12.1.0.2.v9

Version 12.1.0.2.v9 includes the following:

- Oracle July 2017 PSU, a combination of database PSU (patch 26609783) + OJVM component PSU (patch 26027162)
- Oracle recommended RDBMS patches for Oracle GoldenGate (patch 17969866)
- DBMS_STATS AUTO DOP COMPUTES A HIGH DOP UNNECESSARILY (patch 21171382)
- JSON bundle patch (patch 26083365)
- KGL heap size patch (patch 20033733 for 12.1.0.2)
- Timezone file DSTv30 (patch 25881255, OJVM patch 25881271)
- Support for validating DB instance files with the RMAN logical validation utility

For more information, see [Validating DB instance files](#) in the *Amazon RDS User Guide*.

- Support for setting the default edition for a DB instance

For more information, see [Setting the default edition for a DB instance](#) in the *Amazon RDS User Guide*.

Oracle patch 26609783, released July 2017

Bugs fixed:

21099555, 22175564, 19141838, 22083366, 20842388, 19865345, 20117253
 19791273, 20671094, 21542577, 20951038, 19243521, 22165897, 19238590
 21281532, 17008068, 19908836, 24577566, 21184223, 25427662, 19134173
 20569094, 20031873, 20387265, 20322560, 21575362, 19149990, 21263635
 17551063, 18886413, 22160989, 22507210, 19703301, 19366375, 18007682
 19001390, 18202441, 24285405, 25655390, 20267166, 19358317, 19706965
 19068970, 24739928, 18549238, 22148226, 18797519, 26544823, 20825533
 21196809, 18940497, 19670108, 19649152, 18866977, 18948177, 22496904
 19404068, 18964978, 19176326, 19035573, 20413820, 20717081, 19176223
 21106027, 20904530, 20134339, 19074147, 20868862, 18411216, 21072646
 25475853, 21322887, 22507234, 20425790, 20862087, 18966843, 21329301
 20562898, 19333670, 19468991, 20124446, 19883092, 20878790, 18510194

19658708, 19591608, 19402853, 20618595, 21787056, 22380919, 21266085
19469538, 17835294, 19721304, 19068610, 19791377, 22178855, 16777441
22173980, 20746251, 20048359, 21896069, 19185876, 20898391, 20281121
20907061, 6599380, 19577410, 22092979, 19001359, 20603378, 23089357
21387964, 19490948, 22294260, 20832516, 17532734, 22351572, 19309466
19081128, 20627866, 20844426, 24908321, 21188532, 18791688, 21442094
20890311, 20596234, 20368850, 18973548, 19303936, 21296029, 20882568
21479753, 19461270, 20235511, 22077517, 20936905, 21220620, 18964939
19430401, 22296366, 21153266, 19409212, 22657942, 20703000, 20657441
19879746, 20557786, 19684504, 21294938, 19024808, 24693382, 20528052
20977794, 18799993, 20466322, 18740837, 19662635, 18440095, 20228093
19065556, 20212067, 25547060, 21868720, 22905130, 19524384, 25459958
24350831, 17722075, 20446883, 25056052, 18952989, 24523374, 16870214
19928926, 19835133, 21629064, 21354456, 20466628, 24386767, 25490238
19931709, 19730508, 18819908, 20250147, 23124895, 25643931, 23220453
19188927, 20074391, 18307021, 23533807, 20356733, 14643995, 18090142
19065677, 19547370, 21225209, 21960504, 26575788, 20397490, 20172151
18967382, 19174430, 21241829, 19536415, 26546664, 19171086, 21132297
21889720, 22465352, 22168163, 19335438, 24397438, 20076781, 20447445
18856999, 20471920, 19869255, 21620471, 18990693, 23096938, 19124336
17890099, 24812585, 18990023, 21300341, 20101006, 20848335, 21744290
20897759, 21668627, 19304354, 19052488, 20543011, 20794034, 23025340
25606091, 23260854, 18681056, 19562381, 20952966, 19896336, 20828947
25539063, 18618122, 20328248, 20440930, 18456643, 19699191, 22865673
19201867, 22022760, 21514877, 18743542, 20798891, 20347562, 25161298
23294548, 24560906, 22551446, 19777862, 19687159, 21373076, 19174942
20424899, 21899588, 18899974, 21476308, 20598042, 24308635, 21297872
19058490, 19032777, 20171986, 22815955, 19399918, 19434529, 19018447
18051556, 21273804, 22757364, 18851894, 19022470, 19284031, 18043064
20173897, 22062026, 20475845, 17274537, 19440586, 24825843, 18974476
22374754, 16887946, 17319928, 20401975, 20708701, 24674955, 22062517
22809871, 17655240, 19805359, 16439813, 19155797, 20859910, 19393542
17210525, 22024071, 19189525, 21847223, 21649497, 19075256, 25823754
25079710, 20315311, 22762046, 22075064, 20936731, 20437153, 18845653
19280225, 19248799, 20560611, 18988834, 21756699, 18921743, 20245930
18799063, 20373598, 20476175, 19571367, 20925795, 19018206, 25264559
20711718, 20509482, 20181030, 20588502, 21911701, 18849537, 23501901
19183343, 21917884, 21142837, 20603431, 19189317, 19644859, 19390567
26546754, 19279273, 20669434, 16863642, 22528741, 25546608, 19619732
20348653, 18607546, 19315691, 19676905, 20165574, 17867700, 20558005
20734332, 19532017, 20922010, 19818513, 19450314, 22353346, 16941434
20361671, 25423453, 20009833, 22366558, 20294666, 23197103, 18191823
19195895, 19371175, 19307662, 19154375, 20043616, 21977392, 18914624
22529728, 20139391, 25330273, 19593445, 21291274, 19382851, 19520602

19174521, 21875360, 19676012, 19326908, 20217801, 20093776, 18840932
21097043, 21246723, 20803014, 21665897, 19143550, 23026585, 20428621
19627012, 14283239, 21422580, 19213447, 19518079, 18610915, 18674024
24413809, 18306996, 19915271, 21626377, 19524158, 20122715, 20513399
20284155, 25091141, 21080143, 20017509, 22359063, 19363645, 19597439
21239530, 19383839, 20880215, 21756677, 19888853, 22458049, 19534363
19354335, 19044962, 19639483, 25982666, 19475971, 22353199, 21060755
22243719, 22916353, 20378086, 24808595, 21756661, 21260431, 22923409
19028800, 20877664, 21059919, 20879889, 21380789, 19723336, 19077215
21421886, 19604659, 21285458, 23533524, 23170620, 22365117, 18288842
19048007, 19308965, 19689979, 17409174, 19503821, 21526048, 19197175
19180770, 24573817, 19902195, 24835538, 23324000, 20318889, 19013183
20591183, 19012119, 20464614, 19067244, 21632821, 19841800, 19512341
22695831, 20331945, 19587324, 24316947, 19578350, 19637186, 19054077
18674047, 19708632, 20898997, 21091431, 19289642, 21133343, 20835241
20869721, 21172913, 19258504, 17365043, 21419850, 21644640, 19468347
21373473, 25093739, 16359751, 21164318, 25484507, 22520320, 19769480
19439759, 19272708, 19978542, 19329654, 20402832, 19873610, 23229229
13542050, 21517440, 19291380, 21915719, 25600342, 20879709, 20677396
19076343, 19561643, 19990037, 18909599, 19487147, 25600421, 20831538
19016730, 18250893, 16619249, 18354830, 24411921, 16756406, 18254023
21188584, 19989009, 25766822, 17414008, 20688221, 20441797, 20704450
21780146, 25612095, 25957038, 25483815, 19157754, 19207117, 24437510
18885870, 21785691, 20673810, 21450666, 18893947, 18705806, 22223463
18417036, 16923858, 23314180, 20919320, 20474192, 22046677, 21299490
19501299, 19385656, 20432873, 20920911, 20899461, 21387128, 21315084
18122373, 20581111, 22624709, 19606174, 24690216, 18436647, 19023822
25110233, 19124589, 19178851, 19597583, 18499088, 19050649

Version 12.1.0.2.v8

Version 12.1.0.2.v8 includes the following:

- Oracle patch 25433980, a combination of database PSU (patch 25171037) + OJVM component PSU (patch 25437695)
- Oracle recommended RDBMS patches for Oracle GoldenGate (patch 17969866 for 12.1.0.2)
- Oracle Forms patch 18307021 for 12.1.0.2
- DBMS_STATS Patch (patch 21171382 for 12.1.0.2)
- JSON bundle patch (patch 25531469 for 12.1.0.2)

- KGL heap size patch (patch 20033733 for 12.1.0.2)
- Fixed a bug that affected PSU apply after upgrade to 12.1.0.2.v5, v6, and v7
- Timezone file DSTv28 (patch 24701840)
- Support for the DBMS_CHANGE_NOTIFICATION package
- Support for XSTREAM packages and views (may require additional licensing)

Oracle patch 25171037, released April 2017

Bugs fixed:

21099555, 22175564, 19141838, 22083366, 20842388, 20117253, 19865345
19791273, 21542577, 20951038, 19243521, 22165897, 17008068, 19908836
21281532, 19238590, 24577566, 21184223, 19134173, 20569094, 20031873
20322560, 20387265, 21575362, 19149990, 21263635, 17551063, 18886413
22160989, 22507210, 19366375, 19703301, 19001390, 24285405, 18202441
20267166, 19358317, 19706965, 19068970, 18549238, 24739928, 18797519
22148226, 20825533, 21196809, 19649152, 19670108, 18940497, 18948177
22496904, 18964978, 19176326, 19035573, 20413820, 19176223, 21106027
20904530, 20134339, 19074147, 20868862, 18411216, 25475853, 21322887
21072646, 22507234, 20425790, 20862087, 18966843, 21329301, 20562898
19333670, 20124446, 19468991, 19883092, 20878790, 18510194, 19658708
19591608, 19402853, 20618595, 21787056, 22380919, 19469538, 21266085
17835294, 19721304, 19068610, 19791377, 22178855, 16777441, 22173980
20048359, 20746251, 21896069, 19185876, 20898391, 20907061, 20281121
6599380, 19577410, 22092979, 19001359, 20603378, 23089357, 21387964
19490948, 22294260, 17532734, 20832516, 22351572, 19309466, 20627866
19081128, 20844426, 21188532, 18791688, 20890311, 21442094, 20596234
20368850, 18973548, 19303936, 21296029, 20882568, 19461270, 21479753
22077517, 20936905, 20235511, 21220620, 18964939, 19430401, 22296366
21153266, 19409212, 20703000, 22657942, 19879746, 20657441, 21294938
19684504, 19024808, 20528052, 24693382, 20977794, 18799993, 20466322
18740837, 19662635, 18440095, 20228093, 19065556, 20212067, 21868720
22905130, 19524384, 24350831, 17722075, 20446883, 25056052, 18952989
24523374, 16870214, 19928926, 19835133, 21629064, 21354456, 20466628
24386767, 25490238, 19931709, 19730508, 18819908, 20250147, 23124895
23220453, 19188927, 20074391, 18307021, 20356733, 14643995, 19065677
19547370, 21960504, 21225209, 20397490, 18967382, 19174430, 21241829
19536415, 19171086, 21889720, 22465352, 22168163, 19335438, 24397438
20447445, 18856999, 19869255, 20471920, 21620471, 23096938, 18990693
19124336, 17890099, 24812585, 18990023, 21300341, 20101006, 20848335

21744290, 20897759, 21668627, 19304354, 20543011, 19052488, 20794034
23025340, 23260854, 18681056, 20952966, 19896336, 25539063, 18618122
20328248, 20440930, 18456643, 19699191, 19201867, 22865673, 22022760
20798891, 18743542, 25161298, 20347562, 22551446, 19777862, 19687159
21373076, 19174942, 20424899, 21899588, 18899974, 21476308, 20598042
21297872, 24308635, 20171986, 19058490, 19032777, 22815955, 19399918
19434529, 21273804, 19018447, 22757364, 18851894, 19022470, 19284031
18043064, 20173897, 22062026, 20475845, 17274537, 19440586, 18974476
24825843, 22374754, 16887946, 17319928, 20401975, 20708701, 22062517
22809871, 17655240, 16439813, 19805359, 19155797, 20859910, 19393542
22024071, 17210525, 19189525, 21847223, 21649497, 25079710, 19075256
20315311, 22762046, 22075064, 20936731, 18845653, 19280225, 19248799
20560611, 18988834, 21756699, 18921743, 20245930, 18799063, 20373598
19571367, 20476175, 20925795, 19018206, 25264559, 20711718, 20509482
20181030, 20588502, 21911701, 18849537, 23501901, 19183343, 21917884
21142837, 19189317, 19644859, 19390567, 19279273, 20669434, 16863642
22528741, 25546608, 19619732, 18607546, 20348653, 19315691, 19676905
20165574, 17867700, 20558005, 20734332, 19532017, 20922010, 19818513
19450314, 22353346, 16941434, 20361671, 20009833, 22366558, 20294666
18191823, 23197103, 19195895, 19371175, 19307662, 19154375, 20043616
21977392, 18914624, 22529728, 25330273, 20139391, 19593445, 21291274
19382851, 19520602, 19174521, 21875360, 19676012, 19326908, 20217801
20093776, 18840932, 21097043, 21246723, 20803014, 21665897, 19143550
20428621, 19627012, 14283239, 21422580, 19213447, 19518079, 18610915
18674024, 24413809, 18306996, 19915271, 19524158, 20122715, 20284155
20017509, 22359063, 19363645, 19597439, 21239530, 19383839, 20880215
21756677, 19888853, 22458049, 19534363, 19354335, 19044962, 19639483
19475971, 22353199, 22243719, 21060755, 22916353, 20378086, 24808595
21756661, 21260431, 22923409, 19028800, 20877664, 21059919, 20879889
21380789, 19723336, 19077215, 19604659, 21421886, 21285458, 23533524
23170620, 22365117, 18288842, 19048007, 19308965, 19689979, 19503821
21526048, 19197175, 19180770, 19902195, 23324000, 20318889, 19013183
20591183, 19012119, 20464614, 19067244, 21632821, 19841800, 19512341
22695831, 20331945, 19587324, 24316947, 19578350, 19637186, 19054077
18674047, 19708632, 20898997, 21091431, 19289642, 21133343, 20869721
21172913, 19258504, 17365043, 21419850, 19468347, 21373473, 25093739
16359751, 21164318, 22520320, 19769480, 19439759, 19272708, 19978542
19329654, 20402832, 19873610, 23229229, 13542050, 21517440, 19291380
21915719, 20879709, 20677396, 19076343, 19561643, 19990037, 19487147
18909599, 20831538, 19016730, 18250893, 16619249, 18354830, 24411921
16756406, 18254023, 21188584, 19989009, 17414008, 20688221, 20704450
20441797, 25483815, 19157754, 24437510, 18885870, 21785691, 20673810
21450666, 18893947, 18705806, 22223463, 16923858, 18417036, 23314180
20919320, 20474192, 22046677, 21299490, 19501299, 19385656, 20920911

20899461, 21387128, 21315084, 18122373, 20581111, 19606174, 24690216
 18436647, 19023822, 19124589, 19178851, 19597583, 18499088, 19050649

Version 12.1.0.2.v7

Version 12.1.0.2.v7 includes the following:

- Oracle patch 24917069, a combination of database PSU (patch 24732082) + OJVM component PSU (patch 24917972)
- Oracle recommended RDBMS patches for Oracle GoldenGate (patch 17969866 for 12.1.0.2)
- Oracle Forms patch 18307021 for 12.1.0.2
- DBMS_STATS Patch (patch 21171382 for 12.1.0.2)
- JSON bundle patch (patch 25089615 for 12.1.0.2)
- KGL heap size patch (patch 20033733 for 12.1.0.2)

Oracle patch 24917069, released January 2017

Bugs fixed:

24917972, 25067795, 24534298, 25076732, 25076756, 24315824, 21659726
 24448240, 24448282, 23177536, 22675136, 23265914, 23265965, 23727148
 22674709, 22670413, 22670385, 21188537, 22139226, 22118835, 22118851
 21555660, 21811517, 19623450, 21566993, 21566944, 19176885, 21068507
 21047803, 21047766, 20415564, 20408829, 20408866, 19877336, 19855285
 19909862, 19895362, 19895326, 19153980, 19231857, 19223010, 19245191,
 19699946,
 21099555, 22175564, 19141838, 22083366, 20842388, 20117253, 19865345
 19791273, 21542577, 20951038, 19243521, 22165897, 19908836, 21281532
 19238590, 24577566, 21184223, 19134173, 20031873, 20387265, 21575362
 19149990, 21263635, 17551063, 18886413, 22160989, 22507210, 19366375
 19703301, 19001390, 24285405, 18202441, 20267166, 19358317, 19706965
 24739928, 19068970, 18549238, 18797519, 22148226, 20825533, 21196809
 19649152, 19670108, 18940497, 18948177, 22496904, 18964978, 19035573
 19176326, 20413820, 19176223, 21106027, 20904530, 20134339, 19074147
 20868862, 18411216, 21072646, 21322887, 22507234, 20425790, 18966843
 21329301, 20562898, 19333670, 20124446, 19468991, 19883092, 18510194
 19658708, 19591608, 19402853, 20618595, 21787056, 22380919, 19469538

21266085, 17835294, 19721304, 19791377, 19068610, 22178855, 16777441
22173980, 20048359, 20746251, 21896069, 20898391, 19185876, 20907061
20281121, 6599380, 19577410, 22092979, 19001359, 20603378, 23089357
19490948, 21387964, 22294260, 20832516, 17532734, 19309466, 20627866
19081128, 20844426, 21188532, 18791688, 20890311, 21442094, 20596234
18973548, 21296029, 19303936, 20882568, 19461270, 21479753, 22077517
20936905, 20235511, 21220620, 18964939, 19430401, 22296366, 21153266
19409212, 22657942, 19879746, 20657441, 21294938, 19684504, 24693382
20528052, 19024808, 20977794, 18799993, 20466322, 18740837, 19662635
20228093, 20212067, 19065556, 19524384, 17722075, 20446883, 25056052
24523374, 18952989, 16870214, 19928926, 19835133, 21629064, 21354456
20466628, 24386767, 19931709, 19730508, 18819908, 23124895, 23220453
19188927, 20074391, 18307021, 20356733, 14643995, 19547370, 19065677
21960504, 21225209, 20397490, 18967382, 19174430, 21241829, 19536415
19171086, 22465352, 22168163, 19335438, 24397438, 20447445, 18856999
19869255, 20471920, 21620471, 18990693, 17890099, 24812585, 18990023
21300341, 20101006, 20848335, 21744290, 20897759, 21668627, 19304354
19052488, 20794034, 23025340, 23260854, 18681056, 20952966, 19896336
20328248, 18618122, 20440930, 18456643, 19699191, 19201867, 22865673
22022760, 20798891, 18743542, 25161298, 20347562, 19777862, 22551446
19687159, 21373076, 19174942, 20424899, 21899588, 18899974, 21476308
20598042, 24308635, 19032777, 19058490, 22815955, 19399918, 19434529
21273804, 19018447, 22757364, 18851894, 19022470, 19284031, 18043064
20173897, 22062026, 20475845, 17274537, 19440586, 24825843, 18974476
22374754, 16887946, 17319928, 20401975, 20708701, 22809871, 17655240
16439813, 19805359, 19155797, 20859910, 19393542, 17210525, 22024071
21847223, 19189525, 21649497, 19075256, 20315311, 22762046, 22075064
20936731, 19280225, 18845653, 20560611, 19248799, 21756699, 18988834
20245930, 18921743, 18799063, 20373598, 19571367, 20476175, 20925795
25264559, 19018206, 20711718, 20509482, 20181030, 20588502, 18849537
23501901, 19183343, 21917884, 19189317, 19644859, 19390567, 19279273
20669434, 22528741, 16863642, 19619732, 18607546, 20348653, 19315691
19676905, 20165574, 17867700, 20558005, 20734332, 19532017, 20922010
19818513, 19450314, 22353346, 20361671, 20009833, 22366558, 20294666
23197103, 18191823, 19195895, 19307662, 19371175, 20043616, 19154375
18914624, 22529728, 20139391, 21291274, 19382851, 19520602, 19174521
21875360, 19676012, 19326908, 20217801, 20093776, 18840932, 21097043
21246723, 20803014, 21665897, 19143550, 20428621, 19627012, 14283239
19518079, 18610915, 18674024, 24413809, 18306996, 19524158, 19915271
20122715, 20284155, 20017509, 22359063, 19363645, 19597439, 21239530
19888853, 21756677, 20880215, 22458049, 19534363, 19354335, 19044962
19639483, 19475971, 22353199, 21060755, 22243719, 22916353, 20378086
24808595, 21260431, 21756661, 22923409, 20877664, 19028800, 21059919
20879889, 21380789, 19723336, 19077215, 19604659, 21421886, 21285458

```
23533524, 23170620, 22365117, 18288842, 19308965, 19048007, 19689979
21526048, 19197175, 19180770, 19902195, 23324000, 20318889, 19013183
20591183, 19012119, 20464614, 19067244, 21632821, 19512341, 19841800
22695831, 20331945, 19587324, 24316947, 19578350, 19637186, 18674047
19054077, 20898997, 19708632, 21091431, 19289642, 21133343, 20869721
21172913, 19258504, 17365043, 19468347, 21373473, 16359751, 19769480
19439759, 19272708, 19978542, 20402832, 19329654, 19873610, 23229229
21517440, 13542050, 19291380, 21915719, 20879709, 20677396, 19076343
19561643, 19990037, 19487147, 18909599, 20831538, 18250893, 19016730
16619249, 18354830, 18254023, 21188584, 19989009, 17414008, 20688221
20704450, 20441797, 19157754, 24437510, 18885870, 21785691, 18893947
21450666, 18705806, 22223463, 16923858, 18417036, 23314180, 20919320
20474192, 22046677, 19385656, 19501299, 20920911, 20899461, 21315084
21387128, 18122373, 20581111, 19606174, 24690216, 18436647, 19023822
19178851, 19124589, 19597583, 18499088, 19050649
```

Version 12.1.0.2.v6

Version 12.1.0.2.v6 includes the following:

- Oracle patch 24433133, a combination of database PSU (patch 24006101) + OJVM component PSU (patch 24315824)
- Oracle recommended RDBMS patches for Oracle GoldenGate (patch 17969866 for 12.1.0.2)
- Oracle Forms patch 18307021 for 12.1.0.2
- DBMS_STATS Patch (patch 21171382 for 12.1.0.2)
- JSON bundle patch (patch 24568656 for 12.1.0.2)
- Fixed a bug that caused 12c upgrade scripts to drop customer directories
- Made DIAG log directory available to customers

Baseline: Oracle database patch set update 12.1.0.2.161018 (patch 24006101, released October 2016)

Bugs fixed:

```
21099555, 22175564, 19141838, 22083366, 20842388, 20117253, 19865345
19791273, 19243521, 20951038, 19908836, 21281532, 19238590, 24577566
```

21184223, 19134173, 20387265, 19149990, 21263635, 18886413, 17551063
22160989, 22507210, 19703301, 19366375, 19001390, 18202441, 20267166
19358317, 19706965, 18549238, 19068970, 18797519, 22148226, 20825533
19649152, 19670108, 18940497, 18948177, 18964978, 19035573, 19176326
20413820, 19176223, 20904530, 20134339, 19074147, 20868862, 18411216
21322887, 22507234, 20425790, 18966843, 21329301, 19333670, 19468991
20124446, 19883092, 19658708, 19591608, 19402853, 20618595, 21787056
22380919, 21266085, 17835294, 19721304, 19791377, 19068610, 22178855
22173980, 20746251, 20048359, 20898391, 19185876, 20281121, 20907061
6599380, 19577410, 22092979, 20603378, 19001359, 19490948, 21387964
20832516, 17532734, 19309466, 19081128, 20627866, 20844426, 21188532
18791688, 21442094, 20890311, 20596234, 18973548, 21296029, 19303936
19461270, 21479753, 20936905, 20235511, 21220620, 18964939, 19430401
22296366, 21153266, 19409212, 22657942, 20657441, 19879746, 19684504
20528052, 19024808, 20977794, 18799993, 20466322, 18740837, 19662635
20228093, 19065556, 20212067, 19524384, 17722075, 20446883, 18952989
16870214, 19928926, 19835133, 21629064, 20466628, 24386767, 19931709
19730508, 18819908, 23124895, 19188927, 20074391, 20356733, 14643995
19547370, 19065677, 21960504, 21225209, 20397490, 18967382, 19174430
21241829, 19536415, 19171086, 22465352, 22168163, 19335438, 20447445
18856999, 20471920, 19869255, 21620471, 18990693, 17890099, 18990023
20101006, 21300341, 20848335, 21744290, 20897759, 21668627, 19304354
19052488, 20794034, 23260854, 18681056, 20952966, 19896336, 18618122
20328248, 20440930, 18456643, 19699191, 19201867, 22865673, 18743542
20798891, 20347562, 22551446, 19777862, 19687159, 21373076, 19174942
20424899, 21899588, 18899974, 20598042, 19032777, 19058490, 22815955
19399918, 19434529, 21273804, 19018447, 22757364, 18851894, 19284031
19022470, 18043064, 20173897, 22062026, 20475845, 17274537, 19440586
16887946, 22374754, 17319928, 20708701, 17655240, 16439813, 19805359
19155797, 20859910, 19393542, 22024071, 17210525, 21847223, 19189525
21649497, 19075256, 22762046, 22075064, 19280225, 18845653, 20560611
19248799, 21756699, 18988834, 20245930, 18921743, 18799063, 20373598
20476175, 19571367, 20925795, 19018206, 20509482, 20711718, 20588502
18849537, 19183343, 21917884, 19189317, 19644859, 19390567, 19279273
20669434, 16863642, 22528741, 19619732, 18607546, 20348653, 19315691
19676905, 20165574, 17867700, 20558005, 20734332, 19532017, 20922010
19450314, 22353346, 20361671, 20009833, 22366558, 20294666, 18191823
19307662, 19371175, 19195895, 20043616, 19154375, 18914624, 20139391
21291274, 19174521, 19520602, 19382851, 21875360, 19676012, 19326908
20217801, 20093776, 21097043, 21246723, 21665897, 19143550, 20428621
19627012, 14283239, 19518079, 18610915, 18674024, 18306996, 19524158
19915271, 20122715, 20284155, 20017509, 19363645, 19597439, 21239530
19888853, 20880215, 21756677, 19534363, 19354335, 19044962, 19639483
22353199, 22243719, 22916353, 20378086, 21756661, 21260431, 22923409

```
20877664, 19028800, 20879889, 19723336, 19077215, 21421886, 19604659
19308965, 19048007, 18288842, 19689979, 21526048, 19180770, 19197175
19902195, 20318889, 19013183, 19012119, 20464614, 19067244, 21632821
19512341, 19841800, 20331945, 19587324, 24316947, 19578350, 19637186
18674047, 19054077, 20898997, 19708632, 21091431, 19289642, 20869721
19258504, 17365043, 19468347, 21373473, 16359751, 19439759, 19769480
19272708, 19978542, 20402832, 19329654, 19873610, 23229229, 21517440
13542050, 19291380, 21915719, 19076343, 19561643, 19990037, 19487147
18909599, 20831538, 18250893, 19016730, 16619249, 18354830, 21188584
19989009, 17414008, 20688221, 20704450, 20441797, 19157754, 18885870
21785691, 21450666, 18893947, 18705806, 22223463, 16923858, 18417036
20919320, 20474192, 22046677, 19385656, 19501299, 20920911, 20899461
21387128, 21315084, 18122373, 20581111, 19606174, 18436647, 19023822
19178851, 19124589, 19597583, 18499088, 19050649
```

Version 12.1.0.2.v5

Version 12.1.0.2.v5 includes the following:

- Oracle patch 23615289, a combination of database PSU (patch 23054246) + OJVM component PSU (patch 23177536)
- Timezone file DSTv26 (patch 22873635 for 12.1.0.2)
- Oracle recommended RDBMS patches for Oracle GoldenGate (patch 17969866 for 12.1.0.2)
- Oracle Forms patch 18307021 for 12.1.0.2
- Ability to create custom password verify functions

For more information, see [Creating custom functions to verify passwords](#) in the *Amazon RDS User Guide*.

- Fixed a bug that prevented implicit recompilation of views owned by SYS

Baseline: Oracle database patch set update 12.1.0.2.160719 (patch 23054246, released July 2016)

Bugs fixed:

```
19189525, 21847223, 21099555, 21649497, 19075256, 19141838, 22762046
```

22075064, 20117253, 19865345, 19791273, 18845653, 19280225, 19248799
19243521, 20951038, 18988834, 21756699, 21281532, 19238590, 21184223
18921743, 20245930, 18799063, 19134173, 20373598, 19571367, 20476175
20925795, 19018206, 20509482, 20711718, 20387265, 20588502, 19149990
21263635, 18849537, 18886413, 17551063, 22507210, 19183343, 19366375
19703301, 21917884, 19001390, 18202441, 19189317, 20267166, 19644859
19390567, 19358317, 19279273, 19706965, 18549238, 16863642, 19068970
22528741, 18797519, 20825533, 19619732, 18607546, 20348653, 19649152
19670108, 18940497, 18948177, 19315691, 19676905, 18964978, 19176326
20165574, 19035573, 20413820, 17867700, 20558005, 19176223, 19532017
20904530, 20134339, 19450314, 19074147, 22353346, 20868862, 18411216
22507234, 20361671, 20425790, 18966843, 20009833, 22366558, 21329301
20294666, 18191823, 19333670, 19195895, 19371175, 19307662, 19154375
20043616, 20124446, 18914624, 19468991, 19883092, 21291274, 19382851
19520602, 19174521, 21875360, 19676012, 19326908, 19658708, 19591608
19402853, 20093776, 20618595, 21787056, 22380919, 21246723, 17835294
19721304, 19068610, 19791377, 21665897, 22178855, 22173980, 20048359
20746251, 19143550, 20898391, 19185876, 19627012, 20281121, 19577410
22092979, 19001359, 14283239, 19518079, 18610915, 19490948, 17532734
18674024, 18306996, 19309466, 19081128, 19524158, 19915271, 20122715
21188532, 18791688, 20284155, 20890311, 21442094, 20596234, 18973548
21296029, 19303936, 19597439, 20936905, 20235511, 21220620, 20880215
18964939, 21756677, 19888853, 19534363, 19430401, 19354335, 19044962
19639483, 22296366, 22353199, 21153266, 19409212, 19879746, 20657441
19684504, 20528052, 19024808, 20977794, 20378086, 18799993, 21756661
21260431, 18740837, 22923409, 19028800, 20877664, 20228093, 20879889
19065556, 19723336, 19077215, 19604659, 21421886, 19524384, 17722075
19308965, 18288842, 19048007, 19689979, 20446883, 18952989, 16870214
19928926, 19835133, 21629064, 21526048, 19197175, 19180770, 20466628
19902195, 19931709, 20318889, 19013183, 19730508, 19012119, 19067244
20074391, 20356733, 14643995, 19512341, 19841800, 20331945, 19587324
19065677, 19547370, 19578350, 21225209, 19637186, 20397490, 18967382
19174430, 21241829, 19054077, 18674047, 20898997, 19708632, 19536415
21091431, 19289642, 20869721, 22168163, 19335438, 19258504, 20447445
17365043, 18856999, 19468347, 19869255, 20471920, 21373473, 21620471
16359751, 18990693, 17890099, 19769480, 19439759, 19272708, 18990023
19978542, 19329654, 20101006, 21300341, 20402832, 19873610, 20848335
23229229, 21744290, 21668627, 21517440, 13542050, 19304354, 19052488
20794034, 19291380, 21915719, 23260854, 18681056, 20952966, 19896336
19076343, 19561643, 18618122, 19990037, 20440930, 18456643, 19699191
19201867, 19487147, 18909599, 20831538, 19016730, 18250893, 20798891
18743542, 20347562, 16619249, 18354830, 22551446, 19777862, 19687159
21373076, 19174942, 20424899, 21188584, 19989009, 17414008, 20688221
21899588, 20441797, 19157754, 19058490, 19032777, 22815955, 19399918

18885870, 19434529, 21273804, 19018447, 21450666, 18893947, 18851894
16923858, 18417036, 20919320, 19022470, 19284031, 20474192, 20173897
22046677, 22062026, 19501299, 19385656, 20920911, 17274537, 20899461
21315084, 19440586, 16887946, 22374754, 17319928, 19606174, 20708701
18436647, 17655240, 19023822, 19124589, 19178851, 16439813, 19805359
19597583, 18499088, 19155797, 19050649, 19393542

Version 12.1.0.2.v4

Version 12.1.0.2.v4 includes the following:

- Oracle PSU 12.1.0.2.160419 (22291127)
- Timezone file DSTv25 (patch 22037014)
- Oracle recommended RDBMS patches for Oracle GoldenGate (patch 17969866)
- Adds the ability for the master user to grant the EM_EXPRESS_BASIC and EM_EXPRESS_ALL roles
- Adds the ability for the master user to grant privileges on SYS objects with the grant option using the RDSADMIN.RDSADMIN_UTIL.GRANT_SYS_OBJECT procedure
- Adds master user privileges to support most common schemas created by the Oracle Fusion Middleware Repository Creation Utility (RCU)

Baseline: Oracle database patch set update 12.1.0.2.160419 (patch 22291127, released April 2016)

Bugs fixed:

21847223, 19189525, 19075256, 19141838, 22762046, 20117253, 19865345
19791273, 19280225, 18845653, 19248799, 20951038, 19243521, 21756699
18988834, 21281532, 19238590, 18921743, 20245930, 18799063, 19134173
20373598, 19571367, 20476175, 20925795, 19018206, 20711718, 20387265
20509482, 20588502, 19149990, 18849537, 17551063, 18886413, 19183343
19703301, 21917884, 19001390, 18202441, 19189317, 19644859, 19358317
19390567, 19279273, 19706965, 22528741, 19068970, 20825533, 19619732
18607546, 20348653, 19649152, 19670108, 18940497, 18948177, 19315691
19676905, 18964978, 19035573, 20165574, 19176326, 20413820, 20558005
19176223, 19532017, 20904530, 20134339, 19450314, 22353346, 19074147
18411216, 20361671, 20425790, 18966843, 21329301, 20294666, 19333670

19195895, 19307662, 19371175, 20043616, 19154375, 20124446, 18914624
19468991, 19883092, 19382851, 19520602, 19174521, 21875360, 19676012
19326908, 19658708, 19591608, 20093776, 20618595, 21787056, 17835294
19721304, 19791377, 19068610, 22173980, 20746251, 20048359, 19143550
19185876, 19627012, 20281121, 19577410, 22092979, 19001359, 19518079
18610915, 19490948, 18674024, 18306996, 19309466, 19081128, 19915271
20122715, 21188532, 18791688, 20284155, 20890311, 21442094, 20596234
18973548, 19303936, 19597439, 20936905, 20235511, 19888853, 21756677
18964939, 19354335, 19430401, 19044962, 19639483, 21153266, 22353199
19409212, 20657441, 19879746, 19684504, 19024808, 21260431, 21756661
18799993, 20877664, 19028800, 20879889, 19065556, 19723336, 19077215
19604659, 21421886, 19524384, 18288842, 19048007, 19689979, 20446883
18952989, 16870214, 19928926, 19835133, 21526048, 20466628, 19197175
19180770, 19902195, 20318889, 19730508, 19012119, 19067244, 20074391
20356733, 14643995, 19512341, 19841800, 20331945, 19587324, 19547370
19065677, 21225209, 19637186, 20397490, 18967382, 19174430, 19054077
18674047, 19536415, 19708632, 21091431, 19289642, 22168163, 20869721
19335438, 19258504, 20447445, 17365043, 18856999, 19468347, 20471920
19869255, 21620471, 16359751, 18990693, 17890099, 19769480, 19439759
19272708, 18990023, 19978542, 20402832, 20101006, 21300341, 19329654
19873610, 21744290, 13542050, 21517440, 21668627, 19304354, 19052488
20794034, 19291380, 21915719, 18681056, 20952966, 19896336, 19076343
19561643, 19990037, 18618122, 20440930, 18456643, 19699191, 19487147
18909599, 20831538, 18250893, 19016730, 18743542, 20347562, 16619249
18354830, 19777862, 19687159, 19174942, 20424899, 19989009, 20688221
21899588, 20441797, 19157754, 19032777, 19058490, 19399918, 18885870
19434529, 21273804, 19018447, 18893947, 16923858, 18417036, 20919320
19022470, 19284031, 20474192, 22046677, 20173897, 22062026, 19385656
19501299, 17274537, 20899461, 21315084, 19440586, 22374754, 16887946
19606174, 18436647, 17655240, 19023822, 19178851, 19124589, 16439813
19805359, 19597583, 18499088, 19155797, 19050649, 19393542

Version 12.1.0.2.v3

Version 12.1.0.2.v3 includes the following:

- Oracle PSU 12.1.0.2.160119 (21948354).
- Timezone file DSTv25 (patch 22037014 for 12.1.0.2). 12.1.0.1 includes DSTv24, patch 20875898 (unchanged from 12.1.0.1.v3), because a backport of DSTv25 was unavailable at build time.

- Fixed an issue that prevented customers from creating more than 10 Directory objects in the database.
- Fixed an issue that prevented customers from re-granting read privileges on the ADUMP and BDUMP Directory objects.

Baseline: Oracle database patch set update 12.1.0.2.160119 (patch 21948354, released January 2016)

Bugs fixed:

19189525, 19075256, 19141838, 19865345, 19791273, 19280225, 18845653
20951038, 19243521, 19248799, 21756699, 18988834, 19238590, 21281532
20245930, 18921743, 18799063, 19134173, 19571367, 20476175, 20925795
19018206, 20509482, 20387265, 20588502, 19149990, 18849537, 18886413
17551063, 19183343, 19703301, 19001390, 18202441, 19189317, 19644859
19358317, 19390567, 19279273, 19706965, 19068970, 19619732, 20348653
18607546, 18940497, 19670108, 19649152, 18948177, 19315691, 19676905
18964978, 19035573, 20165574, 19176326, 20413820, 20558005, 19176223
19532017, 20134339, 19074147, 18411216, 20361671, 20425790, 18966843
20294666, 19307662, 19371175, 19195895, 19154375, 19468991, 19174521
19520602, 19382851, 21875360, 19326908, 19658708, 20093776, 20618595
21787056, 17835294, 19791377, 19068610, 20048359, 20746251, 19143550
19185876, 19627012, 20281121, 19577410, 22092979, 19001359, 19518079
18610915, 19490948, 18674024, 18306996, 19309466, 19081128, 19915271
20122715, 21188532, 20284155, 18791688, 20890311, 21442094, 18973548
19303936, 19597439, 20235511, 18964939, 19430401, 19044962, 19409212
19879746, 20657441, 19684504, 19024808, 18799993, 20877664, 19028800
19065556, 19723336, 19077215, 19604659, 21421886, 19524384, 19048007
18288842, 19689979, 20446883, 18952989, 16870214, 19928926, 21526048
19180770, 19197175, 19902195, 20318889, 19730508, 19012119, 19067244
20074391, 19512341, 19841800, 14643995, 20331945, 19587324, 19547370
19065677, 19637186, 21225209, 20397490, 18967382, 19174430, 18674047
19054077, 19536415, 19708632, 19289642, 20869721, 19335438, 17365043
18856999, 19869255, 20471920, 19468347, 21620471, 16359751, 18990693
17890099, 19439759, 19769480, 19272708, 19978542, 20101006, 21300341
20402832, 19329654, 19873610, 21668627, 21517440, 19304354, 19052488
20794034, 19291380, 18681056, 19896336, 19076343, 19561643, 18618122
20440930, 18456643, 19699191, 18909599, 19487147, 18250893, 19016730
18743542, 20347562, 16619249, 18354830, 19687159, 19174942, 20424899
19989009, 20688221, 20441797, 19157754, 19032777, 19058490, 19399918

18885870, 19434529, 19018447, 18417036, 20919320, 19022470, 19284031
20474192, 20173897, 22062026, 19385656, 19501299, 17274537, 20899461
19440586, 16887946, 19606174, 18436647, 17655240, 19023822, 19178851
19124589, 19805359, 19597583, 19155797, 19393542, 19050649

Version 12.1.0.2.v2

Version 12.1.0.2.v2 includes the following:

- Oracle PSU 12.1.0.2.5 (21359755)
- Includes the Daylight Saving Time Patch, patch 20875898: DST-24, that came out after the April 2015 PSU.

Baseline: Oracle database patch set update 12.1.0.2.5 (patch 21359755, released October 2015)

Bugs fixed:

19189525, 19075256, 19865345, 19791273, 19280225, 18845653, 19248799
19243521, 18988834, 19238590, 21281532, 18921743, 20245930, 19134173
19571367, 20476175, 20925795, 19018206, 20387265, 19149990, 18849537
19183343, 19703301, 19001390, 18202441, 19189317, 19644859, 19390567
19358317, 19279273, 19706965, 19068970, 19619732, 18607546, 20348653
18940497, 19670108, 19649152, 18948177, 19315691, 19676905, 18964978
20165574, 19035573, 19176326, 20413820, 20558005, 19176223, 19532017
20134339, 19074147, 18411216, 20361671, 20425790, 18966843, 20294666
19371175, 19307662, 19195895, 19154375, 19468991, 19174521, 19520602
19382851, 19658708, 20093776, 17835294, 19068610, 19791377, 20746251
20048359, 19143550, 19185876, 19627012, 20281121, 19577410, 19001359
19518079, 18610915, 18674024, 18306996, 19309466, 19081128, 19915271
20122715, 20284155, 18791688, 21442094, 19303936, 19597439, 20235511
18964939, 19430401, 19044962, 19409212, 20657441, 19684504, 19024808
19028800, 19065556, 19723336, 19077215, 21421886, 19524384, 19048007
18288842, 18952989, 16870214, 19928926, 19180770, 19197175, 19730508
19012119, 19067244, 20074391, 19841800, 19512341, 14643995, 20331945
19587324, 19065677, 19547370, 19637186, 21225209, 20397490, 18967382
19174430, 18674047, 19054077, 19708632, 19536415, 19289642, 19335438
17365043, 18856999, 20471920, 19468347, 21620471, 16359751, 18990693

19439759, 19769480, 19272708, 19978542, 19329654, 20402832, 19873610
19304354, 19052488, 19291380, 18681056, 19896336, 19076343, 19561643
18618122, 20440930, 18456643, 19699191, 18909599, 19487147, 18250893
19016730, 18743542, 20347562, 16619249, 18354830, 19687159, 19174942
20424899, 19989009, 20688221, 20441797, 19157754, 19058490, 19032777
19399918, 18885870, 19434529, 19018447, 18417036, 20919320, 19284031
19022470, 20474192, 22062026, 19385656, 19501299, 17274537, 20899461
19440586, 19606174, 18436647, 19023822, 19178851, 19124589, 19805359
19597583, 19155797, 19393542, 19050649

Version 12.1.0.2.v1

Version 12.1.0.2.v1 includes the following:

- Oracle PSU 12.1.0.2.3 (20299023)
- The In-Memory option allows storing a subset of data in an in-memory column format optimized for performance.
- Installs additional Oracle Text knowledge bases from Oracle Database. Examples media (English and French)
- Provides access to DBMS_REPAIR through RDSADMIN.RDSADMIN_DBMS_REPAIR
- Grants ALTER DATABASE LINK, ALTER PUBLIC DATABASE LINK, EXEMPT ACCESS POLICY, EXEMPT IDENTITY POLICY, and EXEMPT REDACTION POLICY to master user

Note

Version 12.1.0.2.v1 supports Enterprise Edition only.

Baseline: Oracle database patch set update 12.1.0.2.3 (patch 20299023, released April 2015)

Bugs fixed:

19189525, 19065556, 19075256, 19723336, 19077215, 19865345, 18845653
19280225, 19524384, 19248799, 18988834, 19048007, 18288842, 19238590

18921743, 18952989, 16870214, 19928926, 19134173, 19180770, 19018206
19197175, 19149990, 18849537, 19730508, 19183343, 19012119, 19001390
18202441, 19067244, 19189317, 19644859, 19358317, 19390567, 20074391
19279273, 19706965, 19068970, 19841800, 19512341, 14643995, 19619732
20348653, 18607546, 18940497, 19670108, 19649152, 19065677, 19547370
18948177, 19315691, 19637186, 19676905, 18964978, 19035573, 19176326
18967382, 19174430, 19176223, 19532017, 18674047, 19074147, 19054077
19536415, 19708632, 19289642, 20425790, 19335438, 18856999, 19371175
19468347, 19195895, 19154375, 16359751, 18990693, 19439759, 19769480
19272708, 19978542, 19329654, 19873610, 19174521, 19520602, 19382851
19658708, 19304354, 19052488, 19291380, 18681056, 19896336, 17835294
19076343, 19791377, 19068610, 19561643, 18618122, 20440930, 18456643
18909599, 19487147, 19143550, 19185876, 19016730, 18250893, 20347562
19627012, 16619249, 18354830, 19577410, 19687159, 19001359, 19174942
19518079, 18610915, 18674024, 18306996, 19309466, 19081128, 19915271
19157754, 19058490, 20284155, 18791688, 18885870, 19303936, 19434529
19018447, 18417036, 19597439, 20235511, 19022470, 18964939, 19430401
19044962, 19385656, 19501299, 17274537, 19409212, 19440586, 19606174
18436647, 19023822, 19684504, 19178851, 19124589, 19805359, 19024808
19597583, 19155797, 19393542, 19050649, 19028800

Amazon RDS for Oracle Database 11g Release 2

(11.2.0.4)

For Amazon RDS for Oracle Database 11g Release 2 (11.2.0.4), Amazon RDS incorporates bug fixes from Oracle by using their quarterly Database Patch Set Updates (PSUs). If you apply updates, you can be confident that your DB instance is running a version of the database software that has been tested by both Oracle and Amazon. We don't support applying one-off patches to individual DB instances.

Note

RDS for Oracle Database 11g is no longer supported. This information is only useful if you want to upgrade an Oracle Database 11g snapshot.

To find what Oracle Patch Set Updates (PSUs) are applied to Amazon RDS for Oracle Database 11g Release 2 (11.2.0.4), see the following table.

Date	PSU
2020 October	11.2.0.4.v26
2020 July	11.2.0.4.v25
2020 April	11.2.0.4.v24
2020 January	11.2.0.4.v23
2019 October	11.2.0.4.v22
2019 July	11.2.0.4.v21
2019 April	11.2.0.4.v20
2019 January	11.2.0.4.v19
2018 October	11.2.0.4.v18

Date	PSU
2018 July	11.2.0.4.v17
2018 April	11.2.0.4.v16
2018 January	11.2.0.4.v15
2017 October	11.2.0.4.v14
2017 July	11.2.0.4.v13
2017 April	11.2.0.4.v12
2017 January	11.2.0.4.v11
2016 October	11.2.0.4.v10
2016 July	11.2.0.4.v9
2016 April	11.2.0.4.v8
2016 January	11.2.0.4.v7
2015 October	11.2.0.4.v6
	11.2.0.4.v5
2015 April	11.2.0.4.v4
2014 October	11.2.0.4.v3
2014 July	11.2.0.4.v2
	(Deprecated)
2014 January	11.2.0.4.v1

Version 11.2.0.4.v26

Important

This patch is currently only available for Oracle Database Enterprise Edition.

Version 11.2.0.4.v26 includes the following:

- Patch [31537677](#): Oracle Database Patch Set Update 11.2.0.4.201020
- Patch [31668908](#): Oracle JavaVM Component 11.2.0.4.201020 Database PSU
- Patch [22188219](#): "L1 VALIDATION" WAIT EVENT USED TO BACK OFF WHEN HW ENQUEUE CANNOT BE ACQUIRED
- Oracle GoldenGate - Oracle RDBMS Server Recommended Patches
- Patch [32076719](#): MERGE REQUEST ON TOP OF DATABASE PSU 11.2.0.4.201020 FOR BUGS 2990912 13254780
- Patch [24010393](#): MERGE REQUEST ON TOP OF DATABASE PSU 11.2.0.4.6 FOR BUGS 12897813 21281961
- Patch [17031322](#): OCIXMLDBREWRIEXML RETURNED BIND VARIABLES ARE NOT WHITESPACE PRESERVING
- Patch [19277336](#): INTEGRATED REPLICAT INVALIDATES DEPENDENT PACKAGES RESULTING IN AN ORA-4068
- Patch [19306797](#): HEARTBEAT REDO IS NOT GENERATED NON-RAC HOSTS WHEN SUPPLEMENTAL LOGGING ENABLED
- Patch [19440386](#): FAILED TO RAISE ORA-1 FOR PK UPDATE WHEN CONSTRAINT=IMMEDIATE
- Patch [19563715](#): LOGMINER DOES NOT MAKE PROGRESS WHEN 4GB OR MORE MEMORY IS USED IN GOLDENGATE
- Patch [20647412](#): EDITION NAME LOGGED WITH KNLD SHOULD BE THE CURRENT EDITION, NOT SESSION EDITION
- Patch [26744595](#): LGSB:APPLY ABORTS W/ ORA-26786 (ROW-EXISTS) COLLISION WITH HCC(PR)-NO HCC(SB)
- Patch [12668795](#): ORA-00600: [KDUCEFA:ENDBIT] SEEN DURING XSTREAMS ONEWAY REPLICATION

- PreUpgrade Jar: `preupgrade_19_cbuild_8_lf.zip`
- Support for setting and unsetting system diagnostic events using procedures in the `rdsadmin.rdsadmin_util` package

For more information, see [Setting and unsetting system diagnostic events](#) in the *Amazon RDS User Guide*.

- Support for the procedure `rdsadmin_util.truncate_apply$_cdr_info` described in [Integrated REPLICAT slow due to query on sys."_DBA_APPLY_CDR_INFO"](#) in the *Amazon RDS User Guide*.

Combined patches for version 11.2.0.4.v26, released November 2020

Bugs fixed:

```
2990912, 6599380, 8322815, 9756271, 10136473, 11733603, 11786053
11883252, 12364061, 12611721, 12668795, 12747740, 12816846, 12897813
12905058, 12982566, 13254780, 13364795, 13498382, 13558557, 13609098
13645875, 13680635, 13829543, 13837378, 13853126, 13854364, 13866822
13871092, 13936038, 13944971, 13951456, 13955826, 13960236, 14010183
14015842, 14034426, 14054676, 14084247, 14106803, 14133975, 14176370
14245531, 14285317, 14312810, 14338435, 14354737, 14368995, 14458214
14521218, 14521849, 14565184, 14602788, 14657740, 14692762, 14705949
14735792, 14764829, 14774730, 14786201, 14829250, 14852021, 15861775
15913355, 15955387, 15979965, 15990359, 16042673, 16043574, 16065166
16069901, 16091637, 16180763, 16194160, 16198143, 16220077, 16228604
16233738, 16268425, 16285691, 16306373, 16314254, 16315398, 16344544
16354467, 16360112, 16384983, 16392068, 16399083, 16410570, 16422541
16450169, 16472716, 16494615, 16524926, 16538760, 16542886, 16571443
16579084, 16595641, 16596890, 16613964, 16618694, 16668584, 16674686
16685417, 16692232, 16721594, 16731148, 16756406, 16777840, 16785708
16799735, 16819962, 16832076, 16833527, 16833845, 16837842, 16850630
16854386, 16855292, 16863422, 16870214, 16875230, 16875449, 16898135
16901385, 16903536, 16912439, 16929165, 16934803, 16941434, 16943711
16956380, 16989630, 16992075, 17006183, 17006570, 17008068, 17011832
17016369, 17019086, 17019345, 17019356, 17025461, 17027426, 17030189
17031322, 17036973, 17037130, 17040527, 17040764, 17042658, 17047404
17050888, 17056813, 17071721, 17080436, 17082359, 17082983, 17088068
17156148, 17165204, 17174582, 17184721, 17186905, 17201047, 17201159
17205719, 17208934, 17215560, 17227073, 17227277, 17231779, 17232014
17235750, 17237521, 17238511, 17239687, 17242746, 17246576, 17254374
```

17258090, 17258582, 17265217, 17267114, 17274537, 17279227, 17282229
17284817, 17285560, 17288409, 17291347, 17296856, 17297939, 17299889
17302277, 17308789, 17311728, 17313525, 17323222, 17325413, 17332800
17341326, 17343514, 17344412, 17346091, 17346671, 17348614, 17359610
17360606, 17365043, 17375354, 17381384, 17385178, 17389192, 17390160
17390431, 17392698, 17393683, 17393915, 17394950, 17397545, 17432124
17437634, 17441661, 17443671, 17446237, 17449815, 17465741, 17468141
17477958, 17478145, 17478514, 17484731, 17484762, 17495022, 17501491
17518652, 17528315, 17532245, 17532729, 17545847, 17546761, 17546973
17551063, 17551674, 17551699, 17551709, 17570240, 17570606, 17571039
17571306, 17586955, 17587063, 17588480, 17596908, 17600719, 17602269
17610798, 17612828, 17614134, 17614227, 17621643, 17622427, 17630484
17634921, 17643573, 17644091, 17648596, 17649265, 17655240, 17655634
17672719, 17694209, 17695685, 17705023, 17716305, 17717883, 17721717
17722535, 17726838, 17752121, 17752995, 17754782, 17761775, 17762296
17767676, 17783445, 17783588, 17785870, 17786278, 17786518, 17787259
17798953, 17801017, 17804361, 17806696, 17811429, 17811438, 17811447
17811456, 17811789, 17816865, 17820741, 17824637, 17835048, 17835627
17842825, 17847764, 17848897, 17851160, 17852463, 17853456, 17853498
17865671, 17877323, 17883081, 17889549, 17889583, 17890099, 17891943
17891946, 17892268, 17903598, 17912217, 17922254, 17936109, 17945983
17951233, 17957017, 17982555, 17982832, 18000422, 18009564, 18018515
18029658, 18031668, 18043064, 18051556, 18061914, 18084625, 18086801
18090142, 18091059, 18092127, 18093615, 18094246, 18096714, 18098207
18125929, 18135678, 18139690, 18155762, 18159793, 18166013, 18166577
18180390, 18189036, 18191164, 18193833, 18199537, 18202441, 18203835
18203837, 18203838, 18228645, 18230522, 18232865, 18235390, 18244962
18247991, 18259031, 18260550, 18262334, 18264060, 18272672, 18273830
18277454, 18280813, 18282562, 18293054, 18306996, 18308268, 18315328
18316692, 18317531, 18325460, 18328509, 18331812, 18331850, 18334586
18339044, 18356166, 18362222, 18373438, 18382302, 18384391, 18384537
18388363, 18411336, 18413820, 18430495, 18436307, 18436647, 18440047
18440095, 18441944, 18456514, 18458318, 18460587, 18471685, 18482502
18492302, 18508861, 18510194, 18515268, 18522509, 18554763, 18554871
18604493, 18604692, 18607546, 18610915, 18614015, 18619917, 18628388
18641419, 18641451, 18641461, 18662619, 18673304, 18673325, 18673342
18674024, 18674047, 18674465, 18676416, 18681862, 18682983, 18685892
18704244, 18705484, 18723434, 18740837, 18744139, 18747196, 18759211
18762750, 18765602, 18774543, 18783224, 18798250, 18819257, 18828868
18832544, 18841764, 18849970, 18856106, 18856999, 18868646, 18886413
18899974, 18933818, 18948177, 18964939, 18973548, 18973907, 18996843
19006757, 19006849, 19007266, 19013183, 19032777, 19032867, 19049453
19058059, 19060015, 19121551, 19153980, 19174430, 19175543, 19176885
19187988, 19197175, 19207117, 19207156, 19211433, 19211724, 19223010

19231857, 19258504, 19271443, 19272701, 19277336, 19285025, 19289642
19297917, 19306797, 19309466, 19315668, 19330795, 19358317, 19359219
19373893, 19374518, 19393542, 19396455, 19403858, 19429927, 19433930
19440386, 19442102, 19445860, 19455741, 19458377, 19461270, 19463893
19463897, 19466309, 19469538, 19475971, 19487147, 19490948, 19516448
19540573, 19544839, 19554106, 19554117, 19563300, 19563715, 19578350
19584068, 19587324, 19601228, 19601762, 19615136, 19644859, 19680952
19689979, 19692824, 19693090, 19697993, 19699191, 19699946, 19718981
19721304, 19727057, 19730508, 19768226, 19769489, 19777862, 19781326
19788303, 19788842, 19791273, 19794897, 19827973, 19831647, 19835133
19852360, 19854503, 19871910, 19888853, 19891090, 19895326, 19896336
19909862, 19915271, 19930276, 19943771, 19972564, 19972566, 19972568
19972569, 19972570, 20004021, 20004087, 20017509, 20023340, 20031873
20067212, 20074391, 20134113, 20142975, 20144308, 20169408, 20175161
20250147, 20273319, 20294666, 20296213, 20299013, 20299015, 20324049
20331945, 20334344, 20382309, 20387265, 20390564, 20394750, 20408829
20425790, 20441797, 20448824, 20475845, 20476175, 20506699, 20506706
20506715, 20509482, 20513399, 20524085, 20558005, 20563314, 20569094
20596234, 20598042, 20627866, 20631274, 20631846, 20647412, 20657411
20657441, 20671094, 20672075, 20686773, 20717359, 20725343, 20777150
20803583, 20828947, 20856766, 20860659, 20861693, 20869721, 20875898
20879889, 20882568, 20907061, 20914870, 20925795, 20926021, 20936905
21047407, 21047766, 21051833, 21051840, 21051852, 21051858, 21051862
21059919, 21063322, 21067387, 21097043, 21132297, 21142837, 21168487
21172913, 21174504, 21179898, 21197626, 21263635, 21275255, 21281607
21281961, 21286665, 21330264, 21343775, 21343838, 21343897, 21351877
21352646, 21354456, 21380789, 21387964, 21394225, 21419850, 21422580
21424824, 21425496, 21429602, 21453153, 21502702, 21515534, 21516611
21517440, 21526048, 21532755, 21534893, 21538485, 21538558, 21538567
21566639, 21566944, 21612959, 21629064, 21641760, 21656630, 21668627
21698350, 21756661, 21756677, 21756699, 21764119, 21787056, 21794615
21795111, 21811517, 21820934, 21834568, 21842740, 21847223, 21868720
21893235, 21897746, 21911701, 21911849, 21972320, 21983325, 22037014
22083366, 22092979, 22118835, 22148226, 22168163, 22175564, 22185234
22188219, 22195441, 22195448, 22195457, 22195465, 22195477, 22195485
22195492, 22228324, 22243719, 22250006, 22253904, 22296366, 22321741
22321756, 22351572, 22353199, 22380919, 22465352, 22468255, 22499356
22502493, 22507210, 22507234, 22551446, 22568797, 22594718, 22606521
22657942, 22666802, 22670385, 22675136, 22683212, 22683225, 22686674
22730454, 22750215, 22760679, 22782647, 22809871, 22820579, 22826067
22836801, 22873635, 22893153, 22901797, 22905130, 22977256, 23003979
23007241, 23008056, 23026585, 23065323, 23082876, 23105538, 23115139
23140259, 23177648, 23184013, 23194294, 23209741, 23265914, 23266217
23294548, 23302839, 23315889, 23328639, 23330119, 23330124, 23536835

23571055, 23614158, 23628685, 23713236, 23725036, 23727132, 24307571
24316947, 24348685, 24385983, 24411921, 24433711, 24448240, 24473736
24476265, 24476274, 24528741, 24534298, 24555417, 24560906, 24563422
24570598, 24589081, 24624166, 24652769, 24662775, 24701840, 24717859
24719736, 24766121, 24790914, 24817447, 24835538, 24842886, 24908321
24975421, 25042823, 25067795, 25076732, 25077278, 25093656, 25115178
25165496, 25205368, 25248384, 25328093, 25364628, 25369547, 25423453
25427662, 25489607, 25494379, 25505371, 25505382, 25505394, 25505407
25555252, 25600421, 25634317, 25635149, 25649873, 25654936, 25655390
25764020, 25775213, 25809524, 25823754, 25879656, 25879984, 25881255
25885148, 25897615, 25914276, 25947799, 25957038, 26007010, 26023002
26030218, 26039623, 26078387, 26198926, 26203182, 26243698, 26245237
26318200, 26336977, 26354017, 26439748, 26474853, 26482376, 26513067
26544823, 26569225, 26575788, 26631046, 26637592, 26654363, 26667015
26667023, 26667032, 26679352, 26716835, 26744595, 26746894, 26910644
26999139, 27000663, 27015449, 27053456, 27072923, 27086138, 27097854
27255377, 27351628, 27374796, 27404573, 27441326, 27461842, 27534509
27567477, 27642235, 27710072, 27825893, 27870645, 27952577, 28000269
28022101, 28076295, 28079127, 28100487, 28125601, 28199085, 28254374
28305362, 28357401, 28364007, 28384353, 28394726, 28501075, 28502128
28566241, 28612674, 28730253, 28734355, 28790634, 28806384, 28819280
28849751, 28852325, 28855981, 28876684, 28915933, 29027694, 29033139
29200700, 29254615, 29343156, 29434301, 29448234, 29483672, 29483723
29483771, 29511611, 29621961, 29633753, 29774367, 29782211, 29944660
29962927, 29962939, 29965888, 29992392, 29997937, 30018017, 30160639
30179644, 30200680, 30215130, 30237239, 30252098, 30275351, 30275359
30305880, 30365745, 30387666, 30393318, 30421204, 30517516, 30534664
30559616, 30561292, 30562891, 30562907, 30562909, 30562923, 30562936
30578221, 30624864, 30758943, 30772207, 30803210, 30855121, 31001455
31010960, 31022191, 31022281, 31031715, 31125948, 31172207, 31194264
31306274, 31335037, 31335142, 31338362, 31476032, 31492144, 31492164
31492176, 31506720, 31537677, 31668061, 31668867, 31834759, 31883489
31884535, 31885162, 31885173, 31885179, 31885190, 31885201, 31885213
31885223, 31885230

Version 11.2.0.4.v25

Version 11.2.0.4.v25 includes the following:

- Patch [31103343](#): Database Patch Set Update 11.2.0.4.200714
- Patch [31219953](#): Oracle JVM Component Database PSU 11.2.0.4.200714

- Patch [31335037](#): DSTV35 for RDBMS (TZDATA2020A)
- Patch [31335142](#): DSTV35 for OJVM (TZDATA2020A)
- Patch [31596256](#): Oracle GoldenGate - Oracle RDBMS Server Recommended Patches
- Patch [22188219](#): "L1 VALIDATION" WAIT EVENT USED TO BACK OFF WHEN HW ENQUEUE CANNOT BE ACQUIRED
- Patch [28730253](#): SUPPORT NEW ERA REIWA FOR JAPANESE IMPERIAL CALENDAR

Combined patches for version 11.2.0.4.v25, released July 2020

Bugs fixed:

2990912, 6599380, 8322815, 9756271, 10136473, 11733603, 11786053
11883252, 12364061, 12611721, 12668795, 12747740, 12816846, 12897813
12905058, 12982566, 13254780, 13364795, 13498382, 13558557, 13609098
13645875, 13680635, 13829543, 13837378, 13853126, 13866822, 13871092
13936038, 13944971, 13951456, 13955826, 13960236, 14010183, 14015842
14034426, 14054676, 14084247, 14106803, 14133975, 14176370, 14245531
14285317, 14312810, 14338435, 14354737, 14368995, 14458214, 14521218
14521849, 14565184, 14602788, 14657740, 14692762, 14705949, 14735792
14764829, 14774730, 14829250, 14852021, 15861775, 15913355, 15955387
15979965, 15990359, 16042673, 16043574, 16065166, 16069901, 16091637
16180763, 16194160, 16198143, 16220077, 16228604, 16233738, 16268425
16285691, 16306373, 16314254, 16315398, 16344544, 16354467, 16360112
16384983, 16392068, 16399083, 16410570, 16422541, 16450169, 16472716
16494615, 16524926, 16538760, 16542886, 16571443, 16579084, 16595641
16596890, 16613964, 16618694, 16668584, 16674686, 16685417, 16692232
16721594, 16731148, 16756406, 16777840, 16785708, 16799735, 16819962
16832076, 16833527, 16833845, 16837842, 16850630, 16854386, 16855292
16863422, 16870214, 16875230, 16875449, 16898135, 16901385, 16903536
16912439, 16929165, 16934803, 16941434, 16943711, 16956380, 16989630
16992075, 17006183, 17006570, 17008068, 17011832, 17016369, 17019086
17019345, 17019356, 17025461, 17027426, 17030189, 17031322, 17036973
17037130, 17040527, 17040764, 17042658, 17047404, 17050888, 17056813
17071721, 17080436, 17082359, 17082983, 17088068, 17156148, 17165204
17174582, 17184721, 17186905, 17201047, 17201159, 17205719, 17208934
17215560, 17227073, 17227277, 17231779, 17232014, 17235750, 17237521
17238511, 17239687, 17242746, 17246576, 17254374, 17258090, 17258582
17265217, 17267114, 17274537, 17279227, 17282229, 17284817, 17285560
17288409, 17291347, 17296856, 17297939, 17299889, 17302277, 17308789
17311728, 17313525, 17323222, 17325413, 17332800, 17341326, 17343514

17344412, 17346091, 17346671, 17348614, 17359610, 17360606, 17365043
17375354, 17381384, 17385178, 17389192, 17390160, 17390431, 17392698
17393683, 17393915, 17394950, 17397545, 17432124, 17437634, 17441661
17443671, 17446237, 17449815, 17465741, 17468141, 17477958, 17478145
17478514, 17484731, 17484762, 17495022, 17501491, 17518652, 17528315
17532245, 17532729, 17545847, 17546761, 17546973, 17551063, 17551674
17551699, 17551709, 17570240, 17570606, 17571039, 17571306, 17586955
17587063, 17588480, 17596908, 17600719, 17602269, 17610798, 17612828
17614134, 17614227, 17621643, 17622427, 17630484, 17634921, 17643573
17644091, 17648596, 17649265, 17655240, 17655634, 17672719, 17694209
17695685, 17705023, 17716305, 17717883, 17721717, 17722535, 17726838
17752121, 17752995, 17754782, 17761775, 17762296, 17767676, 17783445
17783588, 17785870, 17786278, 17786518, 17787259, 17798953, 17801017
17804361, 17806696, 17811429, 17811438, 17811447, 17811456, 17811789
17816865, 17820741, 17824637, 17835048, 17835627, 17842825, 17847764
17848897, 17851160, 17852463, 17853456, 17853498, 17865671, 17877323
17883081, 17889549, 17889583, 17890099, 17891943, 17891946, 17892268
17903598, 17912217, 17922254, 17936109, 17945983, 17951233, 17957017
17982555, 17982832, 18000422, 18009564, 18018515, 18029658, 18031668
18043064, 18051556, 18061914, 18084625, 18086801, 18090142, 18091059
18092127, 18093615, 18094246, 18096714, 18098207, 18125929, 18135678
18139690, 18155762, 18159793, 18166013, 18166577, 18180390, 18189036
18191164, 18193833, 18199537, 18202441, 18203835, 18203837, 18203838
18228645, 18230522, 18232865, 18235390, 18244962, 18247991, 18259031
18260550, 18262334, 18264060, 18272672, 18273830, 18277454, 18280813
18282562, 18293054, 18306996, 18308268, 18315328, 18316692, 18317531
18325460, 18328509, 18331812, 18331850, 18334586, 18339044, 18356166
18362222, 18373438, 18382302, 18384391, 18384537, 18388363, 18411336
18413820, 18430495, 18436307, 18436647, 18440047, 18440095, 18441944
18456514, 18458318, 18460587, 18471685, 18482502, 18492302, 18508861
18510194, 18515268, 18522509, 18554763, 18554871, 18604493, 18604692
18607546, 18610915, 18614015, 18619917, 18628388, 18641419, 18641451
18641461, 18662619, 18673090, 18673304, 18673325, 18673342, 18674024
18674047, 18674465, 18676416, 18681862, 18682983, 18685892, 18704244
18705484, 18723434, 18740837, 18744139, 18747196, 18759211, 18762750
18765602, 18774543, 18783224, 18798250, 18819257, 18828868, 18832544
18841764, 18849970, 18856106, 18856999, 18868646, 18886413, 18899974
18933818, 18948177, 18964939, 18973548, 18973907, 18996843, 19006757
19006849, 19007266, 19013183, 19032777, 19032867, 19049453, 19058059
19060015, 19121551, 19153980, 19174430, 19175543, 19176885, 19187988
19197175, 19207117, 19207156, 19211433, 19211724, 19223010, 19231857
19258504, 19271443, 19272701, 19277336, 19285025, 19289642, 19297917
19306797, 19309466, 19315668, 19330795, 19358317, 19359219, 19373893
19374518, 19393542, 19396455, 19403858, 19429927, 19433930, 19440386

19442102, 19445860, 19455741, 19458377, 19461270, 19463893, 19463897
19466309, 19469538, 19475971, 19487147, 19490948, 19516448, 19540573
19544839, 19554106, 19554117, 19563300, 19563715, 19578350, 19584068
19587324, 19601228, 19601762, 19615136, 19644859, 19680952, 19689979
19692824, 19693090, 19697993, 19699191, 19699946, 19718981, 19721304
19727057, 19730508, 19768226, 19769489, 19777862, 19781326, 19788303
19788842, 19791273, 19794897, 19827973, 19831647, 19835133, 19852360
19854503, 19871910, 19888853, 19891090, 19895326, 19896336, 19909862
19915271, 19930276, 19943771, 19972564, 19972566, 19972568, 19972569
19972570, 20004021, 20004087, 20017509, 20023340, 20031873, 20067212
20074391, 20134113, 20142975, 20144308, 20169408, 20175161, 20250147
20273319, 20294666, 20296213, 20299015, 20324049, 20331945, 20334344
20382309, 20387265, 20390564, 20394750, 20408829, 20425790, 20441797
20448824, 20475845, 20476175, 20506699, 20506706, 20506715, 20509482
20513399, 20524085, 20558005, 20563314, 20569094, 20596234, 20598042
20627866, 20631274, 20631846, 20647412, 20657411, 20657441, 20671094
20672075, 20686773, 20717359, 20725343, 20777150, 20803583, 20828947
20856766, 20860659, 20861693, 20869721, 20875898, 20879889, 20882568
20907061, 20914870, 20925795, 20926021, 20936905, 21047407, 21047766
21051833, 21051840, 21051852, 21051858, 21051862, 21059919, 21063322
21067387, 21097043, 21132297, 21142837, 21168487, 21172913, 21174504
21179898, 21197626, 21227138, 21263635, 21275255, 21281607, 21281961
21286665, 21330264, 21343775, 21343838, 21343897, 21351877, 21352646
21354456, 21380789, 21387964, 21394225, 21419850, 21422580, 21424824
21425496, 21429602, 21453153, 21502702, 21515534, 21516611, 21517440
21526048, 21532755, 21534893, 21538485, 21538558, 21538567, 21566639
21566944, 21612959, 21629064, 21641760, 21656630, 21668627, 21698350
21756661, 21756677, 21756699, 21764119, 21787056, 21794615, 21795111
21811517, 21820934, 21834568, 21842740, 21847223, 21868720, 21893235
21897746, 21911701, 21911849, 21972320, 21983325, 22037014, 22083366
22092979, 22118835, 22148226, 22168163, 22175564, 22185234, 22188219
22195441, 22195448, 22195457, 22195465, 22195477, 22195485, 22195492
22228324, 22243719, 22250006, 22253904, 22296366, 22321741, 22321756
22351572, 22353199, 22380919, 22465352, 22499356, 22502493, 22507210
22507234, 22551446, 22568797, 22594718, 22606521, 22657942, 22666802
22670385, 22675136, 22683212, 22683225, 22686674, 22730454, 22760679
22782647, 22809871, 22820579, 22836801, 22873635, 22893153, 22901797
22905130, 22977256, 23003979, 23007241, 23008056, 23026585, 23065323
23105538, 23115139, 23140259, 23177648, 23194294, 23209741, 23262847
23265914, 23294548, 23302839, 23315889, 23328639, 23330119, 23330124
23536835, 23571055, 23614158, 23628685, 23713236, 23725036, 23727132
24307571, 24316947, 24348685, 24385983, 24411921, 24433711, 24448240
24476265, 24476274, 24528741, 24534298, 24555417, 24560906, 24563422
24570598, 24589081, 24624166, 24652769, 24662775, 24701840, 24717859

24719736, 24766121, 24790914, 24835538, 24842886, 24908321, 24975421
25042823, 25067795, 25076732, 25077278, 25093656, 25165496, 25248384
25328093, 25364628, 25369547, 25423453, 25427662, 25489607, 25494379
25505371, 25505382, 25505394, 25505407, 25555252, 25600421, 25634317
25635149, 25649873, 25654936, 25655390, 25764020, 25775213, 25809524
25823754, 25879656, 25879984, 25881255, 25885148, 25897615, 25914276
25947799, 25957038, 26007010, 26023002, 26030218, 26039623, 26078387
26198926, 26203182, 26243698, 26245237, 26336977, 26354017, 26439748
26474853, 26482376, 26513067, 26544823, 26569225, 26575788, 26631046
26637592, 26654363, 26667015, 26667023, 26667032, 26679352, 26744595
26746894, 26910644, 26999139, 27000663, 27015449, 27053456, 27072923
27086138, 27097854, 27255377, 27351628, 27374796, 27441326, 27461842
27534509, 27567477, 27642235, 27710072, 27825893, 27870645, 27952577
28000269, 28022101, 28076295, 28079127, 28100487, 28125601, 28199085
28254374, 28305362, 28357401, 28364007, 28384353, 28501075, 28502128
28612674, 28730253, 28734355, 28790634, 28806384, 28819280, 28849751
28852325, 28855981, 28876684, 28915933, 29027694, 29033139, 29200700
29254615, 29343156, 29434301, 29448234, 29483672, 29483723, 29483771
29511611, 29621961, 29633753, 29774367, 29944660, 29962927, 29962939
29992392, 29997937, 30160639, 30179644, 30215130, 30237239, 30252098
30275351, 30275359, 30305880, 30365745, 30393318, 30534664, 30559616
30562891, 30562907, 30562909, 30562923, 30562936, 30624864, 30758943
30772207, 30803210, 30855121, 31001455, 31010960, 31022191, 31022281
31031715, 31103343, 31125948, 31172207, 31306274, 31335037, 31335142
31338362, 31492144, 31492164, 31492176

Version 11.2.0.4.v24

Version 11.2.0.4.v24 includes the following:

- Patch [30670774](#): Database PSU 11.2.0.4.200414
- Patch [30805543](#): Oracle JVM Component Database PSU 11.2.0.4.200414
- Patch [29997937](#): DSTv34 for RDBMS (TZDATA2019G)
- Patch [29997959](#): DSTV34 OJVM (TZDATA2019B)
- Patch [31192454](#): Oracle GoldenGate - Oracle RDBMS Server Recommended Patches
- Patch [22188219](#): "L1 VALIDATION" WAIT EVENT USED TO BACK OFF WHEN HW ENQUEUE CANNOT BE ACQUIRED
- Patch [28730253](#): SUPPORT NEW ERA REIWA FOR JAPANESE IMPERIAL CALENDAR

- Support for purging the recycle bin

For more information, see [Purging the recycle bin](#) in the *Amazon RDS User Guide*.

- Support for generating performance reports with Automatic Workload Repository (AWR) using the `rdsadmin.rdsadmin_diagnostic_util` package

For more information, see [Generating performance reports with Automatic Workload Repository \(AWR\)](#) in the *Amazon RDS User Guide*.

Combined patches for version 11.2.0.4, released April 2020

Bugs fixed:

```
18619917, 19309466, 28876684, 28855981, 18189036, 19781326, 13609098
16285691, 16756406, 18430495, 17323222, 29483723, 19915271, 19516448
14458214, 23713236, 23140259, 29434301, 22502493, 18272672, 16410570
16494615, 19174430, 21352646, 16901385, 16596890, 22243719, 18996843
21387964, 20334344, 17174582, 22250006, 17798953, 14015842, 18031668
15955387, 21534893, 16832076, 16065166, 16579084, 25427662, 21179898
11786053, 15990359, 24589081, 17982832, 18685892, 20142975, 24835538
16315398, 20861693, 17037130, 17284817, 17891946, 17279227, 17588480
17291347, 16731148, 21097043, 24528741, 22321741, 17165204, 26245237
17891943, 17359610, 17265217, 17465741, 29621961, 22551446, 18191164
16721594, 18614015, 27825893, 18440095, 19769489, 20596234, 18482502
16043574, 17360606, 20936905, 22321756, 19211724, 17392698, 19463893
29033139, 17477958, 17040764, 18362222, 19463897, 24624166, 17853456
14521849, 17816865, 19692824, 21868720, 17951233, 25505407, 17040527
31022191, 24975421, 19888853, 18009564, 20882568, 20803583, 23026585
18604692, 17622427, 16903536, 29483771, 17865671, 17883081, 16228604
17325413, 17082359, 12747740, 22168163, 16091637, 20569094, 17468141
30365745, 29962939, 19469538, 29633753, 20598042, 16042673, 23302839
17437634, 28734355, 19049453, 20387265, 16941434, 16833527, 21343775
17297939, 16069901, 14285317, 22380919, 18436647, 23065323, 21983325
17853498, 24790914, 23571055, 16542886, 21286665, 17365043, 17752995
25914276, 17296856, 18783224, 22353199, 22083366, 28305362, 21419850
16180763, 23294548, 26679352, 13960236, 25328093, 25423453, 18339044
17282229, 25600421, 18856999, 18259031, 28806384, 21354456, 23725036
18471685, 30237239, 17258090, 16344544, 17903598, 17011832, 18135678
18704244, 17786518, 19718981, 25655390, 17242746, 20250147, 19197175
17390431, 17835627, 17672719, 17393915, 21566639, 18765602, 21425496
26544823, 22228324, 29962927, 18682983, 30179644, 25165496, 12816846
```

18774543, 18747196, 17824637, 19429927, 21429602, 16524926, 17343514
19271443, 17019345, 18681862, 17186905, 23330119, 17811438, 26474853
17215560, 16875449, 21380789, 17184721, 18508861, 19466309, 23330124
17811429, 17019356, 25654936, 17754782, 17752121, 22809871, 17201159
18308268, 19777862, 16198143, 29027694, 18828868, 17586955, 28076295
26654363, 22977256, 16692232, 27374796, 21142837, 20869721, 17649265
25879656, 17847764, 21756699, 19697993, 28364007, 17787259, 23628685
30252098, 23007241, 27351628, 18094246, 20031873, 17375354, 21698350
26513067, 21538567, 22683212, 16450169, 17478145, 17311728, 17648596
17308789, 22836801, 21756677, 18674047, 14084247, 19788303, 22683225
27534509, 16833845, 18948177, 17205719, 21756661, 20004021, 17922254
13837378, 18084625, 17912217, 11883252, 24842886, 12982566, 26203182
14176370, 14764829, 21847223, 16875230, 28079127, 22568797, 17237521
29511611, 25635149, 16934803, 17848897, 20441797, 20175161, 16613964
18334586, 17288409, 17341326, 17449815, 15913355, 16399083, 18740837
20294666, 14565184, 21517440, 17614134, 19854503, 14245531, 16194160
18325460, 15979965, 30562923, 20671094, 27870645, 25093656, 18247991
16912439, 30562936, 24433711, 19930276, 22092979, 20506715, 23003979
20506706, 13871092, 19272701, 17397545, 16785708, 19461270, 21051862
13829543, 16220077, 17008068, 18061914, 20448824, 30275359, 18674024
19689979, 24411921, 30275351, 17596908, 17036973, 22175564, 17612828
20725343, 28199085, 23194294, 17630484, 21051858, 20017509, 21051852
17767676, 17232014, 22893153, 12611721, 25555252, 18356166, 17071721
19315668, 25764020, 16863422, 21051840, 17267114, 17820741, 18043064
21538558, 26243698, 20324049, 30305880, 16392068, 18744139, 24348685
26746894, 18628388, 27072923, 14010183, 16595641, 17080436, 17332800
20777150, 21453153, 20299015, 18413820, 18264060, 16819962, 22465352
21351877, 21051833, 18673342, 30562907, 30562909, 29200700, 27441326
16571443, 18328509, 27567477, 18674465, 16422541, 18306996, 19359219
21424824, 17443671, 17478514, 21067387, 16268425, 17381384, 18723434
17235750, 23328639, 22195448, 24570598, 21172913, 17655240, 18384391
16992075, 22195441, 17025461, 30562891, 16472716, 19289642, 21502702
22195457, 20475845, 22148226, 26030218, 18331850, 17945983, 13498382
24652769, 18673304, 17610798, 19891090, 25369547, 18456514, 8322815
22657942, 17313525, 17050888, 18317531, 19835133, 17495022, 11733603
18798250, 19285025, 18260550, 17390160, 18316692, 19458377, 14368995
17551063, 21343838, 12905058, 14735792, 28612674, 16855292, 23315889
13364795, 18235390, 18293054, 18673325, 19393542, 30215130, 14657740
17532729, 17393683, 17389192, 17783588, 17852463, 19358317, 17441661
14034426, 28254374, 20631274, 19207117, 26569225, 17518652, 24662775
19475971, 18282562, 19896336, 17348614, 19827973, 17346671, 31022281
19791273, 24476274, 22296366, 13853126, 18273830, 17570606, 13558557
26007010, 16685417, 18180390, 14692762, 18159793, 17027426, 24476265
23177648, 17851160, 16870214, 18202441, 17227073, 20657411, 19006849

22606521, 20506699, 28000269, 23536835, 17761775, 20382309, 16306373
17801017, 19680952, 16850630, 17694209, 26667015, 17877323, 18230522
24563422, 17446237, 17889549, 17551674, 16233738, 22730454, 17571039
26667023, 19972570, 18849970, 21532755, 20860659, 22905130, 21168487
17016369, 21263635, 17231779, 21343897, 17717883, 27710072, 18522509
23209741, 17484731, 21972320, 19972569, 19972568, 17716305, 21059919
19972566, 19972564, 26667032, 17394950, 20657441, 17551699, 17006570
18051556, 12364061, 18029658, 17546973, 18262334, 19699191, 17227277
18018515, 16943711, 17982555, 20828947, 18098207, 18436307, 19584068
16898135, 13936038, 19601762, 31010960, 14054676, 25505394, 18228645
19013183, 25042823, 17721717, 17239687, 25248384, 25634317, 20134113
20273319, 28501075, 21063322, 17344412, 22507210, 16354467, 21795111
25505371, 16777840, 25879984, 17811456, 19730508, 17385178, 18166013
17484762, 10136473, 6599380, 20717359, 20296213, 27097854, 13955826
18193833, 17545847, 16837842, 18964939, 19871910, 25505382, 17811447
18554763, 21132297, 25957038, 20004087, 17889583, 19544839, 26631046
22507234, 24719736, 18868646, 17042658, 20627866, 14106803, 13951456
18139690, 18277454, 13680635, 25823754, 18554871, 18515268, 20169408
24908321, 17274537, 17602269, 26575788, 19032867, 17762296, 14829250
16929165, 14602788, 28849751, 21794615, 18899974, 29944660, 18441944
17811789, 20074391, 14852021, 17705023, 13645875, 24316947, 16668584
17786278, 25947799, 20879889, 19578350, 28022101, 22594718, 16384983
26439748, 17957017, 19121551, 17570240, 19788842, 18382302, 27086138
21330264, 21197626, 14338435, 13944971, 21656630, 18886413, 17156148
17936109, 20509482, 27255377, 24717859, 18762750, 21526048, 24560906
18096714, 17238511, 26078387, 27053456, 20144308, 25364628, 18244962
19433930, 20476175, 19297917, 21174504, 18280813, 28819280, 17614227
28357401, 21911701, 17006183, 25809524, 18092127, 19727057, 17695685
26039623, 22820579, 20856766, 15861775, 17258582, 21668627, 19487147
20925795, 28100487, 26482376, 19554106, 22760679, 21629064, 18199537
18091059, 17299889, 21538485, 17546761, 26336977, 25775213, 18155762
30803210, 16956380, 19207156, 14705949, 23105538, 26198926, 19258504
16314254, 17246576, 17655634, 17890099, 16989630, 20067212, 19721304
25077278, 19490948, 18203835, 18203838, 18973907, 18203837, 29483672
19615136, 17587063, 18000422, 18641451, 18090142, 21641760, 17019086
30559616, 19373893, 18373438, 21820934, 18641461, 17346091, 21422580
22351572, 18604493, 23008056, 22901797, 18610915, 17892268, 17501491
20907061, 14354737, 17835048, 21787056, 22195485, 22782647, 17082983
18641419, 16618694, 14133975, 22195492, 18331812, 18093615, 24385983
25897615, 20513399, 21281607, 13866822, 18841764, 17600719, 17842825
20558005, 17088068, 9756271, 22195465, 18440047, 19211433, 21515534
20331945, 22686674, 18384537, 18607546, 17254374, 18315328, 23115139
28790634, 21394225, 16360112, 22195477, 17726838, 18510194, 17571306
24766121, 17302277, 21842740, 17551709, 26910644, 17634921, 25489607

16538760, 18933818, 19176885, 17201047, 25649873, 25067795, 28502128
27952577, 14774730, 27461842, 19153980, 21911849, 23727132, 18166577
27000663, 24448240, 17056813, 21811517, 19909862, 25494379, 22675136
24534298, 19895326, 22253904, 17804361, 19231857, 27642235, 26023002
17528315, 19058059, 30534664, 29992392, 19554117, 19007266, 28915933
30855121, 30160639, 17285560, 29254615, 22670385, 18458318, 19187988
23265914, 19699946, 19006757, 19374518, 29774367, 19223010, 29448234
25076732, 22118835, 26637592, 19852360, 20408829, 21047766, 21566944
28730253, 16799735, 17432124, 18759211, 19396455, 20875898, 22037014
22873635, 23614158, 24701840, 25881255, 27015449, 28125601, 28852325
29997937, 29997959, 26354017, 21893235, 18125929, 19601228, 12668795
20524085, 19403858, 18086801, 16854386, 21612959, 20563314, 18705484
16674686, 20425790, 20390564, 19032777, 21275255, 17783445, 19943771
18973548, 18411336, 18673090, 19768226, 21047407, 17030189, 18856106
19693090, 21227138, 18492302, 19831647, 12897813, 19563300, 20914870
19587324, 13254780, 18676416, 21834568, 19794897, 26744595, 17208934
17031322, 19060015, 19277336, 19455741, 21764119, 17785870, 20631846
22185234, 20023340, 20647412, 19440386, 21281961, 25885148, 17722535
20926021, 20686773, 17621643, 18662619, 19563715, 19442102, 21516611
14312810, 20672075, 21897746, 2990912, 23262847, 19644859, 19175543
17644091, 20394750, 19306797, 18819257, 22188219

Version 11.2.0.4.v23

Version 11.2.0.4.v23 includes the following:

- Patch [30298532](#): Database Patch Set Update: 11.2.0.4.200114
- Patch [30503372](#): OJVM PATCH SET UPDATE 11.2.0.4.200114
- Patch [29997937](#): DSTv34 for RDBMS (TZDATA2019G)
- Patch [29997959](#): DSTV34 OJVM (TZDATA2019B)
- Oracle GoldenGate - Oracle RDBMS Server Recommended Patches
- Patch [19440386](#): FAILED TO RAISE ORA-1 FOR PK UPDATE WHEN CONSTRAINT=IMMEDIATE
- Patch [19277336](#): INTEGRATED REPLICAT INVALIDATES DEPENDENT PACKAGES RESULTING IN AN ORA-4068
- Patch [24286409](#): MERGE REQUEST ON TOP OF DATABASE PSU 11.2.0.4.6 FOR BUGS 20647412 21534893
- Patch [24010393](#): MERGE REQUEST ON TOP OF DATABASE PSU 11.2.0.4.6 FOR BUGS 12897813 21281961

- Patch [19306797](#): HEARTBEAT REDO IS NOT GENERATED NON-RAC HOSTS WHEN SUPPLIMENTAL LOGGING ENABLED
- Patch [19563715](#): LOGMINER DOES NOT MAKE PROGRESS WHEN 4GB OR MORE MEMORY IS USED IN GOLDENGATE
- Patch [20425790](#): LOGMINER PATCHES SHOULD TRANSPARENTLY FUNCTION IN A NON-PARTITIONING ENABLED DB
- Patch [17031322](#): 46719: OCIXMLDBREWRETXML RETURNED BIND VARIABLES ARE NOT WHITESPACE PRESERVING
- Patch [30303921](#): MERGE REQUEST ON TOP OF DATABASE PSU 11.2.0.4.190416 FOR BUGS 29879564 14312810
- Patch [30293609](#): MERGE REQUEST ON TOP OF DATABASE PSU 11.2.0.4.190416 FOR BUGS 29600521 23262847
- Patch [26744595](#): LGSB:APPLY ABORTS W/ ORA-26786 (ROW-EXISTS) COLLISION WITH HCC(PR)-NO HCC(SB)
- Patch [28730253](#): SUPPORT NEW ERA REIWA FOR JAPANESE IMPERIAL CALENDAR

Oracle patch 30298532, released January 2020

Bugs fixed:

```
18619917, 19309466, 28876684, 28855981, 18189036, 19781326, 13609098
16285691, 16756406, 18430495, 17323222, 29483723, 19915271, 19516448
14458214, 23713236, 23140259, 29434301, 22502493, 18272672, 16410570
16494615, 19174430, 21352646, 16901385, 16596890, 22243719, 18996843
21387964, 20334344, 17174582, 22250006, 17798953, 14015842, 18031668
15955387, 16832076, 16065166, 16579084, 25427662, 21179898, 11786053
15990359, 17982832, 18685892, 20142975, 24835538, 16315398, 20861693
17037130, 17284817, 17891946, 17279227, 17588480, 17291347, 16731148
21097043, 24528741, 22321741, 17165204, 26245237, 17891943, 17359610
17265217, 17465741, 22551446, 18191164, 16721594, 18614015, 27825893
18440095, 19769489, 20596234, 18482502, 16043574, 17360606, 22321756
19211724, 17392698, 19463893, 29033139, 17477958, 17040764, 18362222
19463897, 24624166, 17853456, 14521849, 17816865, 19692824, 21868720
17951233, 25505407, 17040527, 24975421, 19888853, 18009564, 20882568
20803583, 23026585, 18604692, 17622427, 16903536, 17865671, 29483771
17883081, 16228604, 17325413, 17082359, 12747740, 22168163, 16091637
20569094, 17468141, 30365745, 29962939, 19469538, 29633753, 20598042
```

16042673, 17437634, 23302839, 28734355, 19049453, 20387265, 16833527
21343775, 17297939, 16069901, 14285317, 22380919, 18436647, 23065323
21983325, 17853498, 24790914, 23571055, 16542886, 21286665, 17365043
17752995, 25914276, 17296856, 18783224, 22353199, 22083366, 28305362
16180763, 21419850, 23294548, 26679352, 13960236, 25423453, 18339044
17282229, 25600421, 18856999, 18259031, 28806384, 21354456, 23725036
18471685, 30237239, 17258090, 16344544, 17903598, 17011832, 18135678
18704244, 17786518, 19718981, 25655390, 17242746, 20250147, 19197175
17390431, 17835627, 17672719, 17393915, 21566639, 18765602, 21425496
26544823, 22228324, 29962927, 18682983, 25165496, 12816846, 18774543
18747196, 17824637, 19429927, 21429602, 16524926, 17343514, 19271443
17019345, 18681862, 17186905, 23330119, 17811438, 26474853, 17215560
16875449, 21380789, 17184721, 18508861, 19466309, 23330124, 17811429
17019356, 25654936, 17754782, 17752121, 22809871, 17201159, 18308268
19777862, 16198143, 29027694, 18828868, 17586955, 28076295, 22977256
16692232, 27374796, 21142837, 20869721, 17649265, 25879656, 21756699
19697993, 28364007, 17787259, 23628685, 23007241, 30252098, 27351628
18094246, 20031873, 17375354, 21698350, 21538567, 22683212, 16450169
17478145, 17311728, 17648596, 17308789, 22836801, 21756677, 18674047
14084247, 19788303, 22683225, 27534509, 16833845, 18948177, 17205719
21756661, 20004021, 17922254, 13837378, 18084625, 17912217, 11883252
24842886, 12982566, 26203182, 14176370, 14764829, 21847223, 16875230
28079127, 22568797, 17237521, 29511611, 25635149, 16934803, 17848897
20441797, 16613964, 18334586, 17288409, 17341326, 17449815, 15913355
16399083, 18740837, 20294666, 14565184, 21517440, 17614134, 19854503
14245531, 16194160, 18325460, 15979965, 30562923, 20671094, 27870645
25093656, 18247991, 16912439, 24433711, 19930276, 22092979, 20506715
23003979, 20506706, 13871092, 19272701, 17397545, 16785708, 19461270
21051862, 13829543, 16220077, 17008068, 18061914, 20448824, 30275359
18674024, 19689979, 24411921, 30275351, 17596908, 17036973, 17612828
20725343, 28199085, 23194294, 17630484, 21051858, 20017509, 21051852
17767676, 17232014, 22893153, 12611721, 25555252, 18356166, 17071721
25764020, 16863422, 21051840, 17267114, 18043064, 21538558, 26243698
20324049, 16392068, 18744139, 24348685, 26746894, 27072923, 14010183
16595641, 17080436, 17332800, 20777150, 21453153, 20299015, 18413820
18264060, 16819962, 22465352, 21351877, 21051833, 18673342, 30562907
30562909, 29200700, 27441326, 16571443, 18328509, 27567477, 18674465
16422541, 18306996, 17443671, 19359219, 21424824, 17478514, 21067387
16268425, 17381384, 18723434, 17235750, 23328639, 22195448, 24570598
21172913, 17655240, 18384391, 16992075, 22195441, 17025461, 30562891
16472716, 19289642, 21502702, 22195457, 20475845, 22148226, 26030218
18331850, 17945983, 13498382, 24652769, 18673304, 17610798, 19891090
25369547, 18456514, 8322815, 22657942, 17313525, 17050888, 18317531
17495022, 11733603, 18798250, 19285025, 18260550, 17390160, 18316692

19458377, 14368995, 17551063, 21343838, 12905058, 14735792, 28612674
16855292, 23315889, 13364795, 18235390, 18293054, 18673325, 19393542
14657740, 17393683, 17389192, 17783588, 17852463, 19358317, 17441661
14034426, 28254374, 20631274, 19207117, 26569225, 17518652, 24662775
19475971, 18282562, 17348614, 19827973, 17346671, 24476274, 22296366
13853126, 18273830, 17570606, 13558557, 26007010, 16685417, 18180390
14692762, 17027426, 18159793, 24476265, 23177648, 17851160, 16870214
18202441, 17227073, 20657411, 19006849, 20506699, 22606521, 28000269
23536835, 17761775, 20382309, 16306373, 19680952, 16850630, 17694209
26667015, 17877323, 18230522, 24563422, 17446237, 17889549, 17551674
16233738, 22730454, 17571039, 26667023, 19972570, 18849970, 21532755
20860659, 22905130, 21168487, 17016369, 17231779, 21263635, 21343897
27710072, 18522509, 23209741, 17484731, 21972320, 19972569, 19972568
17716305, 21059919, 19972566, 19972564, 26667032, 17394950, 20657441
17551699, 17006570, 18051556, 12364061, 18029658, 17546973, 18262334
19699191, 17227277, 18018515, 16943711, 17982555, 20828947, 18098207
18436307, 19584068, 16898135, 13936038, 19601762, 14054676, 25505394
18228645, 19013183, 25042823, 17721717, 17239687, 25248384, 25634317
20134113, 20273319, 28501075, 21063322, 17344412, 22507210, 16354467
21795111, 25505371, 16777840, 25879984, 17811456, 19730508, 17385178
18166013, 17484762, 10136473, 6599380, 20717359, 20296213, 27097854
13955826, 18193833, 17545847, 16837842, 18964939, 19871910, 25505382
17811447, 18554763, 21132297, 25957038, 20004087, 17889583, 19544839
26631046, 22507234, 24719736, 18868646, 17042658, 20627866, 14106803
13951456, 18139690, 18277454, 13680635, 25823754, 18554871, 20169408
18515268, 24908321, 17274537, 17602269, 26575788, 19032867, 17762296
14829250, 16929165, 14602788, 28849751, 21794615, 18899974, 18441944
29944660, 17811789, 20074391, 14852021, 17705023, 13645875, 24316947
16668584, 17786278, 25947799, 20879889, 19578350, 28022101, 22594718
16384983, 26439748, 17957017, 19121551, 17570240, 19788842, 18382302
27086138, 21330264, 21197626, 14338435, 13944971, 21656630, 18886413
17156148, 17936109, 20509482, 27255377, 24717859, 18762750, 21526048
24560906, 18096714, 17238511, 26078387, 27053456, 20144308, 18244962
19433930, 20476175, 19297917, 21174504, 18280813, 28819280, 17614227
28357401, 17006183, 18092127, 19727057, 17695685, 26039623, 22820579
20856766, 15861775, 17258582, 21668627, 19487147, 20925795, 28100487
26482376, 19554106, 21629064, 18199537, 18091059, 17299889, 21538485
17546761, 25775213, 26336977, 18155762, 16956380, 19207156, 14705949
23105538, 26198926, 19258504, 16314254, 17246576, 17655634, 16989630
20067212, 19721304, 19490948, 25077278, 18203835, 18203838, 18973907
18203837, 29483672, 19615136, 17587063, 18000422, 18641451, 18090142
21641760, 17019086, 30559616, 19373893, 18373438, 18641461, 17346091
21422580, 22351572, 18604493, 23008056, 22901797, 18610915, 17892268
17501491, 20907061, 14354737, 17835048, 21787056, 22195485, 22782647

17082983, 18641419, 16618694, 14133975, 22195492, 18331812, 18093615
24385983, 25897615, 20513399, 21281607, 13866822, 18841764, 17600719
17842825, 20558005, 17088068, 9756271, 22195465, 18440047, 19211433
21515534, 20331945, 22686674, 18384537, 18607546, 17254374, 18315328
23115139, 28790634, 21394225, 16360112, 22195477, 17726838, 18510194
17571306, 17302277, 24766121, 21842740, 17551709, 26910644, 17634921
25489607, 16538760

Version 11.2.0.4.v22

Version 11.2.0.4.v22 includes the following:

- Patch [29913194](#): DATABASE PATCH SET UPDATE 11.2.0.4.191015
- Patch [30132974](#): OJVM PATCH SET UPDATE 11.2.0.4.191015
- Patch [29997937](#): DSTv34 for RDBMS (TZDATA2019G)
- Patch [29997959](#): DSTV34 OJVM (TZDATA2019B)
- Oracle GoldenGate - Oracle RDBMS Server Recommended Patches
- Patch [19440386](#): FAILED TO RAISE ORA-1 FOR PK UPDATE WHEN CONSTRAINT=IMMEDIATE
- Patch [19277336](#): INTEGRATED REPLICAT INVALIDATES DEPENDENT PACKAGES RESULTING IN AN ORA-4068
- Patch [24286409](#): MERGE REQUEST ON TOP OF DATABASE PSU 11.2.0.4.6 FOR BUGS 20647412 21534893
- Patch [24010393](#): MERGE REQUEST ON TOP OF DATABASE PSU 11.2.0.4.6 FOR BUGS 12897813 21281961
- Patch [19306797](#): HEARTBEAT REDO IS NOT GENERATED NON-RAC HOSTS WHEN SUPPLEMENTAL LOGGING ENABLED
- Patch [19563715](#): LOGMINER DOES NOT MAKE PROGRESS WHEN 4GB OR MORE MEMORY IS USED IN GOLDENGATE
- Patch [20425790](#): LOGMINER PATCHES SHOULD TRANSPARENTLY FUNCTION IN A NON-PARTITIONING ENABLED DB
- Patch [17031322](#): 46719: OCIXMLDBREWREXML RETURNED BIND VARIABLES ARE NOT WHITESPACE PRESERVING
- Patch [30303921](#): MERGE REQUEST ON TOP OF DATABASE PSU 11.2.0.4.190416 FOR BUGS 29879564 14312810

- Patch [30293609](#): MERGE REQUEST ON TOP OF DATABASE PSU 11.2.0.4.190416 FOR BUGS 29600521 23262847
- Patch [26744595](#): LGSB:APPLY ABORTS W/ ORA-26786 (ROW-EXISTS) COLLISION WITH HCC(PR)-NO HCC(SB)
- Patch [28730253](#): SUPPORT NEW ERA REIWA FOR JAPANESE IMPERIAL CALENDAR

Oracle patch 29913194, released October 2019

Bugs fixed:

17184721, 21174504, 20169408, 21538558, 16091637, 18092127, 17381384
15979965, 20671094, 16731148, 16314254, 18441944, 13837378, 17835048
17291347, 23105538, 28254374, 13558557, 21656630, 21842740, 17008068
18382302, 17201159, 17853498, 25427662, 21197626, 17246576, 20717359
18356166, 18681862, 18440047, 20569094, 20031873, 16875449, 20387265
19788842, 17296856, 21330264, 14010183, 17648596, 17025461, 18886413
17551063, 24719736, 17258582, 17267114, 21063322, 22507210, 17912217
17889583, 18202441, 17040764, 17478145, 16524926, 25655390, 19358317
22730454, 22148226, 18747196, 26544823, 18641419, 17036973, 18948177
17811789, 16542886, 14285317, 18009564, 17359610, 16618694, 8322815
16832076, 18247991, 16692232, 22507234, 28022101, 17570240, 13871092
24624166, 26631046, 24348685, 19429927, 17848897, 17441661, 14034426
17465741, 20273319, 19207156, 16596890, 17437634, 20506706, 18510194
21343897, 28849751, 18339044, 21453153, 17951233, 21795111, 22321741
18430495, 21787056, 22380919, 20506715, 19692824, 19469538, 17811429
17903598, 19721304, 11786053, 29511611, 18230522, 19554106, 19458377
21281607, 17612828, 6599380, 18029658, 22092979, 19516448, 17040527
22321756, 17811438, 18641461, 18682983, 14657740, 25635149, 21502702
13364795, 19490948, 21387964, 17346671, 17588480, 22351572, 18235390
26474853, 18849970, 17982832, 17889549, 19309466, 16472716, 23008056
20627866, 24908321, 20134113, 25775213, 20596234, 18331850, 18641451
17019356, 20882568, 17344412, 19461270, 21179898, 17546761, 24842886
17231779, 14521849, 18203835, 18203838, 18964939, 18203837, 17313525
22195457, 18139690, 16837842, 14106803, 22296366, 17842825, 22657942
21352646, 16360112, 22594718, 20657441, 22195441, 17389192, 26198926
14565184, 19781326, 17019345, 17205719, 18740837, 18440095, 14764829
14354737, 22195448, 17019086, 13944971, 16571443, 21868720, 17186905
17080436, 18673342, 28501075, 22905130, 17027426, 19972569, 27374796
19972568, 16833845, 19972566, 20144308, 17282229, 19972564, 16870214
16410570, 21629064, 19615136, 21354456, 26039623, 19871910, 17390431

18762750, 23007241, 25248384, 16613964, 18098207, 17957017, 17484762
18471685, 19730508, 18264060, 21538485, 17323222, 17754782, 17600719
18317531, 17852463, 17596908, 17655634, 18166013, 16228604, 20074391
27053456, 24790914, 19972570, 26482376, 20856766, 18090142, 19891090
18996843, 16042673, 19854503, 17835627, 22901797, 20334344, 17393683
20861693, 18000422, 17551709, 26575788, 23315889, 20506699, 19006849
18277454, 18456514, 17258090, 19174430, 20657411, 17174582, 25654936
17242746, 27097854, 16399083, 17824637, 21132297, 17762296, 22465352
22168163, 28612674, 18604692, 17397545, 16450169, 12364061, 20067212
19373893, 18856999, 19211724, 19463893, 19463897, 27351628, 21343775
17853456, 18373438, 18673304, 20004021, 28000269, 26030218, 21668627
16194160, 17477958, 23140259, 16538760, 12982566, 24570598, 20828947
27255377, 18259031, 20296213, 21425496, 28855981, 18293054, 17610798
19699191, 23065323, 17311728, 18135678, 18774543, 23294548, 16785708
10136473, 22551446, 19777862, 24560906, 17786518, 18315328, 25879984
18334586, 12747740, 22250006, 18096714, 19032867, 21641760, 17390160
18899974, 17232014, 20598042, 16354467, 26245237, 26679352, 17484731
18673325, 16422541, 18155762, 19827973, 14015842, 22683225, 17726838
18554871, 23177648, 18051556, 20803583, 18282562, 17922254, 15990359
21972320, 16855292, 16668584, 21343838, 20299015, 29483672, 17446237
18043064, 18093615, 17694209, 23713236, 17288409, 18308268, 20475845
17274537, 13955826, 16934803, 18841764, 17634921, 17501491, 16315398
23725036, 22683212, 17006183, 13829543, 18191164, 26746894, 22809871
17655240, 28819280, 19393542, 18384391, 29633753, 21538567, 17695685
16198143, 21847223, 28199085, 25823754, 17892268, 20142975, 19584068
17165204, 25165496, 27072923, 18604493, 18508861, 21756699, 18554763
16901385, 21532755, 18189036, 17443671, 17385178, 14829250, 17936109
20476175, 20925795, 20509482, 17478514, 27441326, 16850630, 13951456
16595641, 14054676, 15861775, 21142837, 16912439, 17299889, 17297939
23003979, 16833527, 18619917, 17798953, 17630484, 19697993, 17816865
25914276, 18607546, 17571306, 21286665, 16898135, 17341326, 16819962
26910644, 17851160, 17586955, 20558005, 19049453, 21051840, 17587063
16956380, 18328509, 25042823, 14735792, 25423453, 14133975, 29033139
19718981, 18061914, 18522509, 16233738, 17518652, 21051833, 18765602
20294666, 23194294, 20860659, 18272672, 20324049, 18199537, 17332800
13609098, 22502493, 18384537, 14338435, 17945983, 27710072, 16392068
21067387, 17752995, 21097043, 21051862, 16863422, 17237521, 25505382
29483723, 18244962, 19544839, 28357401, 19433930, 24433711, 24717859
17156148, 18973907, 23026585, 17449815, 17877323, 18180390, 17088068
17037130, 20004087, 21422580, 19466309, 11733603, 25505371, 18610915
21051858, 18084625, 29027694, 18674024, 26243698, 21051852, 18091059
18306996, 16306373, 25369547, 19930276, 17787259, 19915271, 18193833
20631274, 20513399, 16344544, 26439748, 25879656, 14692762, 18614015
22782647, 17346091, 18413820, 19297917, 18228645, 17721717, 13960236

18685892, 18436307, 11883252, 19888853, 21756677, 17891943, 19475971
22353199, 16384983, 19121551, 27825893, 25634317, 12816846, 17982555
17761775, 17227073, 13936038, 22243719, 17265217, 25505394, 17071721
16721594, 18262334, 21756661, 17891946, 15913355, 17672719, 17602269
17239687, 17042658, 25555252, 17238511, 21059919, 17811456, 17284817
17752121, 20879889, 28806384, 21380789, 19601762, 17394950, 17011832
28305362, 16579084, 22195465, 16875230, 14602788, 28790634, 18325460
27567477, 30275351, 26569225, 24476265, 24476274, 12611721, 18674465
16903536, 17006570, 19689979, 28076295, 16043574, 18783224, 22836801
14705949, 24662775, 16494615, 21526048, 17392698, 19197175, 16069901
17811447, 29200700, 27870645, 28876684, 17308789, 24835538, 22195477
17865671, 17343514, 19013183, 17325413, 18316692, 16180763, 30275359
17348614, 14368995, 21983325, 17393915, 16285691, 19788303, 19211433
20331945, 17883081, 17705023, 24316947, 17614227, 23571055, 19578350
22195485, 14084247, 24975421, 26078387, 23115139, 13645875, 23328639
16777840, 19727057, 21698350, 14852021, 18744139, 18674047, 17716305
19285025, 18482502, 17622427, 19289642, 27534509, 25947799, 22195492
14458214, 20869721, 21172913, 17767676, 18723434, 25505407, 17786278
19258504, 17082983, 17365043, 21351877, 13498382, 18331812, 16065166
25489607, 16685417, 21566639, 18031668, 22893153, 17551674, 16943711
19272701, 21517440, 25897615, 17649265, 13866822, 18094246, 24528741
17783588, 14245531, 17082359, 18280813, 26007010, 20448824, 23330119
16268425, 19487147, 25600421, 18018515, 17302277, 17215560, 24411921
19271443, 25764020, 14176370, 17016369, 20777150, 16756406, 23330124
22977256, 20441797, 19769489, 28100487, 17545847, 25093656, 18260550
13853126, 17227277, 17551699, 23536835, 30237239, 25957038, 24652769
20725343, 19207117, 9756271, 17495022, 18868646, 17614134, 26667023
17546973, 19680952, 18704244, 26667015, 17050888, 18273830, 18828868
17360606, 16992075, 24563422, 17375354, 12905058, 18362222, 21429602
17254374, 27086138, 28364007, 26667032, 17571039, 17468141, 18436647
17570606, 17235750, 21168487, 17279227, 16220077, 16929165

Version 11.2.0.4.v21

Version 11.2.0.4.v21 includes the following:

- Patch [29497421](#): DATABASE PATCH SET UPDATE 11.2.0.4.190716
- Patch [29610422](#): OJVM PATCH SET UPDATE 11.2.0.4.190716
- Patch [28852325](#): DSTv33 for RDBMS (TZDATA2018G)
- Patch [28852334](#): DSTv33 for OJVM (TZDATA2018G)

- Patch [30018733](#): Oracle GoldenGate - Oracle RDBMS Server Recommended Patches
- Patch [28730253](#): SUPPORT NEW ERA REIWA FOR JAPANESE IMPERIAL CALENDAR

Oracle patch 29497421, released July 2019

Bugs fixed:

17184721, 21174504, 20169408, 21538558, 16091637, 18092127, 17381384
15979965, 20671094, 16731148, 16314254, 18441944, 13837378, 17835048
23105538, 17291347, 28254374, 13558557, 21842740, 21656630, 17008068
18382302, 17201159, 25427662, 17853498, 21197626, 20717359, 17246576
18356166, 18681862, 18440047, 20569094, 20031873, 16875449, 20387265
19788842, 17296856, 21330264, 14010183, 17648596, 17025461, 18886413
17551063, 17258582, 24719736, 17267114, 21063322, 22507210, 17912217
17889583, 18202441, 17040764, 17478145, 16524926, 25655390, 19358317
22730454, 22148226, 18747196, 26544823, 18641419, 17036973, 18948177
17811789, 16542886, 14285317, 18009564, 17359610, 16618694, 8322815
16832076, 18247991, 16692232, 22507234, 28022101, 17570240, 13871092
24624166, 26631046, 24348685, 19429927, 17848897, 17441661, 14034426
17465741, 20273319, 19207156, 16596890, 17437634, 18510194, 21343897
20506706, 28849751, 18339044, 21453153, 17951233, 21795111, 22321741
18430495, 21787056, 22380919, 19692824, 19469538, 20506715, 17811429
17903598, 19721304, 11786053, 29511611, 18230522, 19554106, 19458377
21281607, 17612828, 6599380, 18029658, 22092979, 17040527, 22321756
17811438, 18641461, 18682983, 21502702, 14657740, 25635149, 13364795
19490948, 21387964, 17346671, 17588480, 22351572, 18235390, 18849970
26474853, 17889549, 19309466, 16472716, 23008056, 20627866, 24908321
20134113, 25775213, 20596234, 18331850, 18641451, 20882568, 17019356
17344412, 19461270, 21179898, 17546761, 24842886, 17231779, 14521849
18203835, 18203838, 18964939, 18203837, 17313525, 22195457, 18139690
16837842, 14106803, 22296366, 17842825, 22657942, 21352646, 16360112
22594718, 20657441, 22195441, 17389192, 26198926, 14565184, 17019345
19781326, 17205719, 18740837, 18440095, 14764829, 14354737, 22195448
17019086, 13944971, 16571443, 21868720, 17186905, 17080436, 18673342
28501075, 22905130, 17027426, 19972569, 27374796, 19972568, 16833845
19972566, 20144308, 17282229, 19972564, 16870214, 16410570, 21629064
19615136, 19871910, 21354456, 26039623, 17390431, 18762750, 23007241
25248384, 16613964, 18098207, 17957017, 17484762, 18471685, 19730508
18264060, 21538485, 17323222, 17754782, 17600719, 18317531, 17852463
17596908, 17655634, 18166013, 16228604, 20074391, 27053456, 24790914
19972570, 26482376, 20856766, 18090142, 19891090, 18996843, 16042673

19854503, 17835627, 22901797, 20334344, 17393683, 20861693, 18000422
17551709, 26575788, 23315889, 20506699, 19006849, 18277454, 18456514
17258090, 19174430, 20657411, 17174582, 25654936, 17242746, 27097854
16399083, 17824637, 21132297, 22465352, 17762296, 22168163, 28612674
18604692, 17397545, 16450169, 12364061, 20067212, 18856999, 19211724
19463893, 19463897, 27351628, 21343775, 17853456, 18373438, 18673304
20004021, 26030218, 28000269, 21668627, 16194160, 17477958, 23140259
16538760, 12982566, 24570598, 20828947, 27255377, 18259031, 20296213
28855981, 21425496, 18293054, 17610798, 19699191, 23065323, 17311728
18135678, 18774543, 23294548, 16785708, 10136473, 19777862, 22551446
24560906, 17786518, 18315328, 25879984, 18334586, 22250006, 12747740
18096714, 19032867, 21641760, 17390160, 18899974, 17232014, 20598042
26679352, 26245237, 16354467, 17484731, 18673325, 16422541, 18155762
19827973, 14015842, 22683225, 17726838, 18554871, 23177648, 18051556
20803583, 18282562, 17922254, 15990359, 21972320, 16855292, 16668584
21343838, 20299015, 17446237, 18043064, 18093615, 23713236, 17694209
17288409, 20475845, 18308268, 17274537, 13955826, 16934803, 17634921
17501491, 16315398, 23725036, 22683212, 17006183, 13829543, 18191164
26746894, 22809871, 17655240, 28819280, 18384391, 19393542, 21538567
17695685, 16198143, 21847223, 25823754, 17892268, 20142975, 19584068
17165204, 25165496, 18604493, 18508861, 21756699, 18554763, 16901385
21532755, 18189036, 17443671, 17385178, 14829250, 17936109, 20925795
20509482, 17478514, 27441326, 16850630, 13951456, 16595641, 14054676
15861775, 21142837, 16912439, 17299889, 17297939, 23003979, 16833527
18619917, 17798953, 19697993, 17816865, 25914276, 18607546, 17571306
21286665, 16898135, 17341326, 16819962, 26910644, 17851160, 17586955
20558005, 19049453, 21051840, 17587063, 16956380, 25042823, 14735792
18328509, 25423453, 14133975, 29033139, 19718981, 18061914, 16233738
18522509, 17518652, 21051833, 20294666, 18765602, 23194294, 20860659
18272672, 20324049, 18199537, 17332800, 13609098, 22502493, 18384537
14338435, 27710072, 17945983, 16392068, 21067387, 17752995, 21097043
21051862, 16863422, 17237521, 25505382, 18244962, 28357401, 19544839
19433930, 24433711, 24717859, 17156148, 18973907, 23026585, 17449815
17877323, 18180390, 17088068, 17037130, 20004087, 21422580, 19466309
11733603, 25505371, 18610915, 21051858, 18084625, 29027694, 18674024
26243698, 21051852, 18091059, 18306996, 25369547, 16306373, 19930276
17787259, 18193833, 19915271, 20513399, 20631274, 16344544, 26439748
25879656, 14692762, 18614015, 22782647, 17346091, 18413820, 19297917
18228645, 17721717, 13960236, 18685892, 18436307, 11883252, 19888853
21756677, 17891943, 19475971, 22353199, 16384983, 19121551, 27825893
25634317, 12816846, 17982555, 17761775, 13936038, 17227073, 22243719
17265217, 25505394, 17071721, 16721594, 18262334, 21756661, 17891946
15913355, 17672719, 17602269, 17239687, 17042658, 25555252, 17238511
21059919, 17811456, 17284817, 17752121, 20879889, 28806384, 19601762

21380789, 17394950, 28305362, 17011832, 16579084, 22195465, 16875230
14602788, 28790634, 18325460, 27567477, 26569225, 24476265, 24476274
12611721, 18674465, 16903536, 17006570, 19689979, 28076295, 16043574
18783224, 22836801, 24662775, 16494615, 21526048, 17392698, 19197175
16069901, 29200700, 17811447, 27870645, 28876684, 17308789, 24835538
22195477, 17865671, 17343514, 19013183, 17325413, 18316692, 16180763
17348614, 14368995, 21983325, 17393915, 16285691, 19211433, 20331945
17883081, 17705023, 24316947, 23571055, 17614227, 19578350, 22195485
14084247, 24975421, 26078387, 23115139, 13645875, 23328639, 16777840
21698350, 19727057, 14852021, 18744139, 18674047, 17716305, 19285025
18482502, 17622427, 19289642, 27534509, 25947799, 22195492, 14458214
20869721, 21172913, 17767676, 18723434, 25505407, 17786278, 19258504
17082983, 17365043, 21351877, 13498382, 18331812, 16065166, 25489607
16685417, 21566639, 18031668, 22893153, 17551674, 16943711, 19272701
21517440, 25897615, 17649265, 13866822, 18094246, 24528741, 17783588
14245531, 17082359, 18280813, 26007010, 20448824, 23330119, 16268425
19487147, 25600421, 18018515, 17302277, 17215560, 24411921, 19271443
25764020, 14176370, 17016369, 20777150, 16756406, 23330124, 22977256
20441797, 19769489, 28100487, 17545847, 25093656, 18260550, 13853126
17227277, 17551699, 23536835, 25957038, 24652769, 20725343, 19207117
9756271, 17495022, 18868646, 17614134, 26667023, 17546973, 19680952
18704244, 26667015, 17050888, 18273830, 18828868, 17360606, 16992075
24563422, 17375354, 12905058, 18362222, 21429602, 17254374, 27086138
26667032, 28364007, 17571039, 17468141, 18436647, 17570606, 17235750
21168487, 17279227, 16220077, 16929165

Version 11.2.0.4.v20

Version 11.2.0.4.v20 includes the following:

- Patch [29141056](#): DATABASE PATCH SET UPDATE 11.2.0.4.190416
- Patch [29251270](#): OJVM PATCH SET UPDATE 11.2.0.4.190416
- Patch [28852325](#): DSTv33 for RDBMS (TZDATA2018G)
- Patch [28852334](#): DSTv33 for OJVM (TZDATA2018G)
- Patch [29638593](#): Oracle GoldenGate - Oracle RDBMS Server Recommended Patches
- Patch [28730253](#): SUPPORT NEW ERA REIWA FOR JAPANESE IMPERIAL CALENDAR

Oracle patch 22768427, released April 2019

Bugs fixed:

17184721, 21174504, 21538558, 16091637, 18092127, 17381384, 15979965
20671094, 16731148, 16314254, 13837378, 18441944, 17291347, 23105538
17835048, 28254374, 13558557, 21656630, 21842740, 17008068, 18382302
17201159, 25427662, 17853498, 21197626, 20717359, 17246576, 18356166
18681862, 18440047, 20569094, 20031873, 16875449, 20387265, 19788842
17296856, 21330264, 14010183, 17648596, 18886413, 17025461, 17551063
24719736, 17267114, 21063322, 22507210, 17912217, 17889583, 18202441
17040764, 17478145, 16524926, 25655390, 19358317, 22730454, 22148226
18747196, 26544823, 18641419, 17036973, 18948177, 17811789, 16542886
14285317, 18009564, 17359610, 16618694, 8322815, 16832076, 18247991
16692232, 22507234, 17570240, 13871092, 24624166, 26631046, 19429927
24348685, 17848897, 17441661, 14034426, 17465741, 20273319, 19207156
16596890, 18510194, 17437634, 21343897, 20506706, 28849751, 18339044
21453153, 17951233, 21795111, 22321741, 18430495, 21787056, 22380919
19469538, 19692824, 20506715, 17811429, 17903598, 19721304, 11786053
18230522, 19554106, 19458377, 21281607, 17612828, 6599380, 22092979
17040527, 22321756, 17811438, 18641461, 18682983, 14657740, 25635149
13364795, 19490948, 21387964, 17346671, 17588480, 22351572, 18235390
18849970, 26474853, 17889549, 19309466, 20627866, 23008056, 16472716
24908321, 20134113, 25775213, 20596234, 18331850, 18641451, 20882568
17019356, 17344412, 19461270, 21179898, 17546761, 24842886, 17231779
14521849, 18203835, 18203838, 18964939, 18203837, 17313525, 22195457
18139690, 16837842, 14106803, 22296366, 17842825, 22657942, 21352646
16360112, 22594718, 20657441, 22195441, 17389192, 26198926, 14565184
19781326, 17019345, 17205719, 18740837, 18440095, 14764829, 14354737
22195448, 17019086, 13944971, 16571443, 21868720, 17186905, 17080436
18673342, 22905130, 17027426, 27374796, 19972569, 19972568, 20144308
19972566, 17282229, 19972564, 16870214, 16410570, 21629064, 19615136
21354456, 26039623, 17390431, 18762750, 23007241, 16613964, 17957017
18098207, 17484762, 18471685, 19730508, 18264060, 21538485, 17323222
17754782, 17600719, 18317531, 17852463, 17596908, 17655634, 18166013
16228604, 20074391, 27053456, 24790914, 19972570, 20856766, 18090142
19891090, 18996843, 16042673, 19854503, 17835627, 22901797, 20334344
17393683, 20861693, 18000422, 17551709, 26575788, 23315889, 20506699
19006849, 18277454, 18456514, 19174430, 17258090, 17174582, 25654936
17242746, 27097854, 16399083, 17824637, 21132297, 22465352, 17762296
22168163, 18604692, 17397545, 16450169, 12364061, 20067212, 18856999
19211724, 19463893, 27351628, 19463897, 21343775, 17853456, 18373438

18673304, 20004021, 28000269, 26030218, 21668627, 16194160, 17477958
23140259, 16538760, 12982566, 24570598, 20828947, 27255377, 18259031
20296213, 21425496, 28855981, 18293054, 17610798, 19699191, 23065323
17311728, 18135678, 18774543, 23294548, 16785708, 10136473, 24560906
19777862, 22551446, 17786518, 25879984, 18315328, 18334586, 12747740
18096714, 19032867, 21641760, 17390160, 18899974, 17232014, 20598042
26679352, 26245237, 16354467, 17484731, 18673325, 16422541, 18155762
19827973, 14015842, 22683225, 17726838, 18554871, 23177648, 18051556
20803583, 18282562, 21972320, 15990359, 17922254, 16855292, 16668584
21343838, 20299015, 17446237, 18043064, 18093615, 23713236, 17694209
17288409, 20475845, 18308268, 17274537, 13955826, 16934803, 17634921
17501491, 16315398, 23725036, 22683212, 17006183, 13829543, 18191164
26746894, 22809871, 17655240, 28819280, 18384391, 19393542, 21538567
16198143, 21847223, 25823754, 17892268, 20142975, 19584068, 17165204
25165496, 18604493, 21756699, 18508861, 18554763, 16901385, 21532755
18189036, 17443671, 17385178, 14829250, 17936109, 20925795, 20509482
17478514, 27441326, 16850630, 13951456, 16595641, 14054676, 15861775
21142837, 16912439, 17299889, 17297939, 23003979, 16833527, 18619917
17798953, 19697993, 17816865, 25914276, 18607546, 17571306, 21286665
16898135, 16819962, 17341326, 26910644, 17851160, 17586955, 20558005
19049453, 21051840, 17587063, 16956380, 18328509, 25423453, 14133975
29033139, 19718981, 18061914, 18522509, 17518652, 21051833, 20294666
18765602, 20860659, 18272672, 20324049, 18199537, 17332800, 13609098
22502493, 18384537, 14338435, 17945983, 16392068, 21067387, 17752995
21051862, 16863422, 17237521, 25505382, 18244962, 19544839, 24433711
24717859, 17156148, 18973907, 23026585, 17449815, 17877323, 18180390
17088068, 17037130, 20004087, 21422580, 19466309, 11733603, 25505371
18610915, 21051858, 18084625, 29027694, 18674024, 26243698, 21051852
18091059, 18306996, 25369547, 16306373, 17787259, 18193833, 19915271
20513399, 20631274, 26439748, 16344544, 25879656, 14692762, 18614015
22782647, 17346091, 18228645, 17721717, 13960236, 18685892, 18436307
11883252, 19888853, 21756677, 17891943, 19475971, 22353199, 16384983
19121551, 25634317, 27825893, 12816846, 17982555, 17761775, 17227073
22243719, 17265217, 25505394, 17071721, 16721594, 18262334, 21756661
17891946, 15913355, 17672719, 17602269, 17239687, 17042658, 25555252
17238511, 21059919, 17811456, 17284817, 17752121, 20879889, 28806384
21380789, 17394950, 17011832, 16579084, 22195465, 14602788, 28790634
18325460, 27567477, 26569225, 24476265, 24476274, 12611721, 18674465
16903536, 17006570, 19689979, 28076295, 16043574, 18783224, 24662775
16494615, 21526048, 17392698, 19197175, 16069901, 17811447, 27870645
28876684, 17308789, 24835538, 22195477, 17865671, 17343514, 19013183
17325413, 18316692, 16180763, 17348614, 14368995, 21983325, 17393915
16285691, 19211433, 20331945, 17883081, 17705023, 24316947, 17614227
19578350, 22195485, 14084247, 24975421, 26078387, 23115139, 13645875

16777840, 19727057, 14852021, 18744139, 18674047, 17716305, 19285025
18482502, 17622427, 19289642, 27534509, 25947799, 22195492, 14458214
20869721, 21172913, 17767676, 18723434, 25505407, 17786278, 19258504
17082983, 17365043, 21351877, 13498382, 18331812, 16065166, 25489607
16685417, 18031668, 22893153, 17551674, 16943711, 19272701, 21517440
25897615, 17649265, 13866822, 18094246, 24528741, 17783588, 14245531
17082359, 26007010, 18280813, 20448824, 23330119, 16268425, 19487147
25600421, 18018515, 17302277, 17215560, 24411921, 19271443, 25764020
14176370, 17016369, 20777150, 16756406, 23330124, 22977256, 20441797
19769489, 28100487, 17545847, 25093656, 18260550, 13853126, 17227277
17551699, 23536835, 25957038, 24652769, 20725343, 19207117, 9756271
18868646, 17614134, 26667023, 17546973, 19680952, 18704244, 26667015
17050888, 18273830, 18828868, 17360606, 16992075, 24563422, 17375354
12905058, 18362222, 21429602, 17254374, 26667032, 28364007, 27086138
17571039, 17468141, 18436647, 17570606, 17235750, 21168487, 17279227
16220077, 16929165

Version 11.2.0.4.v19

Version 11.2.0.4.v19 includes the following:

- Patch [28729262](#): Oracle Database Patch Set Update 11.2.0.4.190115
- Patch [28790660](#): Oracle JVM Patch Set Update 11.2.0.4.190115
- Patch [28125601](#): DSTv32 for RDBMS (TZDATA2018E)
- Patch [27015468](#): DSTv32 for OJVM (TZDATA2018E)
- Patch [27216420](#): Oracle GoldenGate - Oracle RDBMS Server Recommended Patches

Oracle patch 28729262, released January 2019

Bugs fixed:

17288409, 21051852, 24316947, 17811429, 17205719, 18607546, 25654936
17484762, 17816865, 20506699, 24835538, 25957038, 19692824, 23330119
17922254, 17754782, 13364795, 16934803, 17311728, 18604692, 20387265
26679352, 17284817, 17441661, 20671094, 24560906, 16992075, 25635149
17446237, 14015842, 19972569, 21756677, 17375354, 17449815, 20925795
21538558, 17019086, 19463897, 26575788, 13866822, 17235750, 17982555
17478514, 18317531, 14338435, 18235390, 19461270, 20803583, 13944971

19475971, 20142975, 17811789, 16929165, 18704244, 24662775, 20506706
17546973, 21422580, 17359610, 20334344, 14054676, 25489607, 17088068
17570606, 18264060, 17346091, 17343514, 21538567, 19680952, 18471685
19211724, 21132297, 23105538, 13951456, 25775213, 16315398, 21847223
18744139, 16850630, 23177648, 19049453, 18673304, 18090142, 17883081
19915271, 18641419, 18262334, 25600421, 17006183, 16065166, 18277454
18685892, 16833527, 10136473, 18051556, 17865671, 25879984, 18554871
17852463, 18774543, 17853498, 18334586, 19487147, 20879889, 17551709
17588480, 19827973, 17344412, 17842825, 18828868, 20509482, 17025461
13609098, 19429927, 26039623, 11883252, 17239687, 16410570, 23007241
17602269, 19197175, 22195457, 18316692, 17313525, 12611721, 21174504
19544839, 18964939, 20294666, 17600719, 26667015, 18191164, 17571306
19393542, 18482502, 20777150, 27086138, 19466309, 22243719, 17165204
17040527, 18098207, 16785708, 24790914, 19891090, 17465741, 16180763
17174582, 12982566, 16777840, 27097854, 19463893, 22195465, 16875449
22148226, 12816846, 17237521, 6599380, 19358317, 17811438, 25505394
17811447, 21983325, 17945983, 18762750, 16912439, 17184721, 18061914
20598042, 26631046, 21380789, 17282229, 18948177, 18331850, 21142837
18202441, 17082359, 18723434, 19554106, 21532755, 21972320, 25505371
20273319, 14034426, 18339044, 19458377, 17752995, 20448824, 17891943
17767676, 17258090, 16668584, 18384391, 21063322, 17040764, 17381384
15913355, 18356166, 14084247, 20596234, 21641760, 20506715, 13853126
21756661, 18203837, 18610915, 14245531, 16043574, 21756699, 22195441
17848897, 17877323, 26667032, 28790634, 19272701, 21453153, 20569094
17468141, 17786518, 20861693, 17912217, 17037130, 16956380, 18155762
17478145, 17394950, 18189036, 18641461, 17551674, 18619917, 17027426
17019356, 21352646, 16268425, 24476274, 22195492, 19584068, 26544823
18436307, 22507210, 17265217, 13498382, 17634921, 19469538, 21526048
19258504, 23003979, 16354467, 18043064, 19174430, 20004087, 17443671
22195485, 18000422, 22321756, 20004021, 17571039, 27053456, 25897615
16832076, 21067387, 22905130, 16344544, 21429602, 18009564, 14354737
18135678, 21286665, 18614015, 14521849, 20441797, 28876684, 18362222
25655390, 16472716, 17835048, 17050888, 17936109, 14010183, 17325413
18747196, 19207156, 17231779, 21842740, 17761775, 16721594, 17082983
20067212, 21179898, 17279227, 17302277, 18084625, 20717359, 24624166
15990359, 24842886, 26746894, 18203835, 23026585, 17297939, 17811456
16731148, 22380919, 21168487, 14133975, 17215560, 13829543, 18740837
17694209, 17385178, 18091059, 8322815, 18259031, 17586955, 19689979
25165496, 28254374, 17201159, 17655634, 18331812, 19730508, 17551699
17648596, 18868646, 16220077, 16069901, 17393915, 17348614, 17957017
17274537, 18096714, 17308789, 18436647, 14285317, 19289642, 14764829
17622427, 18328509, 23115139, 16943711, 22195477, 22502493, 14368995
17346671, 18996843, 17783588, 18604493, 21343838, 16618694, 17672719
18856999, 18783224, 17851160, 17546761, 22168163, 17798953, 18273830

22092979, 16596890, 19972566, 13871092, 20828947, 26667023, 17726838
16384983, 22296366, 17360606, 13645875, 22321741, 16542886, 18199537
25879656, 25634317, 21787056, 23140259, 17889549, 21172913, 14565184
26245237, 20475845, 27825893, 17071721, 21281607, 17610798, 18308268
20299015, 21343897, 22893153, 22594718, 28076295, 20657441, 17397545
18230522, 16360112, 19769489, 12905058, 18641451, 12747740, 18430495
25423453, 17016369, 17042658, 14602788, 17551063, 26243698, 19972568
21517440, 23725036, 19788842, 18508861, 14657740, 17332800, 13837378
17186905, 19972564, 17019345, 19699191, 18315328, 27441326, 17437634
24570598, 22353199, 18093615, 19006849, 28806384, 17392698, 19013183
17296856, 18674024, 26569225, 17232014, 16855292, 21051840, 14692762
17762296, 17705023, 23294548, 22351572, 22507234, 19121551, 20324049
21330264, 26198926, 19854503, 23315889, 26030218, 26910644, 21868720
19309466, 27567477, 25764020, 18681862, 17365043, 17390160, 18554763
20031873, 20558005, 24717859, 21795111, 18456514, 13955826, 16306373
18139690, 17501491, 17752121, 17299889, 21668627, 23713236, 24652769
17889583, 18673325, 22551446, 17242746, 18293054, 18674465, 19721304
19211433, 19888853, 25914276, 24563422, 17951233, 18094246, 17649265
19615136, 17011832, 17477958, 16870214, 18522509, 20631274, 16091637
17323222, 16595641, 16524926, 18228645, 17484731, 18282562, 17596908
18272672, 18031668, 17156148, 16494615, 22683225, 20869721, 17545847
25093656, 28819280, 18682983, 17655240, 24528741, 17614134, 13558557
25427662, 17341326, 22465352, 29033139, 17891946, 17716305, 22657942
27374796, 16392068, 18440095, 19271443, 21351877, 20513399, 18092127
17614227, 18440047, 18849970, 14106803, 16903536, 20725343, 18973907
18673342, 17389192, 25505382, 22809871, 19032867, 17612828, 17006570
16194160, 25369547, 25505407, 16685417, 17721717, 21354456, 17390431
17570240, 16863422, 13960236, 28100487, 18325460, 17008068, 19727057
28855981, 16422541, 17267114, 19972570, 18244962, 21538485, 18203838
18765602, 16198143, 17246576, 14829250, 28364007, 17835627, 20860659
21629064, 18247991, 14458214, 21051862, 17786278, 16692232, 17227277
24348685, 16042673, 24476265, 24975421, 22901797, 16314254, 19285025
16228604, 16756406, 14176370, 16837842, 20144308, 17393683, 23536835
25823754, 18899974, 17787259, 24719736, 20331945, 26078387, 20074391
19490948, 15861775, 16399083, 25947799, 25555252, 18018515, 22683212
18260550, 21051858, 17080436, 16613964, 17036973, 16579084, 24433711
18384537, 27870645, 18280813, 20296213, 16901385, 15979965, 17518652
23330124, 20856766, 18441944, 16450169, 9756271, 27534509, 22730454
19718981, 17291347, 17892268, 11733603, 16285691, 17587063, 21343775
18180390, 16538760, 26474853, 18193833, 21387964, 21051833, 17238511
19777862, 17824637, 23065323, 21656630, 19697993, 17903598, 16571443
18306996, 18166013, 19578350, 14852021, 18674047, 17853456, 12364061
24411921, 19207117, 22195448

Version 11.2.0.4.v18

Version 11.2.0.4.v18 includes the following:

- Patch [28204707](#): Oracle Database Patch Set Update 11.2.0.4.181016
- Patch [28440700](#): Oracle JVM Patch Set Update 11.2.0.4.181016
- Patch [28125601](#): DSTv32 for RDBMS (TZDATA2018E)
- Patch [27015468](#): DSTv32 for OJVM (TZDATA2018E)
- Patch [27216420](#): Oracle GoldenGate - Oracle RDBMS Server Recommended Patches
- Patches 27659043 and 19692824 are now included in the Database Patch Set Update

Oracle patch 28204707, released October 2018

Bugs fixed:

```
17288409, 21051852, 24316947, 17811429, 17205719, 18607546, 25654936
17484762, 17816865, 20506699, 24835538, 25957038, 19692824, 23330119
17922254, 17754782, 13364795, 16934803, 17311728, 18604692, 26679352
20387265, 17284817, 17441661, 20671094, 24560906, 25635149, 16992075
17446237, 14015842, 19972569, 21756677, 17375354, 21538558, 20925795
17449815, 17019086, 19463897, 26575788, 13866822, 17235750, 17982555
17478514, 18317531, 14338435, 18235390, 19461270, 20803583, 13944971
19475971, 20142975, 17811789, 16929165, 18704244, 24662775, 20506706
17359610, 17546973, 21422580, 20334344, 14054676, 25489607, 17570606
17088068, 17346091, 18264060, 17343514, 21538567, 19680952, 18471685
19211724, 21132297, 25775213, 13951456, 16315398, 21847223, 18744139
16850630, 23177648, 19049453, 18090142, 18673304, 17883081, 19915271
18641419, 18262334, 25600421, 17006183, 16065166, 18277454, 18685892
16833527, 10136473, 18051556, 17865671, 25879984, 18554871, 17852463
18774543, 17853498, 18334586, 19487147, 20879889, 17551709, 17588480
19827973, 17344412, 17842825, 18828868, 20509482, 17025461, 26039623
19429927, 13609098, 11883252, 16410570, 17239687, 23007241, 17602269
19197175, 22195457, 18316692, 17313525, 12611721, 21174504, 19544839
20294666, 18964939, 17600719, 26667015, 18191164, 17571306, 19393542
20777150, 18482502, 27086138, 19466309, 22243719, 17165204, 17040527
18098207, 24790914, 16785708, 19891090, 17465741, 16180763, 17174582
```

12982566, 16777840, 19463893, 22195465, 16875449, 22148226, 12816846
17237521, 6599380, 19358317, 17811438, 25505394, 17811447, 21983325
17945983, 18762750, 16912439, 17184721, 18061914, 20598042, 26631046
21380789, 17282229, 18948177, 18331850, 21142837, 18202441, 17082359
18723434, 21972320, 21532755, 19554106, 25505371, 20273319, 14034426
18339044, 19458377, 17752995, 20448824, 17891943, 17767676, 17258090
16668584, 18384391, 21063322, 17040764, 17381384, 15913355, 18356166
14084247, 20596234, 21641760, 20506715, 13853126, 21756661, 18610915
18203837, 14245531, 16043574, 21756699, 22195441, 17848897, 17877323
26667032, 21453153, 19272701, 20569094, 17468141, 17786518, 20861693
17912217, 17037130, 16956380, 18155762, 17478145, 17394950, 18641461
18189036, 17551674, 18619917, 17019356, 17027426, 21352646, 16268425
24476274, 22195492, 19584068, 26544823, 18436307, 22507210, 17265217
13498382, 17634921, 19469538, 21526048, 19258504, 23003979, 16354467
18043064, 19174430, 20004087, 17443671, 22195485, 18000422, 22321756
20004021, 17571039, 25897615, 27053456, 16832076, 21067387, 22905130
16344544, 21429602, 18009564, 14354737, 21286665, 18135678, 14521849
18614015, 20441797, 18362222, 25655390, 16472716, 17835048, 17050888
17936109, 14010183, 17325413, 18747196, 19207156, 17231779, 21842740
17761775, 16721594, 17082983, 20067212, 21179898, 17279227, 17302277
18084625, 20717359, 24624166, 15990359, 24842886, 26746894, 18203835
23026585, 17297939, 17811456, 16731148, 22380919, 21168487, 14133975
13829543, 17215560, 18740837, 17694209, 17385178, 18091059, 8322815
18259031, 28254374, 19689979, 25165496, 17586955, 17201159, 17655634
18331812, 17551699, 19730508, 17648596, 18868646, 16220077, 16069901
17393915, 17348614, 17957017, 17274537, 18096714, 17308789, 18436647
14285317, 19289642, 14764829, 17622427, 18328509, 23115139, 16943711
22195477, 22502493, 14368995, 17346671, 18996843, 17783588, 18604493
21343838, 16618694, 17672719, 18856999, 18783224, 17851160, 17546761
22168163, 17798953, 18273830, 22092979, 16596890, 19972566, 13871092
20828947, 26667023, 17726838, 16384983, 22296366, 17360606, 13645875
22321741, 25634317, 16542886, 18199537, 25879656, 21787056, 23140259
17889549, 21172913, 26245237, 14565184, 27825893, 20475845, 17071721
21281607, 17610798, 18308268, 20299015, 21343897, 22893153, 22594718
20657441, 17397545, 18230522, 16360112, 19769489, 12905058, 18641451
12747740, 18430495, 25423453, 17016369, 17042658, 14602788, 17551063
26243698, 19972568, 21517440, 23725036, 19788842, 18508861, 14657740
17332800, 13837378, 17186905, 19972564, 17019345, 19699191, 18315328
27441326, 17437634, 24570598, 22353199, 18093615, 19006849, 17392698
19013183, 17296856, 18674024, 26569225, 17232014, 16855292, 21051840
14692762, 17762296, 17705023, 23294548, 22351572, 22507234, 19121551
20324049, 21330264, 26198926, 19854503, 23315889, 26910644, 26030218
21868720, 19309466, 25764020, 18681862, 17365043, 17390160, 20031873
20558005, 18554763, 24717859, 21795111, 18456514, 13955826, 16306373

18139690, 17501491, 17752121, 17299889, 21668627, 23713236, 24652769
17889583, 18673325, 22551446, 18674465, 17242746, 19721304, 18293054
19211433, 19888853, 25914276, 24563422, 17951233, 18094246, 17649265
19615136, 17011832, 17477958, 16870214, 18522509, 20631274, 16091637
17323222, 16595641, 16524926, 17484731, 18228645, 18282562, 17596908
18272672, 18031668, 17156148, 16494615, 22683225, 20869721, 17545847
25093656, 18682983, 17655240, 24528741, 17614134, 25427662, 13558557
17341326, 22465352, 17891946, 17716305, 22657942, 27374796, 16392068
18440095, 19271443, 21351877, 20513399, 18092127, 17614227, 18440047
18849970, 16903536, 14106803, 20725343, 18973907, 18673342, 17389192
19032867, 25505382, 22809871, 17612828, 17006570, 16194160, 25369547
25505407, 16685417, 17721717, 21354456, 17390431, 17570240, 13960236
16863422, 28100487, 18325460, 17008068, 19727057, 16422541, 17267114
19972570, 18244962, 21538485, 18203838, 18765602, 16198143, 17246576
14829250, 28364007, 17835627, 20860659, 21629064, 18247991, 14458214
21051862, 17786278, 16692232, 17227277, 24348685, 24476265, 16042673
24975421, 22901797, 16314254, 19285025, 16228604, 16756406, 14176370
16837842, 20144308, 17393683, 23536835, 25823754, 18899974, 17787259
24719736, 20331945, 26078387, 19490948, 20074391, 15861775, 16399083
25555252, 25947799, 18018515, 22683212, 18260550, 21051858, 17080436
16613964, 17036973, 16579084, 24433711, 18384537, 27870645, 18280813
20296213, 16901385, 15979965, 17518652, 23330124, 20856766, 18441944
16450169, 9756271, 27534509, 22730454, 19718981, 17291347, 17892268
11733603, 16285691, 17587063, 21343775, 18180390, 26474853, 16538760
18193833, 21387964, 21051833, 17238511, 19777862, 17824637, 23065323
21656630, 17903598, 16571443, 18166013, 18306996, 19578350, 14852021
17853456, 18674047, 12364061, 24411921, 19207117, 22195448

Version 11.2.0.4.v17

Version 11.2.0.4.v17 includes the following:

- Patch [27734982](#): Oracle Database Patch Set Update 11.2.0.4.180717
- Patch [27923163](#): Oracle JVM Patch Set Update 11.2.0.4.180717
- Patch [28125601](#): DSTv32 for RDBMS (TZDATA2018E)
- Patch [27015468](#): DSTv32 for OJVM (TZDATA2018E)
- Patch [27216420](#): Oracle GoldenGate - Oracle RDBMS Server Recommended Patches
- Patch [27659043](#): MES Bundle 405
- Patch [19692824](#): DBCONTROL is not coming up on OEL 7

Oracle patch 27734982, released July 2018

Bugs fixed:

17288409, 21051852, 24316947, 17811429, 17205719, 18607546, 25654936
17816865, 20506699, 24835538, 25957038, 23330119, 17922254, 17754782
13364795, 16934803, 17311728, 20387265, 17284817, 17441661, 20671094
24560906, 16992075, 17446237, 14015842, 19972569, 21756677, 17375354
21538558, 20925795, 17449815, 19463897, 26575788, 13866822, 17235750
17982555, 17478514, 18317531, 14338435, 18235390, 19461270, 20803583
13944971, 19475971, 20142975, 17811789, 16929165, 18704244, 24662775
20506706, 17546973, 21422580, 20334344, 14054676, 25489607, 17088068
17346091, 18264060, 17343514, 21538567, 19680952, 18471685, 19211724
21132297, 13951456, 16315398, 21847223, 18744139, 16850630, 23177648
19049453, 18090142, 18673304, 17883081, 19915271, 18641419, 18262334
25600421, 17006183, 16065166, 18277454, 16833527, 10136473, 18051556
17865671, 18554871, 17852463, 18774543, 17853498, 18334586, 19487147
20879889, 17551709, 17588480, 19827973, 17344412, 17842825, 18828868
20509482, 17025461, 13609098, 11883252, 17239687, 23007241, 17602269
19197175, 22195457, 18316692, 17313525, 12611721, 21174504, 19544839
20294666, 18964939, 17600719, 26667015, 18191164, 17571306, 19393542
20777150, 18482502, 27086138, 19466309, 22243719, 17165204, 17040527
18098207, 16785708, 17465741, 16180763, 17174582, 12982566, 16777840
19463893, 22195465, 16875449, 22148226, 12816846, 17237521, 6599380
19358317, 17811438, 25505394, 17811447, 21983325, 17945983, 18762750
16912439, 17184721, 18061914, 20598042, 21380789, 17282229, 18948177
18331850, 21142837, 18202441, 17082359, 18723434, 21972320, 21532755
19554106, 25505371, 14034426, 18339044, 19458377, 17752995, 20448824
17891943, 17767676, 17258090, 16668584, 18384391, 17040764, 17381384
15913355, 18356166, 14084247, 20596234, 21641760, 20506715, 13853126
21756661, 18203837, 14245531, 16043574, 21756699, 22195441, 17848897
17877323, 21453153, 19272701, 20569094, 17468141, 17786518, 20861693
17912217, 17037130, 16956380, 18155762, 17478145, 17394950, 18641461
18189036, 18619917, 17027426, 21352646, 16268425, 24476274, 22195492
19584068, 26544823, 18436307, 22507210, 17265217, 13498382, 17634921
19469538, 21526048, 19258504, 23003979, 18043064, 19174430, 20004087
17443671, 22195485, 18000422, 20004021, 22321756, 17571039, 27053456
25897615, 21067387, 16832076, 22905130, 16344544, 21429602, 18009564
14354737, 21286665, 18135678, 14521849, 18614015, 20441797, 18362222
25655390, 16472716, 17835048, 17050888, 17936109, 14010183, 17325413
18747196, 17761775, 16721594, 17082983, 20067212, 21179898, 17302277
18084625, 20717359, 24624166, 15990359, 24842886, 26746894, 18203835

23026585, 17297939, 17811456, 16731148, 22380919, 21168487, 14133975
13829543, 17215560, 17694209, 17385178, 18091059, 8322815, 18259031
19689979, 25165496, 17586955, 17201159, 17655634, 18331812, 19730508
17648596, 18868646, 16220077, 16069901, 17393915, 17348614, 17957017
17274537, 18096714, 17308789, 18436647, 14285317, 19289642, 14764829
17622427, 18328509, 16943711, 22195477, 22502493, 14368995, 17346671
18996843, 17783588, 18604493, 21343838, 16618694, 17672719, 18856999
18783224, 17851160, 17546761, 22168163, 17798953, 18273830, 22092979
16596890, 19972566, 20828947, 13871092, 26667023, 17726838, 16384983
22296366, 17360606, 13645875, 22321741, 16542886, 18199537, 25879656
21787056, 17889549, 21172913, 14565184, 27825893, 20475845, 17071721
21281607, 18308268, 17610798, 20299015, 21343897, 22893153, 20657441
17397545, 18230522, 16360112, 19769489, 12905058, 18641451, 12747740
18430495, 25423453, 17016369, 17042658, 14602788, 17551063, 19972568
21517440, 23725036, 19788842, 18508861, 14657740, 17332800, 13837378
17186905, 19972564, 19699191, 18315328, 27441326, 17437634, 24570598
22353199, 18093615, 19006849, 17392698, 19013183, 17296856, 18674024
26569225, 17232014, 16855292, 21051840, 14692762, 17762296, 17705023
23294548, 22351572, 22507234, 19121551, 20324049, 21330264, 26198926
19854503, 23315889, 26910644, 26030218, 21868720, 19309466, 25764020
18681862, 17365043, 17390160, 20031873, 20558005, 18554763, 24717859
21795111, 18456514, 16306373, 13955826, 18139690, 17501491, 17752121
17299889, 21668627, 23713236, 24652769, 17889583, 18673325, 22551446
17242746, 19721304, 18293054, 19211433, 19888853, 24563422, 17951233
18094246, 17649265, 19615136, 17011832, 17477958, 16870214, 18522509
20631274, 16091637, 17323222, 16595641, 16524926, 18228645, 18282562
17596908, 18031668, 17156148, 16494615, 22683225, 20869721, 17545847
25093656, 17655240, 24528741, 17614134, 25427662, 13558557, 17341326
22465352, 17891946, 17716305, 22657942, 27374796, 16392068, 18440095
19271443, 21351877, 20513399, 18092127, 17614227, 18440047, 18849970
16903536, 14106803, 18973907, 18673342, 17389192, 19032867, 25505382
22809871, 17612828, 17006570, 16194160, 25369547, 25505407, 16685417
17721717, 21354456, 17390431, 17570240, 16863422, 28100487, 18325460
17008068, 19727057, 16422541, 17267114, 19972570, 18244962, 21538485
18203838, 18765602, 16198143, 17246576, 14829250, 17835627, 20860659
21629064, 18247991, 14458214, 21051862, 17786278, 16692232, 24348685
17227277, 24476265, 16042673, 16314254, 19285025, 16228604, 16756406
16837842, 20144308, 17393683, 23536835, 25823754, 18899974, 17787259
24719736, 20331945, 19490948, 20074391, 15861775, 16399083, 25947799
18018515, 22683212, 18260550, 21051858, 17080436, 16613964, 17036973
16579084, 24433711, 18384537, 27870645, 18280813, 20296213, 16901385
15979965, 23330124, 18441944, 16450169, 27534509, 9756271, 17892268
11733603, 16285691, 17587063, 21343775, 18180390, 26474853, 16538760
18193833, 21387964, 21051833, 17238511, 19777862, 17824637, 23065323

17903598, 16571443, 18306996, 19578350, 14852021, 17853456, 18674047
12364061, 24411921, 19207117, 22195448

Version 11.2.0.4.v16

Version 11.2.0.4.v16 includes the following:

- Patch [27338049](#): DATABASE PATCH SET UPDATE 11.2.0.4.180417
- Patch [27475598](#): OJVM PATCH SET UPDATE 11.2.0.4.180417
- Patch [27015449](#): RDBMS - PROACTIVE DSTV31 UPDATE - TZDATA2017C
- Patch [27015468](#): PROACTIVE DSTV31 UPDATE - TZDATA2017C - NEED OJVM FIX
- Patch [27216420](#): Oracle GoldenGate - Oracle RDBMS Server Recommended Patches
- Patch [27659043](#): MES 405 BUNDLE ON TOP OF RDBMS 11.2.0.4.180116 PSU
- Patch [19692824](#): DBCONTROL is not coming up on OEL 7
- Support for the DBMS_ADVANCED_REWRITE package
- Fixed a bug where DBA_LOCKS and associated views available in new DB instances of 11.2.0.4.v15 were not created in upgrades to 11.2.0.4.v15. Views are now created in new and upgraded DB instances of 11.2.0.4.v16 and later.

Oracle patch 27338049, released April 2018

Bugs fixed:

21174504, 17184721, 21538558, 16091637, 18092127, 17381384, 15979965
20671094, 16731148, 16314254, 13837378, 18441944, 17835048, 13558557
17008068, 17201159, 25427662, 17853498, 20717359, 17246576, 18356166
18681862, 18440047, 20569094, 20031873, 16875449, 20387265, 19788842
17296856, 21330264, 14010183, 17648596, 17551063, 17025461, 24719736
17267114, 22507210, 17912217, 17889583, 18202441, 17040764, 17478145
16524926, 25655390, 19358317, 22148226, 18747196, 26544823, 18641419
17036973, 18948177, 17811789, 16542886, 14285317, 18009564, 16618694
8322815, 16832076, 18247991, 16692232, 22507234, 17570240, 13871092
24624166, 17848897, 17441661, 14034426, 17465741, 16596890, 17437634
21343897, 20506706, 21453153, 18339044, 22321741, 21795111, 17951233
18430495, 21787056, 22380919, 19469538, 20506715, 17811429, 19721304
17903598, 18230522, 19554106, 19458377, 21281607, 17612828, 6599380

22092979, 22321756, 17040527, 17811438, 18641461, 14657740, 13364795
21387964, 19490948, 22351572, 17346671, 17588480, 18235390, 26474853
18849970, 17889549, 19309466, 16472716, 20596234, 18331850, 18641451
17344412, 21179898, 19461270, 17546761, 24842886, 14521849, 18203835
18203838, 18964939, 18203837, 17313525, 22195457, 18139690, 16837842
22296366, 14106803, 17842825, 21352646, 22657942, 16360112, 20657441
22195441, 17389192, 26198926, 14565184, 17205719, 18440095, 14764829
22195448, 14354737, 13944971, 16571443, 21868720, 17186905, 17080436
18673342, 22905130, 17027426, 27374796, 19972569, 19972568, 20144308
19972566, 17282229, 19972564, 16870214, 21629064, 19615136, 21354456
17390431, 18762750, 23007241, 16613964, 17957017, 18098207, 18471685
19730508, 21538485, 18264060, 17323222, 17754782, 17600719, 18317531
17852463, 17596908, 17655634, 16228604, 27053456, 20074391, 19972570
18090142, 18996843, 19854503, 16042673, 17835627, 20334344, 17393683
20861693, 18000422, 17551709, 26575788, 23315889, 20506699, 19006849
18277454, 18456514, 19174430, 17258090, 17174582, 25654936, 17242746
16399083, 17824637, 21132297, 22465352, 17762296, 22168163, 17397545
16450169, 12364061, 20067212, 18856999, 19211724, 19463893, 19463897
21343775, 17853456, 18673304, 20004021, 26030218, 21668627, 16194160
17477958, 16538760, 12982566, 24570598, 20828947, 18259031, 20296213
18293054, 17610798, 19699191, 23065323, 17311728, 18135678, 18774543
23294548, 16785708, 10136473, 24560906, 22551446, 19777862, 17786518
18315328, 18334586, 12747740, 18096714, 19032867, 21641760, 18899974
17390160, 17232014, 20598042, 18673325, 16422541, 18155762, 14015842
19827973, 22683225, 17726838, 18554871, 23177648, 18051556, 20803583
21972320, 15990359, 17922254, 18282562, 16855292, 16668584, 21343838
20299015, 17446237, 18093615, 18043064, 23713236, 17694209, 17288409
20475845, 17274537, 13955826, 16934803, 17634921, 17501491, 16315398
22683212, 17006183, 13829543, 18191164, 17655240, 26746894, 22809871
18384391, 19393542, 21538567, 16198143, 21847223, 25823754, 17892268
20142975, 19584068, 17165204, 25165496, 18604493, 21756699, 18508861
16901385, 18554763, 21532755, 18189036, 17443671, 17385178, 14829250
17936109, 20925795, 20509482, 17478514, 27441326, 16850630, 13951456
16595641, 14054676, 15861775, 21142837, 16912439, 17299889, 17297939
23003979, 18619917, 16833527, 17798953, 17816865, 18607546, 17571306
21286665, 17341326, 26910644, 17851160, 20558005, 17586955, 19049453
21051840, 17587063, 16956380, 18328509, 25423453, 14133975, 18061914
18522509, 21051833, 18765602, 20860659, 20324049, 18199537, 17332800
13609098, 22502493, 18384537, 14338435, 17945983, 16392068, 21067387
17752995, 21051862, 16863422, 25505382, 17237521, 18244962, 19544839
24433711, 24717859, 17156148, 18973907, 23026585, 17877323, 17449815
18180390, 17088068, 17037130, 20004087, 21422580, 19466309, 11733603
25505371, 21051858, 18084625, 18674024, 21051852, 18091059, 25369547
16306373, 18306996, 18193833, 19915271, 17787259, 20513399, 20631274

25879656, 16344544, 14692762, 18614015, 17346091, 18228645, 17721717
18436307, 21756677, 19888853, 11883252, 17891943, 19475971, 22353199
16384983, 19121551, 12816846, 17982555, 17761775, 22243719, 17265217
25505394, 17071721, 16721594, 21756661, 18262334, 17891946, 15913355
17672719, 17602269, 17239687, 17042658, 17238511, 17811456, 17284817
17752121, 20879889, 21380789, 17394950, 17011832, 16579084, 22195465
14602788, 18325460, 24476265, 26569225, 24476274, 12611721, 16903536
17006570, 19689979, 16043574, 18783224, 24662775, 16494615, 21526048
17392698, 19197175, 16069901, 17811447, 17308789, 22195477, 24835538
17865671, 17343514, 19013183, 17325413, 18316692, 16180763, 17348614
14368995, 21983325, 17393915, 16285691, 19211433, 20331945, 17883081
17705023, 24316947, 17614227, 19578350, 22195485, 14084247, 13645875
16777840, 19727057, 14852021, 18744139, 18674047, 17716305, 19285025
18482502, 17622427, 19289642, 22195492, 25947799, 14458214, 20869721
21172913, 17767676, 18723434, 25505407, 17786278, 19258504, 17082983
21351877, 17365043, 13498382, 18331812, 16065166, 25489607, 16685417
18031668, 22893153, 16943711, 19272701, 21517440, 25897615, 17649265
13866822, 18094246, 24528741, 17783588, 14245531, 17082359, 18280813
20448824, 23330119, 16268425, 19487147, 25600421, 18018515, 17302277
17215560, 24411921, 19271443, 25764020, 17016369, 20777150, 23330124
16756406, 20441797, 19769489, 17545847, 25093656, 18260550, 13853126
17227277, 23536835, 25957038, 24652769, 19207117, 9756271, 18868646
17614134, 26667023, 17546973, 18704244, 19680952, 26667015, 17050888
18828868, 18273830, 17360606, 24563422, 16992075, 17375354, 12905058
18362222, 21429602, 27086138, 17571039, 17468141, 18436647, 17235750
21168487, 16220077, 16929165

Version 11.2.0.4.v15

Version 11.2.0.4.v15 includes the following:

- Patch [26925576](#): DATABASE PATCH SET UPDATE 11.2.0.4.180116
- Patch [26925532](#): OJVM PATCH SET UPDATE 11.2.0.4.180116
- Patch [27015449](#): RDBMS - PROACTIVE DSTV31 UPDATE - TZDATA2017C
- Patch [27015468](#): PROACTIVE DSTV31 UPDATE - TZDATA2017C - NEED OJVM FIX
- Patch [27216420](#): Oracle GoldenGate - Oracle RDBMS Server Recommended Patches
- Patch [27244661](#): MES 405 BUNDLE ON TOP OF RDBMS 11.2.0.4.180116 PSU
- Patch [19692824](#): DBCONTROL is not coming up on OEL 7
- Support for DBA_LOCKS and associated views

Oracle patch 26925576, released January 2018

Bugs fixed:

17288409, 21051852, 24316947, 17811429, 17205719, 18607546, 25654936
17816865, 20506699, 24835538, 25957038, 23330119, 17922254, 17754782
13364795, 16934803, 17311728, 20387265, 17284817, 17441661, 20671094
24560906, 16992075, 17446237, 14015842, 19972569, 21756677, 17375354
21538558, 20925795, 17449815, 26575788, 19463897, 13866822, 17235750
17982555, 17478514, 18317531, 14338435, 18235390, 20803583, 19461270
19475971, 13944971, 20142975, 17811789, 16929165, 18704244, 24662775
20506706, 21422580, 17546973, 20334344, 14054676, 25489607, 17088068
17346091, 18264060, 17343514, 21538567, 19680952, 18471685, 19211724
21132297, 13951456, 16315398, 21847223, 18744139, 16850630, 23177648
19049453, 18090142, 18673304, 17883081, 19915271, 18641419, 18262334
25600421, 17006183, 16065166, 18277454, 16833527, 10136473, 18051556
17865671, 18554871, 17852463, 17853498, 18334586, 20879889, 17551709
17588480, 19827973, 17344412, 17842825, 18828868, 20509482, 17025461
13609098, 11883252, 17239687, 23007241, 17602269, 19197175, 18316692
22195457, 17313525, 12611721, 21174504, 19544839, 18964939, 17600719
26667015, 18191164, 17571306, 19393542, 20777150, 18482502, 19466309
22243719, 17165204, 17040527, 18098207, 16785708, 17465741, 16180763
17174582, 12982566, 16777840, 19463893, 22195465, 16875449, 22148226
12816846, 17237521, 6599380, 19358317, 17811438, 25505394, 17811447
21983325, 17945983, 18762750, 16912439, 17184721, 20598042, 18061914
21380789, 17282229, 18948177, 18331850, 21142837, 18202441, 17082359
18723434, 21972320, 21532755, 19554106, 25505371, 14034426, 18339044
19458377, 17752995, 20448824, 17891943, 17767676, 17258090, 16668584
18384391, 17040764, 17381384, 15913355, 18356166, 14084247, 20596234
21641760, 20506715, 13853126, 21756661, 18203837, 14245531, 16043574
21756699, 22195441, 17848897, 17877323, 21453153, 19272701, 20569094
17468141, 17786518, 20861693, 17912217, 17037130, 16956380, 18155762
17478145, 17394950, 18641461, 18189036, 18619917, 17027426, 21352646
16268425, 24476274, 22195492, 19584068, 26544823, 18436307, 22507210
17265217, 13498382, 17634921, 19469538, 21526048, 19258504, 23003979
19174430, 18043064, 20004087, 17443671, 22195485, 18000422, 20004021
22321756, 17571039, 25897615, 27053456, 21067387, 16832076, 22905130
16344544, 21429602, 18009564, 14354737, 21286665, 18135678, 14521849
18614015, 20441797, 18362222, 25655390, 16472716, 17835048, 17050888
17936109, 14010183, 17325413, 18747196, 17761775, 16721594, 17082983
20067212, 21179898, 17302277, 18084625, 20717359, 24624166, 15990359
26746894, 24842886, 18203835, 23026585, 17297939, 17811456, 16731148

22380919, 21168487, 14133975, 13829543, 17215560, 17694209, 17385178
18091059, 8322815, 18259031, 25165496, 19689979, 17586955, 17201159
17655634, 18331812, 19730508, 18868646, 17648596, 16220077, 16069901
17393915, 17348614, 17957017, 17274537, 18096714, 17308789, 18436647
14285317, 19289642, 14764829, 17622427, 18328509, 16943711, 22195477
22502493, 14368995, 17346671, 18996843, 17783588, 21343838, 16618694
17672719, 18856999, 18783224, 17851160, 17546761, 22168163, 17798953
18273830, 22092979, 16596890, 19972566, 20828947, 13871092, 26667023
17726838, 16384983, 22296366, 17360606, 13645875, 22321741, 16542886
25879656, 18199537, 21787056, 17889549, 21172913, 14565184, 20475845
17071721, 21281607, 17610798, 20299015, 21343897, 22893153, 20657441
17397545, 18230522, 16360112, 19769489, 12905058, 18641451, 12747740
18430495, 25423453, 17016369, 17042658, 14602788, 17551063, 19972568
21517440, 19788842, 18508861, 14657740, 17332800, 13837378, 17186905
19972564, 19699191, 18315328, 17437634, 24570598, 22353199, 18093615
19006849, 19013183, 17296856, 18674024, 26569225, 17232014, 16855292
21051840, 14692762, 17762296, 17705023, 23294548, 22507234, 19121551
20324049, 21330264, 26198926, 19854503, 23315889, 26910644, 26030218
21868720, 19309466, 25764020, 18681862, 17365043, 20031873, 20558005
18554763, 17390160, 24717859, 21795111, 18456514, 16306373, 13955826
18139690, 17501491, 17752121, 21668627, 17299889, 23713236, 24652769
17889583, 18673325, 22551446, 19721304, 18293054, 17242746, 19211433
19888853, 17951233, 18094246, 17649265, 19615136, 17011832, 17477958
16870214, 18522509, 20631274, 16091637, 17323222, 16595641, 16524926
18228645, 18282562, 17596908, 18031668, 17156148, 16494615, 22683225
20869721, 17545847, 25093656, 17655240, 24528741, 17614134, 25427662
13558557, 22465352, 17341326, 17891946, 17716305, 22657942, 16392068
18440095, 19271443, 21351877, 20513399, 18092127, 17614227, 18440047
18849970, 16903536, 14106803, 18973907, 18673342, 22809871, 17389192
19032867, 25505382, 17612828, 17006570, 16194160, 25369547, 16685417
25505407, 17721717, 21354456, 17390431, 17570240, 16863422, 18325460
17008068, 19727057, 16422541, 19972570, 17267114, 18244962, 21538485
18203838, 18765602, 16198143, 17246576, 14829250, 17835627, 20860659
21629064, 18247991, 14458214, 21051862, 17786278, 16692232, 17227277
24476265, 16042673, 16314254, 19285025, 16228604, 16756406, 16837842
20144308, 17393683, 23536835, 25823754, 18899974, 17787259, 24719736
20331945, 19490948, 20074391, 15861775, 16399083, 25947799, 18018515
22683212, 21051858, 18260550, 17080436, 16613964, 17036973, 16579084
24433711, 18384537, 18280813, 20296213, 16901385, 15979965, 23330124
18441944, 16450169, 9756271, 17892268, 11733603, 16285691, 17587063
21343775, 18180390, 26474853, 16538760, 18193833, 21387964, 21051833
17238511, 19777862, 23065323, 17824637, 16571443, 17903598, 18306996
19578350, 14852021, 17853456, 18674047, 12364061, 19207117, 24411921, 22195448

Version 11.2.0.4.v14

Version 11.2.0.4.v14 includes the following:

- Oracle October 2017 PSU, a combination of database PSU (patch 26392168) + OJVM component PSU (patch 26635834)
- Oracle recommended RDBMS patches for Oracle GoldenGate (patch 26950781)
- RSA Micro-Edition Suite Bundle (patch 26963526)
- Timezone file DSTv30 (patch 25881255, OJVM patch 25881271)

Oracle patch 26392168, released October 2017

Bugs fixed:

17288409, 21051852, 24316947, 17811429, 17205719, 18607546, 25654936
20506699, 17816865, 25957038, 23330119, 17922254, 17754782, 13364795
16934803, 17311728, 20387265, 17284817, 17441661, 24560906, 16992075
17446237, 14015842, 19972569, 21756677, 17375354, 21538558, 20925795
17449815, 26575788, 19463897, 13866822, 17235750, 17982555, 17478514
18317531, 14338435, 18235390, 20803583, 19461270, 13944971, 20142975
17811789, 16929165, 18704244, 24662775, 20506706, 17546973, 20334344
25489607, 14054676, 17088068, 17346091, 18264060, 17343514, 21538567
19680952, 18471685, 19211724, 21132297, 13951456, 21847223, 16315398
18744139, 16850630, 23177648, 19049453, 18673304, 17883081, 19915271
18641419, 18262334, 25600421, 17006183, 16065166, 18277454, 16833527
10136473, 18051556, 17865671, 17852463, 18554871, 17853498, 18334586
20879889, 17551709, 17588480, 19827973, 17344412, 17842825, 18828868
20509482, 17025461, 11883252, 13609098, 17239687, 17602269, 19197175
18316692, 22195457, 17313525, 12611721, 19544839, 18964939, 26667015
17600719, 18191164, 19393542, 17571306, 20777150, 18482502, 19466309
22243719, 17040527, 17165204, 18098207, 16785708, 17465741, 16180763
17174582, 12982566, 16777840, 19463893, 22195465, 16875449, 22148226
12816846, 17237521, 6599380, 19358317, 17811438, 25505394, 17811447
17945983, 21983325, 18762750, 16912439, 17184721, 18061914, 17282229
18331850, 18202441, 17082359, 18723434, 21532755, 21972320, 19554106
25505371, 14034426, 18339044, 19458377, 17752995, 20448824, 17891943
17258090, 17767676, 16668584, 18384391, 17040764, 17381384, 15913355

18356166, 14084247, 20596234, 20506715, 21756661, 13853126, 18203837
14245531, 16043574, 21756699, 22195441, 17848897, 17877323, 19272701
21453153, 20569094, 17468141, 20861693, 17786518, 17912217, 17037130
16956380, 18155762, 17478145, 17394950, 18641461, 18189036, 18619917
17027426, 21352646, 16268425, 24476274, 22195492, 19584068, 26544823
18436307, 22507210, 17265217, 17634921, 13498382, 19469538, 21526048
19258504, 18043064, 20004087, 17443671, 22195485, 18000422, 20004021
22321756, 17571039, 21067387, 16832076, 22905130, 16344544, 21429602
18009564, 14354737, 21286665, 18135678, 14521849, 18614015, 20441797
18362222, 25655390, 16472716, 17835048, 17050888, 17936109, 14010183
17325413, 18747196, 17761775, 16721594, 17082983, 20067212, 21179898
17302277, 18084625, 24624166, 15990359, 26746894, 24842886, 23026585
18203835, 17297939, 17811456, 16731148, 22380919, 21168487, 14133975
13829543, 17215560, 17694209, 17385178, 18091059, 8322815, 18259031
19689979, 17586955, 17201159, 17655634, 18331812, 19730508, 18868646
17648596, 16220077, 16069901, 17348614, 17393915, 17957017, 17274537
18096714, 17308789, 18436647, 14285317, 19289642, 14764829, 17622427
18328509, 16943711, 22195477, 14368995, 22502493, 17346671, 18996843
17783588, 21343838, 16618694, 17672719, 18856999, 18783224, 17851160
17546761, 22168163, 17798953, 18273830, 22092979, 16596890, 19972566
20828947, 13871092, 26667023, 17726838, 16384983, 22296366, 17360606
22321741, 13645875, 25879656, 18199537, 16542886, 21787056, 17889549
14565184, 20475845, 21281607, 17071721, 17610798, 20299015, 21343897
22893153, 20657441, 17397545, 18230522, 16360112, 19769489, 12905058
18641451, 12747740, 18430495, 25423453, 17016369, 17042658, 14602788
17551063, 19972568, 21517440, 19788842, 18508861, 14657740, 17332800
13837378, 17186905, 19972564, 19699191, 18315328, 17437634, 22353199
18093615, 19006849, 19013183, 17296856, 18674024, 17232014, 16855292
17762296, 14692762, 21051840, 17705023, 23294548, 22507234, 19121551
21330264, 26198926, 19854503, 23315889, 26030218, 21868720, 19309466
18681862, 17365043, 20558005, 18554763, 17390160, 18456514, 16306373
13955826, 18139690, 17501491, 17752121, 21668627, 17299889, 23713236
24652769, 17889583, 18673325, 22551446, 19721304, 18293054, 17242746
19211433, 19888853, 17951233, 18094246, 17649265, 19615136, 17011832
16870214, 17477958, 18522509, 20631274, 16091637, 17323222, 16595641
16524926, 18228645, 18282562, 17596908, 18031668, 17156148, 16494615
22683225, 20869721, 17545847, 25093656, 17655240, 24528741, 17614134
25427662, 13558557, 17341326, 17891946, 17716305, 22657942, 18440095
16392068, 19271443, 21351877, 18092127, 17614227, 18440047, 18849970
16903536, 14106803, 18973907, 18673342, 17389192, 25505382, 19032867
17612828, 16194160, 17006570, 25369547, 25505407, 16685417, 17721717
17390431, 17570240, 16863422, 18325460, 17008068, 19727057, 16422541
19972570, 17267114, 18244962, 21538485, 18203838, 18765602, 16198143
17246576, 14829250, 17835627, 18247991, 14458214, 21051862, 17786278


```
16692232, 17227277, 24476265, 16042673, 16314254, 19285025, 16228604
16837842, 20144308, 17393683, 23536835, 25823754, 18899974, 17787259
24719736, 20331945, 19490948, 20074391, 15861775, 16399083, 25947799
18018515, 22683212, 21051858, 18260550, 17080436, 16613964, 17036973
16579084, 24433711, 18384537, 18280813, 20296213, 16901385, 15979965
23330124, 18441944, 16450169, 9756271, 17892268, 11733603, 16285691
17587063, 21343775, 26474853, 18180390, 16538760, 18193833, 21387964
21051833, 17238511, 19777862, 23065323, 17824637, 17903598, 16571443
18306996, 19578350, 14852021, 17853456, 18674047, 12364061, 24411921
19207117, 22195448
```

Version 11.2.0.4.v13

Version 11.2.0.4.v13 includes the following:

- Oracle July 2017 PSU, a combination of database PSU (patch 26609445) + OJVM component PSU (patch 26027154)
- Oracle recommended RDBMS patches for Oracle GoldenGate (patch 26554712)
- RSA Micro-Edition Suite Bundle (patch 26770426)
- Timezone file DSTv30 (patch 25881255, OJVM patch 25881271)
- Support for validating DB instance files with the RMAN logical validation utility

For more information, see [Validating DB instance files](#) in the *Amazon RDS User Guide*.

- Support for setting the default edition for a DB instance

For more information, see [Setting the default edition for a DB instance](#) in the *Amazon RDS User Guide*.

Oracle patch 26609445, released July 2017

Bugs fixed:

```
17288409, 21051852, 24316947, 17811429, 17205719, 18607546, 20506699
17816865, 25957038, 23330119, 17922254, 17754782, 13364795, 16934803
17311728, 20387265, 17284817, 17441661, 24560906, 16992075, 17446237
14015842, 19972569, 21756677, 17375354, 21538558, 20925795, 17449815
26575788, 19463897, 13866822, 17235750, 17982555, 17478514, 18317531
```

14338435, 18235390, 20803583, 19461270, 13944971, 20142975, 17811789
16929165, 18704244, 20506706, 17546973, 20334344, 14054676, 17088068
17346091, 18264060, 17343514, 21538567, 19680952, 18471685, 19211724
13951456, 21847223, 16315398, 18744139, 16850630, 23177648, 19049453
18673304, 17883081, 19915271, 18641419, 18262334, 25600421, 17006183
16065166, 18277454, 16833527, 10136473, 18051556, 17865671, 17852463
18554871, 17853498, 18334586, 20879889, 17551709, 17588480, 19827973
17344412, 17842825, 18828868, 20509482, 17025461, 11883252, 13609098
17239687, 17602269, 19197175, 18316692, 22195457, 17313525, 12611721
19544839, 18964939, 17600719, 18191164, 19393542, 17571306, 20777150
18482502, 19466309, 22243719, 17040527, 17165204, 18098207, 16785708
17465741, 16180763, 17174582, 12982566, 16777840, 19463893, 22195465
16875449, 22148226, 12816846, 17237521, 6599380, 19358317, 17811438
25505394, 17811447, 17945983, 21983325, 18762750, 16912439, 17184721
18061914, 17282229, 18331850, 18202441, 17082359, 18723434, 21972320
19554106, 25505371, 14034426, 18339044, 19458377, 17752995, 20448824
17891943, 17258090, 17767676, 16668584, 18384391, 17040764, 17381384
15913355, 18356166, 14084247, 20596234, 20506715, 21756661, 13853126
18203837, 14245531, 16043574, 21756699, 22195441, 17848897, 17877323
21453153, 17468141, 20861693, 17786518, 17912217, 17037130, 16956380
18155762, 17478145, 17394950, 18641461, 18189036, 18619917, 17027426
21352646, 16268425, 24476274, 22195492, 19584068, 26544823, 18436307
22507210, 17265217, 17634921, 13498382, 19469538, 21526048, 19258504
18043064, 20004087, 17443671, 22195485, 18000422, 20004021, 22321756
17571039, 21067387, 16832076, 22905130, 16344544, 18009564, 14354737
21286665, 18135678, 14521849, 18614015, 20441797, 18362222, 25655390
16472716, 17835048, 17050888, 17936109, 14010183, 17325413, 18747196
17761775, 16721594, 17082983, 20067212, 21179898, 17302277, 18084625
15990359, 24842886, 18203835, 17297939, 17811456, 16731148, 22380919
21168487, 14133975, 13829543, 17215560, 17694209, 17385178, 18091059
8322815, 18259031, 19689979, 17586955, 17201159, 17655634, 18331812
19730508, 18868646, 17648596, 16220077, 16069901, 17348614, 17393915
17957017, 17274537, 18096714, 17308789, 18436647, 14285317, 19289642
14764829, 17622427, 18328509, 16943711, 22195477, 14368995, 22502493
17346671, 18996843, 17783588, 21343838, 16618694, 17672719, 18856999
18783224, 17851160, 17546761, 22168163, 17798953, 18273830, 22092979
16596890, 19972566, 13871092, 17726838, 16384983, 22296366, 17360606
22321741, 13645875, 25879656, 18199537, 16542886, 21787056, 17889549
14565184, 17071721, 17610798, 20299015, 21343897, 22893153, 20657441
17397545, 18230522, 16360112, 19769489, 12905058, 18641451, 12747740
18430495, 25423453, 17016369, 17042658, 14602788, 17551063, 19972568
21517440, 19788842, 18508861, 14657740, 17332800, 13837378, 17186905
19972564, 19699191, 18315328, 17437634, 22353199, 18093615, 19006849
19013183, 17296856, 18674024, 17232014, 16855292, 17762296, 14692762

21051840, 17705023, 22507234, 19121551, 21330264, 19854503, 26030218
21868720, 19309466, 18681862, 17365043, 20558005, 18554763, 17390160
18456514, 16306373, 13955826, 18139690, 17501491, 17752121, 21668627
17299889, 17889583, 18673325, 19721304, 18293054, 17242746, 19888853
17951233, 18094246, 17649265, 19615136, 17011832, 16870214, 17477958
18522509, 20631274, 16091637, 17323222, 16595641, 16524926, 18228645
18282562, 17596908, 18031668, 17156148, 16494615, 22683225, 17545847
25093656, 17655240, 24528741, 17614134, 25427662, 13558557, 17341326
17891946, 17716305, 22657942, 18440095, 16392068, 19271443, 21351877
18092127, 17614227, 18440047, 16903536, 14106803, 18973907, 18673342
17389192, 25505382, 19032867, 17612828, 16194160, 17006570, 25369547
25505407, 16685417, 17721717, 17390431, 17570240, 16863422, 18325460
19727057, 16422541, 19972570, 17267114, 18244962, 21538485, 18203838
18765602, 16198143, 17246576, 14829250, 17835627, 18247991, 14458214
21051862, 16692232, 17786278, 17227277, 24476265, 16042673, 16314254
16228604, 16837842, 17393683, 23536835, 25823754, 18899974, 17787259
20331945, 20074391, 15861775, 16399083, 18018515, 22683212, 21051858
18260550, 17080436, 16613964, 17036973, 16579084, 24433711, 18384537
18280813, 20296213, 16901385, 15979965, 23330124, 18441944, 16450169
9756271, 17892268, 11733603, 16285691, 17587063, 21343775, 18180390
16538760, 18193833, 21387964, 21051833, 17238511, 19777862, 17824637
16571443, 18306996, 19578350, 14852021, 17853456, 18674047, 12364061
24411921, 19207117, 22195448

Version 11.2.0.4.v12

Version 11.2.0.4.v12 includes the following:

- Oracle patch 25440428, a combination of database PSU (patch 24732075) + OJVM component PSU (patch 25434033)
- Oracle recommended RDBMS patches for Oracle GoldenGate (patch 25734992)
- MES Bundle (patch 24975421 for 11.2.0.4)
- Timezone file DSTv28 (patch 24701840)
- Support for the DBMS_CHANGE_NOTIFICATION package
- Support for XSTREAM packages and views (may require additional licensing)

Oracle patch 24732075, released April 2017

Bugs fixed:

17288409, 21051852, 24316947, 17811429, 17205719, 18607546, 20506699
17816865, 17922254, 23330119, 17754782, 16934803, 13364795, 17311728
17284817, 17441661, 24560906, 16992075, 17446237, 14015842, 19972569
21756677, 17375354, 20925795, 21538558, 17449815, 19463897, 13866822
17235750, 17982555, 17478514, 18317531, 14338435, 18235390, 20803583
13944971, 20142975, 17811789, 16929165, 18704244, 20506706, 17546973
20334344, 14054676, 17088068, 17346091, 18264060, 17343514, 21538567
19680952, 18471685, 19211724, 13951456, 21847223, 16315398, 18744139
16850630, 23177648, 19049453, 18673304, 17883081, 19915271, 18641419
18262334, 17006183, 16065166, 18277454, 16833527, 10136473, 18051556
17865671, 17852463, 18554871, 17853498, 18334586, 17551709, 17588480
19827973, 17344412, 17842825, 18828868, 17025461, 11883252, 13609098
17239687, 17602269, 19197175, 18316692, 22195457, 17313525, 12611721
19544839, 18964939, 17600719, 18191164, 19393542, 17571306, 20777150
18482502, 19466309, 22243719, 17040527, 17165204, 18098207, 16785708
17465741, 17174582, 16180763, 12982566, 16777840, 19463893, 22195465
16875449, 12816846, 22148226, 17237521, 6599380, 19358317, 25505394
17811438, 17811447, 17945983, 21983325, 18762750, 16912439, 17184721
18061914, 17282229, 18331850, 18202441, 17082359, 18723434, 21972320
19554106, 25505371, 14034426, 18339044, 19458377, 17752995, 20448824
17891943, 17258090, 17767676, 16668584, 18384391, 17040764, 17381384
15913355, 18356166, 14084247, 20596234, 20506715, 21756661, 13853126
18203837, 14245531, 16043574, 21756699, 22195441, 17848897, 17877323
21453153, 17468141, 20861693, 17786518, 17912217, 17037130, 16956380
18155762, 17478145, 17394950, 18641461, 18189036, 18619917, 17027426
21352646, 16268425, 24476274, 22195492, 19584068, 18436307, 22507210
17265217, 17634921, 13498382, 21526048, 19258504, 20004087, 17443671
22195485, 18000422, 22321756, 20004021, 17571039, 21067387, 22905130
16344544, 18009564, 14354737, 21286665, 18135678, 18614015, 20441797
18362222, 17835048, 16472716, 17936109, 17050888, 14010183, 17325413
18747196, 17761775, 16721594, 17082983, 20067212, 21179898, 17302277
18084625, 15990359, 24842886, 18203835, 17297939, 17811456, 22380919
16731148, 21168487, 14133975, 13829543, 17215560, 17694209, 17385178
18091059, 8322815, 17586955, 17201159, 17655634, 18331812, 19730508
18868646, 17648596, 16220077, 16069901, 17348614, 17393915, 17274537
17957017, 18096714, 17308789, 18436647, 14285317, 19289642, 14764829
17622427, 18328509, 16943711, 22195477, 14368995, 22502493, 17346671
18996843, 17783588, 21343838, 16618694, 17672719, 18856999, 18783224

17851160, 17546761, 17798953, 18273830, 22092979, 16596890, 19972566
16384983, 17726838, 22296366, 17360606, 22321741, 13645875, 18199537
16542886, 21787056, 17889549, 14565184, 17071721, 17610798, 20299015
21343897, 22893153, 20657441, 17397545, 18230522, 16360112, 19769489
12905058, 18641451, 12747740, 18430495, 17016369, 17042658, 14602788
17551063, 19972568, 21517440, 18508861, 19788842, 14657740, 17332800
13837378, 19972564, 17186905, 18315328, 19699191, 17437634, 22353199
18093615, 19006849, 19013183, 17296856, 18674024, 17232014, 16855292
17762296, 14692762, 21051840, 17705023, 22507234, 19121551, 21330264
19854503, 21868720, 19309466, 18681862, 20558005, 18554763, 17390160
18456514, 16306373, 13955826, 18139690, 17501491, 17752121, 21668627
17299889, 17889583, 18673325, 19721304, 18293054, 17242746, 17951233
18094246, 17649265, 19615136, 17011832, 16870214, 17477958, 18522509
20631274, 16091637, 17323222, 16595641, 16524926, 18228645, 18282562
17596908, 18031668, 17156148, 16494615, 22683225, 17545847, 25093656
17655240, 24528741, 17614134, 13558557, 17341326, 17891946, 17716305
22657942, 18440095, 16392068, 19271443, 21351877, 18092127, 17614227
18440047, 16903536, 14106803, 18973907, 18673342, 25505382, 19032867
17389192, 17612828, 16194160, 17006570, 25369547, 25505407, 17721717
17390431, 17570240, 16863422, 18325460, 19727057, 16422541, 19972570
17267114, 18244962, 21538485, 18765602, 18203838, 16198143, 17246576
14829250, 17835627, 18247991, 14458214, 21051862, 16692232, 17786278
17227277, 24476265, 16042673, 16314254, 16228604, 16837842, 17393683
23536835, 17787259, 20331945, 20074391, 15861775, 16399083, 18018515
22683212, 18260550, 21051858, 17080436, 16613964, 17036973, 16579084
24433711, 18384537, 18280813, 20296213, 16901385, 15979965, 23330124
18441944, 16450169, 9756271, 17892268, 11733603, 16285691, 17587063
21343775, 18180390, 16538760, 18193833, 21387964, 21051833, 17238511
17824637, 16571443, 18306996, 14852021, 17853456, 18674047, 12364061
24411921, 22195448

Version 11.2.0.4.v11

Version 11.2.0.4.v11 includes the following:

- Oracle patch 24918033, a combination of database PSU (patch 24006111) + OJVM component PSU (patch 24917954)
- Oracle recommended RDBMS patches for Oracle GoldenGate (patch 24491261)
- MES Bundle (patch 24975421 for 11.2.0.4)

Oracle patch 24918033, released January 2017

Bugs fixed:

18933818, 19176885, 17201047, 25067795, 14774730, 19153980, 21911849
23727132, 18166577, 24448240, 17056813, 21811517, 19909862, 22675136
24534298, 19895326, 22253904, 17804361, 19231857, 17528315, 19058059
19554117, 19007266, 17285560, 22670385, 18458318, 19187988, 23265914
19006757, 19374518, 19223010, 25076732, 22118835, 19852360, 20408829
21047766, 21566944,
17288409, 21051852, 24316947, 17811429, 18607546, 17205719, 20506699
17816865, 17922254, 23330119, 17754782, 16934803, 13364795, 17311728
17441661, 17284817, 16992075, 17446237, 14015842, 19972569, 21756677
17375354, 20925795, 21538558, 17449815, 19463897, 13866822, 17235750
17982555, 17478514, 18317531, 14338435, 18235390, 20803583, 13944971
20142975, 17811789, 16929165, 18704244, 20506706, 17546973, 20334344
14054676, 17088068, 17346091, 18264060, 17343514, 21538567, 19680952
18471685, 19211724, 13951456, 21847223, 16315398, 18744139, 16850630
23177648, 19049453, 18673304, 17883081, 19915271, 18641419, 18262334
17006183, 16065166, 18277454, 16833527, 10136473, 18051556, 17865671
17852463, 18554871, 17853498, 18334586, 17551709, 17588480, 19827973
17344412, 17842825, 18828868, 17025461, 11883252, 13609098, 17239687
17602269, 19197175, 22195457, 18316692, 17313525, 12611721, 19544839
18964939, 17600719, 18191164, 19393542, 17571306, 20777150, 18482502
19466309, 22243719, 17040527, 17165204, 18098207, 16785708, 17465741
17174582, 16180763, 16777840, 12982566, 19463893, 22195465, 22148226
16875449, 12816846, 17237521, 6599380, 19358317, 17811438, 17811447
17945983, 21983325, 18762750, 16912439, 17184721, 18061914, 17282229
18331850, 18202441, 17082359, 18723434, 21972320, 19554106, 14034426
18339044, 19458377, 17752995, 20448824, 17891943, 17258090, 17767676
16668584, 18384391, 17040764, 17381384, 15913355, 18356166, 14084247
20596234, 20506715, 21756661, 13853126, 18203837, 14245531, 16043574
21756699, 22195441, 17848897, 17877323, 21453153, 17468141, 20861693
17786518, 17912217, 17037130, 16956380, 18155762, 17478145, 17394950
18641461, 18189036, 18619917, 17027426, 21352646, 16268425, 24476274
22195492, 19584068, 18436307, 22507210, 17265217, 17634921, 13498382
21526048, 19258504, 20004087, 17443671, 22195485, 18000422, 22321756
20004021, 17571039, 21067387, 16344544, 18009564, 14354737, 21286665
18135678, 18614015, 20441797, 18362222, 17835048, 16472716, 17936109
17050888, 17325413, 14010183, 18747196, 17761775, 16721594, 17082983
20067212, 21179898, 17302277, 18084625, 15990359, 18203835, 17297939
17811456, 22380919, 16731148, 21168487, 14133975, 13829543, 17215560

17694209, 17385178, 18091059, 8322815, 17586955, 17201159, 17655634
18331812, 19730508, 18868646, 17648596, 16220077, 16069901, 17348614
17393915, 17274537, 17957017, 18096714, 17308789, 18436647, 14285317
19289642, 14764829, 18328509, 17622427, 16943711, 22195477, 14368995
22502493, 17346671, 18996843, 17783588, 21343838, 16618694, 17672719
18856999, 18783224, 17851160, 17546761, 17798953, 18273830, 22092979
16596890, 19972566, 16384983, 17726838, 22296366, 17360606, 22321741
13645875, 18199537, 16542886, 21787056, 17889549, 14565184, 17071721
17610798, 20299015, 21343897, 22893153, 20657441, 17397545, 18230522
16360112, 19769489, 12905058, 18641451, 12747740, 18430495, 17016369
17042658, 14602788, 17551063, 19972568, 21517440, 18508861, 19788842
14657740, 17332800, 13837378, 19972564, 17186905, 18315328, 19699191
17437634, 22353199, 18093615, 19006849, 19013183, 17296856, 18674024
17232014, 16855292, 17762296, 14692762, 21051840, 17705023, 22507234
19121551, 21330264, 19854503, 21868720, 19309466, 18681862, 20558005
18554763, 17390160, 18456514, 16306373, 13955826, 18139690, 17501491
17752121, 21668627, 17299889, 17889583, 18673325, 19721304, 18293054
17242746, 17951233, 18094246, 17649265, 19615136, 17011832, 16870214
17477958, 18522509, 20631274, 16091637, 17323222, 16595641, 16524926
18228645, 18282562, 17596908, 18031668, 17156148, 16494615, 22683225
17545847, 17655240, 24528741, 17614134, 13558557, 17341326, 17891946
17716305, 22657942, 16392068, 19271443, 21351877, 18092127, 17614227
18440047, 16903536, 14106803, 18973907, 18673342, 19032867, 17389192
17612828, 16194160, 17006570, 17721717, 17390431, 17570240, 16863422
18325460, 19727057, 16422541, 19972570, 17267114, 18244962, 21538485
18765602, 18203838, 16198143, 17246576, 14829250, 17835627, 18247991
14458214, 21051862, 16692232, 17786278, 17227277, 24476265, 16042673
16314254, 16228604, 16837842, 17393683, 23536835, 17787259, 20331945
20074391, 15861775, 16399083, 18018515, 22683212, 18260550, 21051858
17080436, 16613964, 17036973, 16579084, 24433711, 18384537, 18280813
20296213, 16901385, 15979965, 23330124, 18441944, 16450169, 9756271
17892268, 11733603, 16285691, 17587063, 21343775, 18180390, 16538760
18193833, 21387964, 21051833, 17238511, 17824637, 16571443, 18306996
14852021, 17853456, 18674047, 12364061, 22195448

Version 11.2.0.4.v10

Version 11.2.0.4.v10 includes the following:

- Oracle patch 24436313, a combination of database PSU (patch 24006111) + OJVM component PSU (patch 24315821)

- Oracle recommended RDBMS patches for Oracle GoldenGate (patch 24491261)
- MES Bundle (patch 24975421 for 11.2.0.4)

Baseline: Oracle database patch set update 11.2.0.4.161018 (patch 24006111, released October 2016)

Bugs fixed:

17288409, 21051852, 24316947, 17811429, 18607546, 17205719, 20506699
17816865, 17922254, 23330119, 17754782, 16934803, 13364795, 17311728
17441661, 17284817, 16992075, 17446237, 14015842, 19972569, 21756677
17375354, 20925795, 21538558, 17449815, 19463897, 13866822, 17235750
17982555, 17478514, 18317531, 14338435, 18235390, 20803583, 13944971
20142975, 17811789, 16929165, 18704244, 20506706, 17546973, 20334344
14054676, 17088068, 17346091, 18264060, 17343514, 21538567, 19680952
18471685, 19211724, 13951456, 21847223, 16315398, 18744139, 16850630
23177648, 19049453, 18673304, 17883081, 19915271, 18641419, 18262334
17006183, 16065166, 18277454, 16833527, 10136473, 18051556, 17865671
17852463, 18554871, 17853498, 18334586, 17551709, 17588480, 19827973
17344412, 17842825, 18828868, 17025461, 11883252, 13609098, 17239687
17602269, 19197175, 22195457, 18316692, 17313525, 12611721, 19544839
18964939, 17600719, 18191164, 19393542, 17571306, 20777150, 18482502
19466309, 22243719, 17040527, 17165204, 18098207, 16785708, 17465741
17174582, 16180763, 16777840, 12982566, 19463893, 22195465, 22148226
16875449, 12816846, 17237521, 6599380, 19358317, 17811438, 17811447
17945983, 21983325, 18762750, 16912439, 17184721, 18061914, 17282229
18331850, 18202441, 17082359, 18723434, 21972320, 19554106, 14034426
18339044, 19458377, 17752995, 20448824, 17891943, 17258090, 17767676
16668584, 18384391, 17040764, 17381384, 15913355, 18356166, 14084247
20596234, 20506715, 21756661, 13853126, 18203837, 14245531, 16043574
21756699, 22195441, 17848897, 17877323, 21453153, 17468141, 20861693
17786518, 17912217, 17037130, 16956380, 18155762, 17478145, 17394950
18641461, 18189036, 18619917, 17027426, 21352646, 16268425, 24476274
22195492, 19584068, 18436307, 22507210, 17265217, 17634921, 13498382
21526048, 19258504, 20004087, 17443671, 22195485, 18000422, 22321756
20004021, 17571039, 21067387, 16344544, 18009564, 14354737, 21286665
18135678, 18614015, 20441797, 18362222, 17835048, 16472716, 17936109
17050888, 17325413, 14010183, 18747196, 17761775, 16721594, 17082983
20067212, 21179898, 17302277, 18084625, 15990359, 18203835, 17297939
17811456, 22380919, 16731148, 21168487, 14133975, 13829543, 17215560

17694209, 17385178, 18091059, 8322815, 17586955, 17201159, 17655634
18331812, 19730508, 18868646, 17648596, 16220077, 16069901, 17348614
17393915, 17274537, 17957017, 18096714, 17308789, 18436647, 14285317
19289642, 14764829, 18328509, 17622427, 16943711, 22195477, 14368995
22502493, 17346671, 18996843, 17783588, 21343838, 16618694, 17672719
18856999, 18783224, 17851160, 17546761, 17798953, 18273830, 22092979
16596890, 19972566, 16384983, 17726838, 22296366, 17360606, 22321741
13645875, 18199537, 16542886, 21787056, 17889549, 14565184, 17071721
17610798, 20299015, 21343897, 22893153, 20657441, 17397545, 18230522
16360112, 19769489, 12905058, 18641451, 12747740, 18430495, 17016369
17042658, 14602788, 17551063, 19972568, 21517440, 18508861, 19788842
14657740, 17332800, 13837378, 19972564, 17186905, 18315328, 19699191
17437634, 22353199, 18093615, 19006849, 19013183, 17296856, 18674024
17232014, 16855292, 17762296, 14692762, 21051840, 17705023, 22507234
19121551, 21330264, 19854503, 21868720, 19309466, 18681862, 20558005
18554763, 17390160, 18456514, 16306373, 13955826, 18139690, 17501491
17752121, 21668627, 17299889, 17889583, 18673325, 19721304, 18293054
17242746, 17951233, 18094246, 17649265, 19615136, 17011832, 16870214
17477958, 18522509, 20631274, 16091637, 17323222, 16595641, 16524926
18228645, 18282562, 17596908, 18031668, 17156148, 16494615, 22683225
17545847, 17655240, 24528741, 17614134, 13558557, 17341326, 17891946
17716305, 22657942, 16392068, 19271443, 21351877, 18092127, 17614227
18440047, 16903536, 14106803, 18973907, 18673342, 19032867, 17389192
17612828, 16194160, 17006570, 17721717, 17390431, 17570240, 16863422
18325460, 19727057, 16422541, 19972570, 17267114, 18244962, 21538485
18765602, 18203838, 16198143, 17246576, 14829250, 17835627, 18247991
14458214, 21051862, 16692232, 17786278, 17227277, 24476265, 16042673
16314254, 16228604, 16837842, 17393683, 23536835, 17787259, 20331945
20074391, 15861775, 16399083, 18018515, 22683212, 18260550, 21051858
17080436, 16613964, 17036973, 16579084, 24433711, 18384537, 18280813
20296213, 16901385, 15979965, 23330124, 18441944, 16450169, 9756271
17892268, 11733603, 16285691, 17587063, 21343775, 18180390, 16538760
18193833, 21387964, 21051833, 17238511, 17824637, 16571443, 18306996
14852021, 17853456, 18674047, 12364061, 22195448

Version 11.2.0.4.v9

Version 11.2.0.4.v9 includes the following:

- Oracle patch 23615392, a combination of database PSU (patch 23054359) + OJVM component PSU (patch 23177551)

- Timezone file DSTv26 (patch 22873635 for 11.2.0.4)
- Oracle recommended RDBMS patches for Oracle GoldenGate (patch 24320398 for 11.2.0.4.160719)
- MES Bundle (patch 22695784 for 11.2.0.4)
- Added the ability to create custom password verify functions

For more information, see [Creating custom functions to verify passwords](#) in the *Amazon RDS User Guide*.

- Fixed a bug that prevented implicit recompilation of views owned by SYS

Baseline: Oracle database patch set update 11.2.0.4.160719 (patch 23054359, released July 2016)

Bugs fixed:

17288409, 21051852, 17811429, 18607546, 17205719, 20506699, 17816865
 23330119, 17922254, 17754782, 16934803, 13364795, 17311728, 17441661
 17284817, 16992075, 17446237, 14015842, 19972569, 21756677, 17375354
 21538558, 20925795, 17449815, 19463897, 13866822, 17982555, 17235750
 17478514, 18317531, 14338435, 18235390, 20803583, 13944971, 20142975
 17811789, 16929165, 18704244, 20506706, 17546973, 20334344, 14054676
 17088068, 17346091, 18264060, 17343514, 21538567, 19680952, 18471685
 19211724, 13951456, 21847223, 16315398, 18744139, 16850630, 23177648
 19049453, 18673304, 17883081, 19915271, 18641419, 18262334, 17006183
 16065166, 18277454, 16833527, 10136473, 18051556, 17865671, 17852463
 18554871, 17853498, 18334586, 17551709, 17588480, 19827973, 17344412
 17842825, 18828868, 17025461, 11883252, 13609098, 17239687, 17602269
 19197175, 22195457, 18316692, 17313525, 12611721, 19544839, 18964939
 17600719, 18191164, 19393542, 17571306, 18482502, 20777150, 19466309
 17040527, 17165204, 18098207, 16785708, 17465741, 17174582, 16180763
 16777840, 12982566, 19463893, 22195465, 16875449, 12816846, 17237521
 19358317, 17811438, 17811447, 17945983, 21983325, 18762750, 16912439
 17184721, 18061914, 17282229, 18331850, 18202441, 17082359, 18723434
 21972320, 19554106, 14034426, 18339044, 19458377, 17752995, 20448824
 17891943, 17258090, 17767676, 16668584, 18384391, 17040764, 17381384
 15913355, 18356166, 14084247, 20596234, 20506715, 21756661, 13853126
 18203837, 14245531, 16043574, 21756699, 22195441, 17848897, 17877323
 21453153, 17468141, 20861693, 17786518, 17912217, 17037130, 16956380
 18155762, 17478145, 17394950, 18641461, 18189036, 18619917, 17027426

21352646, 16268425, 22195492, 19584068, 18436307, 22507210, 17265217
17634921, 13498382, 21526048, 19258504, 20004087, 17443671, 22195485
18000422, 22321756, 20004021, 17571039, 21067387, 16344544, 18009564
14354737, 21286665, 18135678, 18614015, 20441797, 18362222, 17835048
16472716, 17936109, 17050888, 17325413, 14010183, 18747196, 17761775
16721594, 17082983, 20067212, 21179898, 17302277, 18084625, 15990359
18203835, 17297939, 22380919, 17811456, 16731148, 21168487, 13829543
17215560, 14133975, 17694209, 17385178, 18091059, 8322815, 17586955
17201159, 17655634, 18331812, 19730508, 18868646, 17648596, 16220077
16069901, 17348614, 17393915, 17274537, 17957017, 18096714, 17308789
18436647, 14285317, 19289642, 14764829, 18328509, 17622427, 16943711
22195477, 14368995, 22502493, 17346671, 18996843, 17783588, 21343838
16618694, 17672719, 18856999, 18783224, 17851160, 17546761, 17798953
18273830, 22092979, 16596890, 19972566, 16384983, 17726838, 22296366
17360606, 22321741, 13645875, 18199537, 16542886, 21787056, 17889549
14565184, 17071721, 17610798, 20299015, 21343897, 22893153, 20657441
17397545, 18230522, 16360112, 19769489, 12905058, 18641451, 12747740
18430495, 17016369, 17042658, 14602788, 17551063, 19972568, 21517440
18508861, 19788842, 14657740, 17332800, 13837378, 19972564, 17186905
18315328, 19699191, 17437634, 22353199, 18093615, 19006849, 19013183
17296856, 18674024, 17232014, 16855292, 17762296, 14692762, 21051840
17705023, 22507234, 19121551, 21330264, 19854503, 21868720, 19309466
18681862, 18554763, 20558005, 17390160, 18456514, 16306373, 13955826
18139690, 17501491, 17752121, 21668627, 17299889, 17889583, 18673325
19721304, 18293054, 17242746, 17951233, 18094246, 17649265, 19615136
17011832, 16870214, 17477958, 18522509, 20631274, 16091637, 17323222
16595641, 16524926, 18228645, 18282562, 17596908, 18031668, 17156148
16494615, 22683225, 17545847, 17655240, 17614134, 13558557, 17341326
17891946, 17716305, 16392068, 19271443, 21351877, 18092127, 17614227
18440047, 16903536, 14106803, 18973907, 18673342, 19032867, 17389192
17612828, 16194160, 17006570, 17721717, 17390431, 17570240, 16863422
18325460, 19727057, 16422541, 19972570, 17267114, 18244962, 21538485
18765602, 18203838, 16198143, 17246576, 14829250, 17835627, 18247991
14458214, 21051862, 16692232, 17786278, 17227277, 16042673, 16314254
16228604, 16837842, 17393683, 23536835, 17787259, 20331945, 20074391
15861775, 16399083, 18018515, 22683212, 18260550, 21051858, 17080436
16613964, 17036973, 16579084, 18384537, 18280813, 20296213, 16901385
15979965, 23330124, 18441944, 16450169, 9756271, 17892268, 11733603
16285691, 17587063, 21343775, 16538760, 18180390, 18193833, 21387964
21051833, 17238511, 17824637, 16571443, 18306996, 14852021, 17853456
18674047, 12364061, 22195448

Version 11.2.0.4.v8

Version 11.2.0.4.v8 includes the following:

- Oracle PSU 11.2.0.4.160419 (22502456)
- Timezone file DSTv25 (patch 22037014)
- Oracle recommended RDBMS patches for Oracle GoldenGate (patch 22576728)
- MES Bundle (patch 22695784 for 11.2.0.4)
- Adds the ability for the master user to grant privileges on SYS objects with the grant option using the RDSADMIN.RDSADMIN_UTIL.GRANT_SYS_OBJECT procedure
- Adds master user privileges to support most common schemas created by the Oracle Fusion Middleware Repository Creation Utility (RCU)

Baseline: Oracle database patch set update 11.2.0.4.160419 (patch 22502456, released April 2016)

Bugs fixed:

```
17288409, 21051852, 17811429, 18607546, 17205719, 20506699, 17816865
17922254, 17754782, 16934803, 13364795, 17311728, 17441661, 17284817
16992075, 17446237, 14015842, 19972569, 21756677, 21538558, 20925795
17449815, 17375354, 19463897, 13866822, 17982555, 17235750, 17478514
18317531, 14338435, 18235390, 20803583, 13944971, 20142975, 17811789
16929165, 18704244, 20506706, 17546973, 20334344, 14054676, 17088068
17346091, 18264060, 17343514, 21538567, 19680952, 18471685, 19211724
13951456, 21847223, 16315398, 18744139, 16850630, 19049453, 18673304
17883081, 19915271, 18641419, 18262334, 17006183, 16065166, 18277454
16833527, 10136473, 18051556, 17865671, 17852463, 18554871, 17853498
18334586, 17551709, 17588480, 19827973, 17344412, 17842825, 18828868
17025461, 11883252, 13609098, 17239687, 17602269, 19197175, 22195457
18316692, 17313525, 12611721, 19544839, 18964939, 17600719, 18191164
19393542, 17571306, 18482502, 20777150, 19466309, 17040527, 17165204
18098207, 16785708, 17465741, 17174582, 16180763, 16777840, 12982566
19463893, 22195465, 16875449, 12816846, 17237521, 19358317, 17811438
17811447, 21983325, 17945983, 18762750, 16912439, 17184721, 18061914
17282229, 18331850, 18202441, 17082359, 18723434, 21972320, 19554106
14034426, 18339044, 19458377, 17752995, 20448824, 17891943, 17258090
17767676, 16668584, 18384391, 17040764, 17381384, 15913355, 18356166
```

14084247, 20596234, 20506715, 21756661, 13853126, 18203837, 14245531
21756699, 16043574, 22195441, 17848897, 17877323, 21453153, 17468141
20861693, 17786518, 17912217, 17037130, 18155762, 16956380, 17478145
17394950, 18641461, 18189036, 18619917, 17027426, 21352646, 16268425
22195492, 19584068, 18436307, 17265217, 17634921, 13498382, 21526048
19258504, 20004087, 17443671, 22195485, 18000422, 20004021, 22321756
17571039, 21067387, 16344544, 18009564, 14354737, 21286665, 18135678
18614015, 20441797, 18362222, 17835048, 16472716, 17936109, 17050888
17325413, 14010183, 18747196, 17761775, 16721594, 17082983, 20067212
21179898, 17302277, 18084625, 15990359, 18203835, 17297939, 17811456
16731148, 21168487, 13829543, 17215560, 14133975, 17694209, 17385178
18091059, 8322815, 17586955, 17201159, 17655634, 18331812, 19730508
18868646, 17648596, 16220077, 16069901, 17348614, 17393915, 17274537
17957017, 18096714, 17308789, 18436647, 14285317, 19289642, 14764829
18328509, 17622427, 22195477, 16943711, 22502493, 14368995, 17346671
18996843, 17783588, 21343838, 16618694, 17672719, 18856999, 18783224
17851160, 17546761, 17798953, 18273830, 22092979, 16596890, 19972566
16384983, 17726838, 17360606, 22321741, 13645875, 18199537, 16542886
21787056, 17889549, 14565184, 17071721, 17610798, 20299015, 21343897
22893153, 20657441, 17397545, 18230522, 16360112, 19769489, 12905058
18641451, 12747740, 18430495, 17016369, 17042658, 14602788, 17551063
19972568, 21517440, 18508861, 19788842, 14657740, 17332800, 13837378
19972564, 17186905, 18315328, 19699191, 17437634, 22353199, 18093615
19006849, 19013183, 17296856, 18674024, 17232014, 16855292, 17762296
14692762, 21051840, 17705023, 19121551, 21330264, 19854503, 21868720
19309466, 18681862, 18554763, 20558005, 17390160, 18456514, 16306373
13955826, 18139690, 17501491, 17752121, 21668627, 17299889, 17889583
18673325, 19721304, 18293054, 17242746, 17951233, 17649265, 18094246
19615136, 17011832, 16870214, 17477958, 18522509, 20631274, 16091637
17323222, 16595641, 16524926, 18228645, 18282562, 17596908, 17156148
18031668, 16494615, 22683225, 17545847, 17655240, 17614134, 13558557
17341326, 17891946, 17716305, 16392068, 19271443, 21351877, 18092127
18440047, 17614227, 14106803, 16903536, 18973907, 18673342, 19032867
17389192, 17612828, 16194160, 17006570, 17721717, 17390431, 17570240
16863422, 18325460, 19727057, 16422541, 19972570, 17267114, 18244962
21538485, 18765602, 18203838, 16198143, 17246576, 14829250, 17835627
18247991, 14458214, 21051862, 16692232, 17786278, 17227277, 16042673
16314254, 16228604, 16837842, 17393683, 17787259, 20331945, 20074391
15861775, 16399083, 18018515, 22683212, 18260550, 21051858, 17036973
16613964, 17080436, 16579084, 18384537, 18280813, 20296213, 16901385
15979965, 18441944, 16450169, 9756271, 17892268, 11733603, 16285691
17587063, 21343775, 16538760, 18180390, 18193833, 21387964, 21051833
17238511, 17824637, 16571443, 18306996, 14852021, 18674047, 17853456
12364061, 22195448

Version 11.2.0.4.v7

Version 11.2.0.4.v7 includes the following:

- Oracle PSU 11.2.0.4.160119 (21948347)
- Timezone file DSTv25 - patch 22037014 for 11.2.0.4 and 12.1.0.2 (12.1.0.1 includes DSTv24, patch 20875898 (unchanged from 12.1.0.1.v3), as a backport of DSTv25 was unavailable at build time)
- Fixed an issue that prevented customers from creating more than 10 Directory objects in the database
- Fixed an issue that prevented customers from re-granting read privileges on the ADUMP and BDUMP Directory objects

Baseline: Oracle database patch set update 11.2.0.4.160119 (patch 21948347, released January 2016)

Bugs fixed:

```
17288409, 21051852, 18607546, 17205719, 17811429, 17816865, 20506699
17922254, 17754782, 16934803, 13364795, 17311728, 17441661, 17284817
16992075, 17446237, 14015842, 19972569, 17449815, 21538558, 20925795
17375354, 19463897, 17982555, 17235750, 13866822, 17478514, 18317531
18235390, 14338435, 20803583, 13944971, 20142975, 17811789, 16929165
18704244, 20506706, 17546973, 20334344, 14054676, 17088068, 18264060
17346091, 17343514, 21538567, 19680952, 18471685, 19211724, 13951456
21847223, 16315398, 18744139, 16850630, 19049453, 18673304, 17883081
19915271, 18641419, 18262334, 17006183, 16065166, 18277454, 16833527
10136473, 18051556, 17865671, 17852463, 18554871, 17853498, 18334586
17588480, 17551709, 19827973, 17842825, 17344412, 18828868, 17025461
11883252, 13609098, 17239687, 17602269, 19197175, 22195457, 18316692
17313525, 12611721, 19544839, 18964939, 17600719, 18191164, 19393542
17571306, 18482502, 20777150, 19466309, 17040527, 17165204, 18098207
16785708, 17174582, 16180763, 17465741, 16777840, 12982566, 19463893
22195465, 12816846, 16875449, 17237521, 19358317, 17811438, 17811447
17945983, 18762750, 17184721, 16912439, 18061914, 17282229, 18331850
18202441, 17082359, 18723434, 21972320, 19554106, 14034426, 18339044
```

19458377, 17752995, 20448824, 17891943, 17258090, 17767676, 16668584
18384391, 17040764, 17381384, 15913355, 18356166, 14084247, 20506715
13853126, 18203837, 14245531, 21756699, 16043574, 22195441, 17848897
17877323, 21453153, 17468141, 20861693, 17786518, 17912217, 17037130
18155762, 16956380, 17478145, 17394950, 18189036, 18641461, 18619917
17027426, 21352646, 16268425, 22195492, 19584068, 18436307, 17265217
17634921, 13498382, 21526048, 20004087, 22195485, 17443671, 18000422
22321756, 20004021, 17571039, 21067387, 16344544, 18009564, 14354737
18135678, 18614015, 20441797, 18362222, 17835048, 16472716, 17936109
17050888, 17325413, 14010183, 18747196, 17761775, 16721594, 17082983
20067212, 21179898, 17302277, 18084625, 15990359, 18203835, 17297939
17811456, 16731148, 21168487, 17215560, 13829543, 14133975, 17694209
18091059, 17385178, 8322815, 17586955, 17201159, 17655634, 18331812
19730508, 18868646, 17648596, 16220077, 16069901, 17348614, 17393915
17274537, 17957017, 18096714, 17308789, 18436647, 14285317, 19289642
14764829, 18328509, 17622427, 22195477, 16943711, 14368995, 17346671
18996843, 17783588, 21343838, 16618694, 17672719, 18856999, 18783224
17851160, 17546761, 17798953, 18273830, 22092979, 19972566, 16384983
17726838, 17360606, 22321741, 13645875, 18199537, 16542886, 21787056
17889549, 14565184, 17071721, 17610798, 20299015, 21343897, 20657441
17397545, 18230522, 16360112, 19769489, 12905058, 18641451, 12747740
18430495, 17042658, 17016369, 14602788, 17551063, 19972568, 21517440
18508861, 19788842, 14657740, 17332800, 13837378, 19972564, 17186905
18315328, 19699191, 17437634, 19006849, 19013183, 17296856, 18674024
17232014, 16855292, 21051840, 14692762, 17762296, 17705023, 19121551
21330264, 19854503, 19309466, 18681862, 18554763, 20558005, 17390160
18456514, 16306373, 13955826, 18139690, 17501491, 21668627, 17299889
17752121, 17889583, 18673325, 18293054, 17242746, 17951233, 17649265
18094246, 19615136, 17011832, 16870214, 17477958, 18522509, 20631274
16091637, 17323222, 16595641, 16524926, 18228645, 18282562, 17596908
17156148, 18031668, 16494615, 17545847, 17655240, 17614134, 13558557
17341326, 17891946, 17716305, 16392068, 19271443, 21351877, 18092127
18440047, 17614227, 14106803, 16903536, 18973907, 18673342, 19032867
17389192, 17612828, 16194160, 17006570, 17721717, 17570240, 17390431
16863422, 18325460, 19727057, 16422541, 19972570, 17267114, 18244962
21538485, 18765602, 18203838, 16198143, 17246576, 14829250, 17835627
18247991, 14458214, 21051862, 16692232, 17786278, 17227277, 16042673
16314254, 16228604, 16837842, 17393683, 17787259, 20331945, 20074391
15861775, 16399083, 18018515, 21051858, 18260550, 17036973, 16613964
17080436, 16579084, 18384537, 18280813, 20296213, 16901385, 15979965
18441944, 16450169, 9756271, 17892268, 11733603, 16285691, 17587063
21343775, 16538760, 18180390, 18193833, 21051833, 17238511, 17824637
16571443, 18306996, 14852021, 18674047, 17853456, 12364061, 22195448

Version 11.2.0.4.v6

Version 11.2.0.4.v6 includes the following:

- Enable SSL encryption for Standard Edition and Standard Edition One

Version 11.2.0.4.v5

Version 11.2.0.4.v5 includes the following:

- Oracle PSU 11.2.0.4.8 (21352635)
- Includes the Daylight Saving Time Patch, patch 20875898: DST-24, that came out after the April 2015 PSU.

Baseline: Oracle database patch set update 11.2.0.4.8 (patch 21352635, released October 2015)

Bugs fixed:

```
17288409, 21051852, 18607546, 17205719, 17811429, 17816865, 20506699
17922254, 17754782, 16934803, 13364795, 17311728, 17441661, 17284817
16992075, 17446237, 14015842, 19972569, 21538558, 20925795, 17449815
17375354, 19463897, 17982555, 17235750, 13866822, 18317531, 17478514
18235390, 14338435, 20803583, 13944971, 20142975, 17811789, 16929165
18704244, 20506706, 17546973, 20334344, 14054676, 17088068, 18264060
17346091, 17343514, 21538567, 19680952, 18471685, 19211724, 13951456
16315398, 18744139, 16850630, 19049453, 18673304, 17883081, 19915271
18641419, 18262334, 17006183, 16065166, 18277454, 16833527, 10136473
18051556, 17865671, 17852463, 18554871, 17853498, 18334586, 17588480
17551709, 19827973, 17842825, 17344412, 18828868, 17025461, 11883252
13609098, 17239687, 17602269, 19197175, 18316692, 17313525, 12611721
19544839, 18964939, 17600719, 18191164, 19393542, 17571306, 18482502
20777150, 19466309, 17040527, 17165204, 18098207, 16785708, 17174582
16180763, 17465741, 16777840, 12982566, 19463893, 12816846, 16875449
17237521, 19358317, 17811438, 17811447, 17945983, 18762750, 17184721
16912439, 18061914, 17282229, 18331850, 18202441, 17082359, 18723434
19554106, 14034426, 18339044, 19458377, 17752995, 20448824, 17891943
```


17258090, 17767676, 16668584, 18384391, 17040764, 17381384, 15913355
18356166, 14084247, 20506715, 13853126, 18203837, 14245531, 16043574
17848897, 17877323, 17468141, 17786518, 17912217, 17037130, 18155762
16956380, 17478145, 17394950, 18189036, 18641461, 18619917, 17027426
21352646, 16268425, 19584068, 18436307, 17265217, 17634921, 13498382
20004087, 17443671, 18000422, 20004021, 17571039, 21067387, 16344544
18009564, 14354737, 18135678, 18614015, 20441797, 18362222, 17835048
16472716, 17936109, 17050888, 17325413, 14010183, 18747196, 17761775
16721594, 17082983, 20067212, 21179898, 17302277, 18084625, 15990359
18203835, 17297939, 17811456, 16731148, 17215560, 13829543, 14133975
17694209, 18091059, 17385178, 8322815, 17586955, 17201159, 17655634
18331812, 19730508, 18868646, 17648596, 16220077, 16069901, 17348614
17393915, 17274537, 17957017, 18096714, 17308789, 18436647, 14285317
19289642, 14764829, 18328509, 17622427, 16943711, 14368995, 17346671
18996843, 17783588, 16618694, 17672719, 18856999, 18783224, 17851160
17546761, 17798953, 18273830, 19972566, 16384983, 17726838, 17360606
13645875, 18199537, 16542886, 17889549, 14565184, 17071721, 20299015
17610798, 20657441, 17397545, 18230522, 16360112, 19769489, 12905058
18641451, 12747740, 18430495, 17042658, 17016369, 14602788, 19972568
18508861, 19788842, 14657740, 17332800, 13837378, 19972564, 17186905
18315328, 19699191, 17437634, 19006849, 19013183, 17296856, 18674024
17232014, 16855292, 21051840, 14692762, 17762296, 17705023, 19121551
19854503, 19309466, 18681862, 18554763, 20558005, 17390160, 18456514
16306373, 13955826, 18139690, 17501491, 17299889, 17752121, 17889583
18673325, 18293054, 17242746, 17951233, 17649265, 18094246, 19615136
17011832, 16870214, 17477958, 18522509, 20631274, 16091637, 17323222
16595641, 16524926, 18228645, 18282562, 17596908, 17156148, 18031668
16494615, 17545847, 17614134, 13558557, 17341326, 17891946, 17716305
16392068, 19271443, 18092127, 18440047, 17614227, 14106803, 16903536
18973907, 18673342, 17389192, 16194160, 17006570, 17612828, 17721717
17570240, 17390431, 16863422, 18325460, 19727057, 16422541, 19972570
17267114, 18244962, 21538485, 18765602, 18203838, 16198143, 17246576
14829250, 17835627, 18247991, 14458214, 21051862, 16692232, 17786278
17227277, 16042673, 16314254, 16228604, 16837842, 17393683, 17787259
20331945, 20074391, 15861775, 16399083, 18018515, 18260550, 21051858
17036973, 16613964, 17080436, 16579084, 18384537, 18280813, 20296213
16901385, 15979965, 18441944, 16450169, 9756271, 17892268, 11733603
16285691, 17587063, 16538760, 18180390, 18193833, 21051833, 17238511
17824637, 16571443, 18306996, 14852021, 18674047, 17853456, 12364061

Version 11.2.0.4.v4

Version 11.2.0.4.v4 includes the following:

- Oracle PSU 11.2.0.4.6 (20299013)
- Installs additional Oracle Text knowledge bases from Oracle Database. Examples media (English and French)
- Provides access to DBMS_REPAIR through RDSADMIN.RDSADMIN_DBMS_REPAIR
- Grants ALTER DATABASE LINK, ALTER PUBLIC DATABASE LINK, EXEMPT ACCESS POLICY, EXEMPT IDENTITY POLICY, and EXEMPT REDACTION POLICY to master user

Baseline: Oracle database patch set update 11.2.0.4.6 (patch 20299013, released April 2015)

Bugs fixed:

17288409, 17798953, 18273830, 18607546, 17811429, 17205719, 20506699
17816865, 19972566, 17922254, 17754782, 16384983, 17726838, 13364795
16934803, 17311728, 17284817, 17441661, 17360606, 13645875, 18199537
16992075, 16542886, 17446237, 14015842, 17889549, 14565184, 19972569
17071721, 20299015, 17610798, 17375354, 17449815, 17397545, 19463897
18230522, 13866822, 17235750, 17982555, 16360112, 18317531, 17478514
19769489, 12905058, 14338435, 18235390, 13944971, 18641451, 20142975
17811789, 16929165, 18704244, 12747740, 18430495, 20506706, 17546973
14054676, 17088068, 17346091, 18264060, 17016369, 17042658, 17343514
14602788, 19972568, 19680952, 18471685, 19788842, 18508861, 14657740
17332800, 19211724, 13837378, 13951456, 16315398, 17186905, 18744139
19972564, 16850630, 18315328, 17437634, 19049453, 18673304, 17883081
19006849, 19915271, 19013183, 18641419, 17296856, 18674024, 18262334
17006183, 18277454, 16833527, 17232014, 16855292, 10136473, 17762296
14692762, 17705023, 18051556, 17865671, 17852463, 18554871, 17853498
19121551, 18334586, 19854503, 17551709, 19309466, 17588480, 19827973
17344412, 17842825, 18828868, 18681862, 18554763, 17390160, 18456514
16306373, 17025461, 13955826, 18139690, 11883252, 13609098, 17501491
17239687, 17752121, 17299889, 17602269, 19197175, 17889583, 18316692
17313525, 18673325, 12611721, 19544839, 18293054, 17242746, 18964939
17600719, 18191164, 19393542, 17571306, 18482502, 19466309, 17951233
17649265, 18094246, 19615136, 17040527, 17011832, 17165204, 18098207
16785708, 16870214, 17465741, 16180763, 17174582, 17477958, 12982566
16777840, 18522509, 20631274, 16091637, 17323222, 19463893, 16595641
16875449, 12816846, 16524926, 17237521, 18228645, 18282562, 17596908
19358317, 17811438, 17811447, 17945983, 18762750, 17156148, 18031668
16912439, 17184721, 16494615, 18061914, 17282229, 17545847, 18331850
18202441, 17082359, 18723434, 19554106, 17614134, 13558557, 17341326

```
14034426, 17891946, 18339044, 17716305, 19458377, 17752995, 16392068
19271443, 17891943, 18092127, 17258090, 17767676, 16668584, 18384391
17614227, 17040764, 16903536, 17381384, 14106803, 15913355, 18973907
18356166, 18673342, 17389192, 14084247, 16194160, 17612828, 17006570
20506715, 17721717, 13853126, 17390431, 18203837, 17570240, 14245531
16043574, 16863422, 17848897, 17877323, 18325460, 19727057, 17468141
17786518, 17912217, 16422541, 19972570, 17267114, 17037130, 18244962
18765602, 18203838, 18155762, 16956380, 16198143, 17246576, 17478145
17394950, 14829250, 18189036, 18641461, 18619917, 17835627, 17027426
16268425, 18247991, 19584068, 14458214, 18436307, 17265217, 17634921
13498382, 16692232, 17786278, 17227277, 16042673, 16314254, 17443671
18000422, 16228604, 16837842, 17571039, 17393683, 16344544, 17787259
18009564, 20074391, 14354737, 15861775, 18135678, 18614015, 16399083
18362222, 18018515, 16472716, 17835048, 17050888, 17936109, 14010183
17325413, 18747196, 17080436, 16613964, 17036973, 17761775, 16579084
16721594, 17082983, 18384537, 18280813, 20296213, 17302277, 16901385
18084625, 15979965, 15990359, 18203835, 17297939, 17811456, 16731148
13829543, 14133975, 17215560, 17694209, 18091059, 17385178, 8322815
17586955, 18441944, 17201159, 16450169, 9756271, 17655634, 19730508
17892268, 18868646, 17648596, 16220077, 16069901, 11733603, 16285691
17587063, 18180390, 16538760, 18193833, 17348614, 17393915, 17957017
17274537, 18096714, 17308789, 17238511, 18436647, 17824637, 14285317
19289642, 14764829, 17622427, 18328509, 16571443, 16943711, 14368995
18306996, 17346671, 14852021, 18996843, 17783588, 16618694, 17853456
18674047, 17672719, 18856999, 12364061, 18783224, 17851160, 17546761
```

Version 11.2.0.4.v3

Version 11.2.0.4.v3 includes the following:

- Oracle PSU 11.2.0.4.4 (19121551)
- Latest DST file (DSTv23 – patch 19396455, released Oct 2014). This patch is incorporated by default in new instances only.

Baseline: Oracle database patch set update 11.2.0.4.4 (patch 19121551, released October 2014)

Bugs fixed:

19396455, 18759211, 17432124, 16799735,
17288409, 17205719, 17811429, 17754782, 17726838, 13364795, 17311728
17284817, 17441661, 13645875, 18199537, 16992075, 16542886, 17446237
14565184, 17071721, 17610798, 17375354, 17449815, 17397545, 19463897
18230522, 17235750, 16360112, 13866822, 17982555, 17478514, 12905058
14338435, 13944971, 16929165, 12747740, 17546973, 14054676, 17088068
18264060, 17343514, 17016369, 17042658, 14602788, 14657740, 17332800
19211724, 13951456, 16315398, 17186905, 18744139, 16850630, 17437634
19049453, 18673304, 17883081, 18641419, 17296856, 18262334, 17006183
18277454, 17232014, 16855292, 10136473, 17705023, 17865671, 18554871
19121551, 17588480, 17551709, 17344412, 17842825, 18681862, 17390160
13955826, 13609098, 18139690, 17501491, 17239687, 17752121, 17299889
17602269, 18673325, 17313525, 17242746, 19544839, 17600719, 18191164
17571306, 19466309, 17951233, 18094246, 17165204, 17011832, 17040527
16785708, 16180763, 17477958, 17174582, 17465741, 18522509, 17323222
19463893, 16875449, 16524926, 17237521, 17596908, 17811438, 17811447
18031668, 16912439, 16494615, 18061914, 17545847, 17082359, 19554106
17614134, 17341326, 17891946, 19458377, 17716305, 17752995, 16392068
19271443, 17767676, 17614227, 17040764, 17381384, 18973907, 18673342
14084247, 17389192, 17006570, 17612828, 17721717, 13853126, 18203837
17390431, 17570240, 14245531, 16043574, 16863422, 19727057, 17468141
17786518, 17037130, 17267114, 18203838, 16198143, 16956380, 17478145
14829250, 17394950, 17027426, 16268425, 18247991, 19584068, 14458214
18436307, 17265217, 13498382, 16692232, 17786278, 17227277, 16042673
16314254, 17443671, 16228604, 16837842, 17393683, 17787259, 18009564
15861775, 16399083, 18018515, 16472716, 17050888, 14010183, 17325413
16613964, 17080436, 17036973, 17761775, 16721594, 18280813, 15979965
18203835, 17297939, 16731148, 17811456, 14133975, 17385178, 17586955
16450169, 17655634, 9756271, 17892268, 17648596, 16220077, 16069901
11733603, 16285691, 17587063, 18180390, 17393915, 18096714, 17238511
17824637, 14285317, 19289642, 14764829, 18328509, 17622427, 16943711
17346671, 18996843, 14852021, 17783588, 16618694, 17672719, 17546761

Version 11.2.0.4.v2 (deprecated)

Version 11.2.0.4.v2 includes the following:

- Oracle PSU 11.2.0.4.3 (18522509)
- User access to DBMS_TRANSACTION package to clean-up failed distributed transactions
- Latest DST file (DSTv22 – patch 18759211, released June 2014). This patch is incorporated by default only in new Oracle DB instances.

- Grants DBMS_REPUTIL to DBA role (upgrade to 11.2.0.4 revokes it from public)
- Privileges granted on DBMS_TRANSACTION, v\$pending_xatrans\$, and v\$xatrans\$
- Resolves a problem with DDL commands when user objects have "SYSTEM" in their names
- Installs schema objects to support XA Transactions, allowing transactions to be managed by an external transaction manager
- Permits truncation of temporary SYS and SYSTEM objects, allowing tools like LogMiner to function correctly

Baseline: Oracle database patch set update 11.2.0.4.3 (patch 18522509, released July 2014)

Bugs fixed:

```

17432124, 18759211, 18522509, 18031668, 17478514,
17752995, 17288409, 16392068, 17205719, 17811429, 17767676, 17614227
17040764, 17381384, 17754782, 17726838, 13364795, 17311728, 17389192
17006570, 17612828, 17284817, 17441661, 13853126, 17721717, 13645875
18203837, 17390431, 16542886, 16992075, 16043574, 17446237, 16863422
14565184, 17071721, 17610798, 17468141, 17786518, 17375354, 17397545
18203838, 16956380, 17478145, 16360112, 17235750, 17394950, 13866822
17478514, 17027426, 12905058, 14338435, 16268425, 13944971, 18247991
14458214, 16929165, 17265217, 13498382, 17786278, 17227277, 17546973
14054676, 17088068, 16314254, 17016369, 14602788, 17443671, 16228604
16837842, 17332800, 17393683, 13951456, 16315398, 18744139, 17186905
16850630, 17437634, 19049453, 17883081, 15861775, 17296856, 18277454
16399083, 16855292, 18018515, 10136473, 16472716, 17050888, 17865671
17325413, 14010183, 18554871, 17080436, 16613964, 17761775, 16721594
17588480, 17551709, 17344412, 18681862, 15979965, 13609098, 18139690
17501491, 17239687, 17752121, 17602269, 18203835, 17297939, 17313525
16731148, 17811456, 14133975, 17600719, 17385178, 17571306, 16450169
17655634, 18094246, 17892268, 17165204, 17011832, 17648596, 16785708
17477958, 16180763, 16220077, 17465741, 17174582, 18522509, 16069901
16285691, 17323222, 18180390, 17393915, 16875449, 18096714, 17238511

```

Version 11.2.0.4.v1

Version 11.2.0.4.v1 includes the following:

- Oracle PSU 11.2.0.4.1

- Support for creating and dropping directories in the main data storage space

For more information, see [Creating and dropping directories in the main data storage space](#) in the *Amazon RDS User Guide*.

Baseline: Oracle database patch set update 11.2.0.4.1 (released January 2014)

Bugs fixed:

17432124, 16850630, 17551709, 13944971, 17811447,
13866822, 17811429, 16069901, 16721594, 17443671,
17478514, 17612828, 17610798, 17239687, 17501491
17446237, 16450169, 17811438, 17288409, 17811456,
12905058, 17088068, 16285691, 17332800

Document history for the Amazon RDS for Oracle Release Notes

The following table describes Amazon RDS for Oracle releases.

Change	Description	Date
Amazon RDS supports the Oracle April 2024 RU for 21c and 19c	Amazon RDS for Oracle has released database engine version 21.0.0.0.ru-2024-04.rur-2024-04.r1 and 19.0.0.0.ru-2024-04.rur-2024-04.r1 to support the April 2024 RU.	May 6, 2024
Amazon RDS supports the Oracle January 2024 RU for 21c and 19c	Amazon RDS for Oracle has released database engine version 21.0.0.0.ru-2024-01.rur-2024-01.r1 and 19.0.0.0.ru-2024-01.rur-2024-01.r1 to support the January 2024 RU.	February 5, 2024
Amazon RDS supports the Oracle October 2023 RU for 21c and 19c	Amazon RDS for Oracle has released database engine version 21.0.0.0.ru-2023-10.rur-2023-10.r1 and 19.0.0.0.ru-2023-10.rur-2023-10.r1 to support the October 2023 RU.	November 1, 2023
Amazon RDS supports the Oracle July 2023 RU for 21c and 19c	Amazon RDS for Oracle has released database engine version 21.0.0.0.ru-2023-07.rur-2023-07.r1 and 19.0.0.0.ru-2023-07.rur-2023-07.r1	August 10, 2023

	3-07.r1 to support the July 2023 RU.	
Amazon RDS supports the Oracle April 2023 RU for 21c	Amazon RDS for Oracle has released database engine version 21.0.0.0.ru-2023-04.rur-2023-04.r1 to support the April 2023 RU.	June 8, 2023
Amazon RDS supports the Oracle April 2023 RU for 19c	Amazon RDS for Oracle has released database engine version 19.0.0.0.ru-2023-04.rur-2023-04.r1 to support the April 2023 RU.	May 4, 2023
Amazon RDS supports release 2 of the Oracle January 2023 RU for 21c and 19c	Amazon RDS for Oracle has released database engine versions 19.0.0.0.ru-2023-01.rur-2023-01.r2 and 21.0.0.0.ru-2023-01.rur-2023-01.r2 to support the January 2023 RU.	April 5, 2023
Amazon RDS supports the Oracle January 2023 RU for 21c and 19c	Amazon RDS for Oracle has released database engine versions 19.0.0.0.ru-2023-01.rur-2023-01.r1 and 21.0.0.0.ru-2023-01.rur-2023-01.r1 to support the January 2023 RU.	February 16, 2023
Amazon RDS supports the Oracle October 2022 RU for 21c and 19	Amazon RDS for Oracle has released database engine versions 19.0.0.0.ru-2022-10.rur-2022-10.r1 and 21.0.0.0.ru-2022-10.rur-2022-10.r1 to support the October 2022 RU.	November 10, 2022

Amazon RDS supports the Oracle July 2022 RU for 21c	Amazon RDS for Oracle has released database engine versions 21.0.0.0.ru-2022-07.rur-2022-07.r1 to support the July 2022 RU for 21c.	November 8, 2022
Amazon RDS supports the Oracle July 2022 RU and PSU	Amazon RDS for Oracle has released database engine versions 19.0.0.0.ru-2022-07.rur-2022-07.r1 and 12.1.0.2.v29 to support the July 2022 RU and PSU.	October 5, 2022
Amazon RDS supports the Oracle April 2022 RU, RUR and PSU	Amazon RDS for Oracle has released database engine versions 21.0.0.0.ru-2022-04.rur-2022-04.r1 , 19.0.0.0.ru-2022-04.rur-2022-04.r1 and 12.1.0.2.v28 to support the April 2022 RU, RUR and PSU.	July 28, 2022
Amazon RDS supports the Oracle January 2022 RU, RUR and PSU	Amazon RDS for Oracle has released database engine versions 19.0.0.0.ru-2022-01.rur-2022-01.r1 , 12.2.0.1.ru-2022-01.rur-2022-01.r1 and 12.1.0.2.v27 to support the January 2022 RU, RUR and PSU.	March 28, 2022
Initial release	Initial release of the <i>Amazon RDS for Oracle Release Notes</i> .	March 22, 2022

Earlier updates

The following table describes the important changes in each release of the *Amazon RDS for Oracle Release Notes* before March 22, 2022.

Change	Description	Date changed
Amazon RDS supports the Oracle January 2022 RU and RUR	Amazon RDS for Oracle has released database engine version 21.0.0.0.ru-2022-01.rur-2022-01.r1 to support the January 2022 RU and RUR.	March 7, 2022
Amazon RDS supports the Oracle October 2021 PSU	Amazon RDS for Oracle has released database engine version Oracle 12.1.0.2.v26 to support the October 2021 Patch Set Updates (PSU).	February 25, 2022
Amazon RDS supports the Oracle October 2021 RU and RUR	Amazon RDS for Oracle has released database engine versions 19.0.0.0.ru-2021-10.rur-2021-10.r1 and 12.2.0.1.ru-2021-10.rur-2021-10.r1 to support the October 2021 Release Update (RU) and Release Update Revision (RUR).	January 4, 2022
Amazon RDS for Oracle July 2021 RU and RUR	Amazon RDS for Oracle has released database engine versions 19.0.0.0.ru-2021-07.rur-2021-07.r1, 12.2.0.1.ru-2021-07.rur-2021-07.r1, and 12.1.0.2.v25 to support the July 2021 Release Update (RU) and Release Update Revision (RUR).	August 31, 2021
Amazon RDS for Oracle includes the April 2021 PSU for Oracle Database 12c Release 1 (12.1.0.2)	Amazon RDS has released the 12.1.0.2.v24 patch set update (PSU).	May 28, 2021

Change	Description	Date changed
Amazon RDS for Oracle April 2021 RU and RUR	Amazon RDS for Oracle has released database engine versions 19.0.0.0.ru-2021-04.rur-2021-04.r1, 18.0.0.0.ru-2021-04.rur-2021-04.r1, and 12.2.0.1.ru-2021-04.rur-2021-04.r1 to support the April 2021 Release Update (RU) and Release Update Revision (RUR).	May 21, 2021
Amazon RDS for Oracle includes the January 2021 PSU for release 12.1.0.2	Amazon RDS has released a database engine update for Oracle Database 12c Release 1 (12.1.0.2). Also, Amazon RDS has released database version 19.0.0.0.ru-2021-01.rur-2021-01.r2, which we recommend as an alternative to 19.0.0.0.ru-2021-01.rur-2021-01.r1.	March 18, 2021
Amazon RDS for Oracle includes January 2021 RU, RUR, and PSU updates	Amazon RDS has released database engine updates for Oracle Database versions 12.2, 18c, and 19c.	February 2, 2021
Amazon RDS for Oracle includes the October 2020 PSU for Oracle Database 11g	Amazon RDS for Oracle has released database engine updates for Oracle Database 11g Enterprise Edition.	December 12, 2020
Amazon RDS for Oracle includes October 2020 RU, RUR, and PSU updates	Amazon RDS for Oracle has released database engine updates for all versions except 11.2. Also, Amazon RDS for Oracle provides support for setting and unsetting system diagnostic events using the <code>rdsadmin.rdsadmin_util</code> package, and troubleshooting a GoldenGate error using the procedure <code>rdsadmin_util.truncate_apply \$_cdr_info</code> .	November 24, 2020

Change	Description	Date changed
RDS for Oracle includes July 2020 RU, RUR, and PSU updates	Amazon RDS for Oracle has released database engine updates for July 2020.	August 8, 2020
Amazon RDS for Oracle April 2020 RU, RUR, and PSU	Amazon RDS for Oracle has released database engine updates for April 2020.	May 13, 2020
Amazon RDS for Oracle January 2020 RU, RUR, and PSU	Amazon RDS for Oracle has released database engine updates for January 2020.	February 20, 2020
Amazon RDS for Oracle October 2019 RU and RUR for Oracle Database 19c	Amazon RDS for Oracle has released database engine updates for October 2019 for Oracle Database 19c.	January 9, 2020
Amazon RDS for Oracle October 2019 RU, RUR, and PSU	Amazon RDS for Oracle has released database engine updates for October 2019.	November 19, 2019
Amazon RDS for Oracle July 2019 RU, RUR, and PSU	Amazon RDS for Oracle has released database engine version 12.2.0.1.ru-2019-07.rur-2019-07.r1 to support the July 2019 Release Update (RU) and Release Update Revision (RUR). Amazon RDS for Oracle has also released database engine versions 12.1.0.2.v17 and 11.2.0.4.v21 to support the July 2019 Oracle Database Patch Set Update (PSU).	August 8, 2019

Change	Description	Date changed
Amazon RDS for Oracle April 2019 RU, RUR, and PSU	Amazon RDS for Oracle has released database engine version 12.2.0.1.ru-2019-04.rur-2019-04.r1 to support the April 2019 Release Update (RU) and Release Update Revision (RUR). Amazon RDS for Oracle has also released database engine versions 12.1.0.2.v16 and 11.2.0.4.v20 to support the April 2019 Oracle Database Patch Set Update (PSU).	May 16, 2019
Amazon RDS for Oracle January 2019 RU, RUR, and PSU	Amazon RDS for Oracle has released database engine version 12.2.0.1.ru-2019-01.rur-2019-01.r1 to support the January 2019 Release Update (RU) and Release Update Revision (RUR). Amazon RDS for Oracle has also released database engine versions 12.1.0.2.v15 and 11.2.0.4.v19 to support the January 2019 Oracle Database Patch Set Update (PSU).	February 8, 2019
Amazon RDS for Oracle October 2018 PSU	Amazon RDS for Oracle has released database engine versions 12.1.0.2.v14 and 11.2.0.4.v18 to support the October 2018 Oracle Database Patch Set Update (PSU).	November 13, 2018
Amazon RDS for Oracle July 2018 PSU	Amazon RDS for Oracle has released database engine versions 12.1.0.2.v13 and 11.2.0.4.v17 to support the July 2018 Oracle Database Patch Set Update (PSU).	October 3, 2018
Amazon RDS for Oracle April 2018 PSU	Amazon RDS for Oracle has released database engine versions 12.1.0.2.v12 and 11.2.0.4.v16 to support the April 2018 Oracle Database Patch Set Update (PSU).	June 1, 2018
Oracle January 2018 PSU	Amazon RDS for Oracle has released database engine versions 12.1.0.2.v11 and 11.2.0.4.v15 to support the January 2018 Oracle Database Patch Set Update (PSU).	February 22, 2018

Change	Description	Date changed
Oracle October 2017 PSU	Amazon RDS for Oracle has released database engine versions 12.1.0.2.v10 and 11.2.0.4.v14 to support the October 2017 Oracle Database Patch Set Update (PSU).	December 19, 2017
Oracle July 2017 PSU	Amazon RDS for Oracle has released database engine versions 12.1.0.2.v9 and 11.2.0.4.v13 to support the July 2017 Oracle Database Patch Set Update (PSU).	November 3, 2017
New feature	Amazon RDS for Oracle has released database engine versions 12.1.0.2.v8 and 11.2.0.4.v12 to support the April 2017 Oracle Database Patch Set Update (PSU).	May 23, 2017
New feature	Amazon RDS for Oracle now includes the January 2017 Oracle Database Patch Set Update (PSU). This adds support for database engine versions 12.1.0.2.v7 and 11.2.0.4.v11.	March 21, 2017
New feature	Amazon RDS for Oracle now includes the October 2016 Oracle Database Patch Set Update (PSU). This adds support for Oracle database engine versions 12.1.0.2.v6 and 11.2.0.4.v10.	December 12, 2016
New feature	Amazon RDS for Oracle now includes the July 2016 Oracle Database Patch Set Update (PSU). This adds support for Oracle database engine versions 12.1.0.2.v5, 12.1.0.1.v6, and 11.2.0.4.v9.	September 20, 2016
New feature	Amazon RDS for Oracle now includes the April 2016 Oracle Database Patch Set Update (PSU). This PSU adds support for Oracle database engine versions 12.1.0.2.v4, 12.1.0.1.v5, and 11.2.0.4.v8.	June 17, 2016
New feature	Updated to support Oracle database versions 11.2.0.4.v7, 12.1.0.1.v4, and 12.1.0.2.v3 with the January 2016 Oracle Patch Set Updates (PSU).	April 1, 2016

Change	Description	Date changed
New feature	Updated to support Oracle Standard Edition Two with Bring-Your- Own-License licensing. Also added support for Oracle versions 11.2.0.4.v5, 12.1.0.1.v3, and 12.1.0.2.v2.	December 14, 2015
New feature	Updated to support Oracle Database 12c Release 1 (12.1.0.2), including the In-Memory option, Oracle Database 11g April PSU patches, and improved integration with AWS CloudHSM.	July 20, 2015
New feature	Updated to support Oracle Database 12c.	April 2, 2015
New feature	Updated to support version 11.2.0.4.v3 of Oracle Database 11g, which includes the PSU released in October 2014.	November 20, 2014
New feature	Updated to support version 11.2.0.4v2 of Oracle Database 11g.	October 16, 2014
New feature	Updated to support Oracle Database 11g (11.2.0.4).	April 23, 2014