



API Reference

Amazon WorkSpaces Service



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Amazon WorkSpaces Service: API Reference

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Table of Contents

Welcome	1
Actions	2
AcceptAccountLinkInvitation	6
Request Syntax	6
Request Parameters	6
Response Syntax	7
Response Elements	7
Errors	7
See Also	8
AssociateConnectionAlias	9
Request Syntax	9
Request Parameters	9
Response Syntax	10
Response Elements	10
Errors	10
See Also	11
AssociateIpsGroups	12
Request Syntax	12
Request Parameters	12
Response Elements	12
Errors	13
See Also	13
AssociateWorkspaceApplication	15
Request Syntax	15
Request Parameters	15
Response Syntax	15
Response Elements	16
Errors	16
See Also	17
AuthorizeIpsRules	19
Request Syntax	19
Request Parameters	19
Response Elements	20
Errors	20

See Also	20
CopyWorkspacelImage	22
Request Syntax	22
Request Parameters	22
Response Syntax	24
Response Elements	24
Errors	24
See Also	25
CreateAccountLinkInvitation	26
Request Syntax	26
Request Parameters	26
Response Syntax	26
Response Elements	27
Errors	27
See Also	28
CreateConnectClientAddIn	29
Request Syntax	29
Request Parameters	29
Response Syntax	30
Response Elements	30
Errors	30
See Also	31
CreateConnectionAlias	32
Request Syntax	32
Request Parameters	32
Response Syntax	33
Response Elements	33
Errors	33
See Also	34
CreteelpGroup	36
Request Syntax	36
Request Parameters	36
Response Syntax	37
Response Elements	37
Errors	38
See Also	38

CreateStandbyWorkspaces	40
Request Syntax	40
Request Parameters	40
Response Syntax	41
Response Elements	41
Errors	42
See Also	43
CreateTags	44
Request Syntax	44
Request Parameters	44
Response Elements	44
Errors	45
See Also	45
CreateUpdatedWorkspacelmage	46
Request Syntax	46
Request Parameters	46
Response Syntax	48
Response Elements	48
Errors	48
See Also	49
CreateWorkspaceBundle	50
Request Syntax	50
Request Parameters	50
Response Syntax	52
Response Elements	52
Errors	53
See Also	54
CreateWorkspacelmage	55
Request Syntax	55
Request Parameters	55
Response Syntax	56
Response Elements	56
Errors	58
See Also	59
CreateWorkspaces	60
Request Syntax	60

Request Parameters	61
Response Syntax	61
Response Elements	63
Errors	64
See Also	64
CreateWorkspacesPool	65
Request Syntax	65
Request Parameters	65
Response Syntax	67
Response Elements	68
Errors	68
See Also	69
DeleteAccountLinkInvitation	70
Request Syntax	70
Request Parameters	70
Response Syntax	70
Response Elements	71
Errors	71
See Also	72
DeleteClientBranding	73
Request Syntax	73
Request Parameters	73
Response Elements	74
Errors	74
See Also	74
DeleteConnectClientAddIn	76
Request Syntax	76
Request Parameters	76
Response Elements	76
Errors	77
See Also	77
DeleteConnectionAlias	78
Request Syntax	78
Request Parameters	78
Response Elements	79
Errors	79

See Also	80
DeletelpGroup	81
Request Syntax	81
Request Parameters	81
Response Elements	81
Errors	81
See Also	82
DeleteTags	83
Request Syntax	83
Request Parameters	83
Response Elements	83
Errors	83
See Also	84
DeleteWorkspaceBundle	85
Request Syntax	85
Request Parameters	85
Response Elements	85
Errors	85
See Also	86
DeleteWorkspaceImage	87
Request Syntax	87
Request Parameters	87
Response Elements	87
Errors	87
See Also	88
DeployWorkspaceApplications	89
Request Syntax	89
Request Parameters	89
Response Syntax	89
Response Elements	90
Errors	90
See Also	91
DeregisterWorkspaceDirectory	92
Request Syntax	92
Request Parameters	92
Response Elements	93

Errors	93
See Also	93
DescribeAccount	95
Response Syntax	95
Response Elements	95
Errors	96
See Also	96
DescribeAccountModifications	97
Request Syntax	97
Request Parameters	97
Response Syntax	97
Response Elements	98
Errors	98
See Also	98
DescribeApplicationAssociations	100
Request Syntax	100
Request Parameters	100
Response Syntax	101
Response Elements	101
Errors	102
See Also	102
DescribeApplications	104
Request Syntax	104
Request Parameters	104
Response Syntax	106
Response Elements	106
Errors	107
See Also	107
DescribeBundleAssociations	109
Request Syntax	109
Request Parameters	109
Response Syntax	109
Response Elements	110
Errors	110
See Also	111
DescribeClientBranding	112

Request Syntax	112
Request Parameters	112
Response Syntax	112
Response Elements	114
Errors	115
See Also	115
DescribeClientProperties	117
Request Syntax	117
Request Parameters	117
Response Syntax	117
Response Elements	118
Errors	118
See Also	118
DescribeConnectClientAddIns	120
Request Syntax	120
Request Parameters	120
Response Syntax	121
Response Elements	121
Errors	121
See Also	122
DescribeConnectionAliases	123
Request Syntax	123
Request Parameters	123
Response Syntax	124
Response Elements	125
Errors	125
See Also	126
DescribeConnectionAliasPermissions	127
Request Syntax	127
Request Parameters	127
Response Syntax	128
Response Elements	128
Errors	129
See Also	129
DescribeImageAssociations	131
Request Syntax	131

Request Parameters	131
Response Syntax	131
Response Elements	132
Errors	132
See Also	133
DescribeGroups	134
Request Syntax	134
Request Parameters	134
Response Syntax	135
Response Elements	135
Errors	136
See Also	136
DescribeTags	137
Request Syntax	137
Request Parameters	137
Response Syntax	137
Response Elements	137
Errors	138
See Also	138
DescribeWorkspaceAssociations	139
Request Syntax	139
Request Parameters	139
Response Syntax	139
Response Elements	140
Errors	140
See Also	141
DescribeWorkspaceBundles	142
Request Syntax	142
Request Parameters	142
Response Syntax	143
Response Elements	143
Errors	144
See Also	144
DescribeWorkspaceDirectories	146
Request Syntax	146
Request Parameters	146

Response Syntax	147
Response Elements	149
Errors	149
See Also	150
DescribeWorkspacelImagePermissions	151
Request Syntax	151
Request Parameters	151
Response Syntax	152
Response Elements	152
Errors	153
See Also	153
DescribeWorkspacelImages	154
Request Syntax	154
Request Parameters	154
Response Syntax	155
Response Elements	156
Errors	156
See Also	156
DescribeWorkspaces	158
Request Syntax	158
Request Parameters	158
Response Syntax	160
Response Elements	161
Errors	162
See Also	162
DescribeWorkspacesConnectionStatus	164
Request Syntax	164
Request Parameters	164
Response Syntax	164
Response Elements	165
Errors	165
See Also	166
DescribeWorkspaceSnapshots	167
Request Syntax	167
Request Parameters	167
Response Syntax	167

Response Elements	168
Errors	168
See Also	169
DescribeWorkspacesPools	170
Request Syntax	170
Request Parameters	170
Response Syntax	171
Response Elements	172
Errors	172
See Also	173
DescribeWorkspacesPoolSessions	174
Request Syntax	174
Request Parameters	174
Response Syntax	175
Response Elements	175
Errors	176
See Also	176
DisassociateConnectionAlias	178
Request Syntax	178
Request Parameters	178
Response Elements	178
Errors	179
See Also	179
DisassociateelpGroups	181
Request Syntax	181
Request Parameters	181
Response Elements	181
Errors	182
See Also	182
DisassociateWorkspaceApplication	184
Request Syntax	184
Request Parameters	184
Response Syntax	184
Response Elements	185
Errors	185
See Also	186

GetAccountLink	187
Request Syntax	187
Request Parameters	187
Response Syntax	187
Response Elements	188
Errors	188
See Also	189
ImportClientBranding	190
Request Syntax	190
Request Parameters	192
Response Syntax	193
Response Elements	194
Errors	195
See Also	196
ImportWorkspacelImage	197
Request Syntax	197
Request Parameters	197
Response Syntax	199
Response Elements	199
Errors	200
See Also	201
ListAccountLinks	202
Request Syntax	202
Request Parameters	202
Response Syntax	203
Response Elements	203
Errors	203
See Also	204
ListAvailableManagementCidrRanges	205
Request Syntax	205
Request Parameters	205
Response Syntax	206
Response Elements	206
Errors	207
See Also	207
MigrateWorkspace	208

Request Syntax	208
Request Parameters	208
Response Syntax	209
Response Elements	209
Errors	209
See Also	210
ModifyAccount	212
Request Syntax	212
Request Parameters	212
Response Elements	213
Errors	213
See Also	213
ModifyCertificateBasedAuthProperties	215
Request Syntax	215
Request Parameters	215
Response Elements	216
Errors	216
See Also	216
ModifyClientProperties	218
Request Syntax	218
Request Parameters	218
Response Elements	218
Errors	218
See Also	219
ModifySamlProperties	220
Request Syntax	220
Request Parameters	220
Response Elements	221
Errors	221
See Also	222
ModifySelfservicePermissions	223
Request Syntax	223
Request Parameters	223
Response Elements	224
Errors	224
See Also	224

ModifyStreamingProperties	226
Request Syntax	226
Request Parameters	226
Response Elements	227
Errors	227
See Also	227
ModifyWorkspaceAccessProperties	229
Request Syntax	229
Request Parameters	229
Response Elements	230
Errors	230
See Also	230
ModifyWorkspaceCreationProperties	231
Request Syntax	231
Request Parameters	231
Response Elements	232
Errors	232
See Also	232
ModifyWorkspaceProperties	234
Request Syntax	234
Request Parameters	234
Response Elements	235
Errors	235
See Also	236
ModifyWorkspaceState	237
Request Syntax	237
Request Parameters	237
Response Elements	237
Errors	238
See Also	238
RebootWorkspaces	240
Request Syntax	240
Request Parameters	240
Response Syntax	240
Response Elements	241
Errors	241

See Also	241
RebuildWorkspaces	243
Request Syntax	243
Request Parameters	243
Response Syntax	243
Response Elements	244
Errors	244
See Also	244
RegisterWorkspaceDirectory	246
Request Syntax	246
Request Parameters	246
Response Syntax	249
Response Elements	249
Errors	250
See Also	251
RejectAccountLinkInvitation	252
Request Syntax	252
Request Parameters	252
Response Syntax	252
Response Elements	253
Errors	253
See Also	254
RestoreWorkspace	255
Request Syntax	255
Request Parameters	255
Response Elements	255
Errors	255
See Also	256
RevokeIpRules	257
Request Syntax	257
Request Parameters	257
Response Elements	257
Errors	257
See Also	258
StartWorkspaces	259
Request Syntax	259

Request Parameters	259
Response Syntax	259
Response Elements	260
Errors	260
See Also	260
StartWorkspacesPool	261
Request Syntax	261
Request Parameters	261
Response Elements	261
Errors	261
See Also	262
StopWorkspaces	264
Request Syntax	264
Request Parameters	264
Response Syntax	264
Response Elements	265
Errors	265
See Also	265
StopWorkspacesPool	266
Request Syntax	266
Request Parameters	266
Response Elements	266
Errors	266
See Also	267
TerminateWorkspaces	268
Request Syntax	268
Request Parameters	269
Response Syntax	269
Response Elements	269
Errors	270
See Also	270
TerminateWorkspacesPool	271
Request Syntax	271
Request Parameters	271
Response Elements	271
Errors	271

See Also	272
TerminateWorkspacesPoolSession	273
Request Syntax	273
Request Parameters	273
Response Elements	273
Errors	273
See Also	274
UpdateConnectClientAddIn	275
Request Syntax	275
Request Parameters	275
Response Elements	276
Errors	276
See Also	277
UpdateConnectionAliasPermission	278
Request Syntax	278
Request Parameters	278
Response Elements	279
Errors	279
See Also	280
UpdateRulesOfIpGroup	281
Request Syntax	281
Request Parameters	281
Response Elements	281
Errors	282
See Also	282
UpdateWorkspaceBundle	284
Request Syntax	284
Request Parameters	284
Response Elements	285
Errors	285
See Also	285
UpdateWorkspaceImagePermission	287
Request Syntax	287
Request Parameters	287
Response Elements	288
Errors	288

See Also	289
UpdateWorkspacesPool	291
Request Syntax	291
Request Parameters	291
Response Syntax	293
Response Elements	294
Errors	294
See Also	295
Data Types	296
AccountLink	299
Contents	299
See Also	300
AccountModification	301
Contents	301
See Also	302
ActiveDirectoryConfig	303
Contents	303
See Also	303
ApplicationResourceAssociation	304
Contents	304
See Also	305
ApplicationSettingsRequest	306
Contents	306
See Also	306
ApplicationSettingsResponse	307
Contents	307
See Also	308
AssociationStateReason	309
Contents	309
See Also	309
BundleResourceAssociation	310
Contents	310
See Also	311
Capacity	312
Contents	312
See Also	312

CapacityStatus	313
Contents	313
See Also	314
CertificateBasedAuthProperties	315
Contents	315
See Also	315
ClientProperties	316
Contents	316
See Also	316
ClientPropertiesResult	317
Contents	317
See Also	317
ComputeType	318
Contents	318
See Also	318
ConnectClientAddIn	319
Contents	319
See Also	320
ConnectionAlias	321
Contents	321
See Also	322
ConnectionAliasAssociation	323
Contents	323
See Also	324
ConnectionAliasPermission	325
Contents	325
See Also	325
DataReplicationSettings	326
Contents	326
See Also	326
DefaultClientBrandingAttributes	327
Contents	327
See Also	329
DefaultImportClientBrandingAttributes	330
Contents	330
See Also	332

DefaultWorkspaceCreationProperties	333
Contents	333
See Also	334
DescribeWorkspacesPoolsFilter	336
Contents	336
See Also	336
ErrorDetails	338
Contents	338
See Also	338
FailedCreateStandbyWorkspacesRequest	340
Contents	340
See Also	340
FailedCreateWorkspaceRequest	341
Contents	341
See Also	341
FailedWorkspaceChangeRequest	342
Contents	342
See Also	342
ImagePermission	344
Contents	344
See Also	344
ImageResourceAssociation	345
Contents	345
See Also	346
IosClientBrandingAttributes	347
Contents	347
See Also	350
IosImportClientBrandingAttributes	351
Contents	351
See Also	354
IpRuleItem	355
Contents	355
See Also	355
ModificationState	356
Contents	356
See Also	356

NetworkAccessConfiguration	357
Contents	357
See Also	357
OperatingSystem	358
Contents	358
See Also	358
PendingCreateStandbyWorkspacesRequest	359
Contents	359
See Also	360
RebootRequest	361
Contents	361
See Also	361
RebuildRequest	362
Contents	362
See Also	362
RelatedWorkspaceProperties	363
Contents	363
See Also	364
RootStorage	365
Contents	365
See Also	365
SamIProperties	366
Contents	366
See Also	367
SelfservicePermissions	368
Contents	368
See Also	369
Snapshot	370
Contents	370
See Also	370
StandbyWorkspace	371
Contents	371
See Also	372
StandbyWorkspacesProperties	373
Contents	373
See Also	373

StartRequest	375
Contents	375
See Also	375
StopRequest	376
Contents	376
See Also	376
StorageConnector	377
Contents	377
See Also	377
StreamingProperties	378
Contents	378
See Also	378
Tag	380
Contents	380
See Also	380
TerminateRequest	381
Contents	381
See Also	381
TimeoutSettings	382
Contents	382
See Also	383
UpdateResult	384
Contents	384
See Also	384
UserSetting	386
Contents	386
See Also	386
UserStorage	388
Contents	388
See Also	388
Workspace	389
Contents	389
See Also	393
WorkspaceAccessProperties	395
Contents	395
See Also	396

WorkspaceApplication	398
Contents	398
See Also	400
WorkspaceApplicationDeployment	401
Contents	401
See Also	401
WorkspaceBundle	402
Contents	402
See Also	404
WorkspaceConnectionStatus	405
Contents	405
See Also	406
WorkspaceCreationProperties	407
Contents	407
See Also	409
WorkspaceDirectory	410
Contents	410
See Also	415
WorkspacelImage	416
Contents	416
See Also	418
WorkspaceProperties	419
Contents	419
See Also	421
WorkspaceRequest	422
Contents	422
See Also	424
WorkspaceResourceAssociation	425
Contents	425
See Also	426
WorkspacesIpGroup	427
Contents	427
See Also	427
WorkspacesPool	429
Contents	429
See Also	431

WorkspacesPoolError	432
Contents	432
See Also	433
WorkspacesPoolSession	434
Contents	434
See Also	436
Common Errors	437
WorkSpaces Core API actions	439
CloudTrail Logging	442
WorkSpaces Information in CloudTrail	442
Example: WorkSpaces Log File Entry	443

Welcome to the Amazon WorkSpaces API Reference

Amazon WorkSpaces enables you to provision virtual, cloud-based Microsoft Windows or Amazon Linux desktops for your users, known as *WorkSpaces*. WorkSpaces eliminates the need to procure and deploy hardware or install complex software. You can quickly add or remove users as your needs change. Users can access their virtual desktops from multiple devices or web browsers.

This API Reference provides detailed information about the actions, data types, parameters, and errors of the WorkSpaces service. For more information about the supported AWS Regions, endpoints, and service quotas of the WorkSpaces service, see [WorkSpaces endpoints and quotas](#) in the *AWS General Reference*.

You can also manage your WorkSpaces resources using the WorkSpaces console, AWS Command Line Interface (AWS CLI), and SDKs. For more information about administering WorkSpaces, see the [Amazon WorkSpaces Administration Guide](#). For more information about using the Amazon WorkSpaces client application or web browser to access provisioned WorkSpaces, see the [Amazon WorkSpaces User Guide](#). For more information about using the AWS CLI to manage your WorkSpaces resources, see the [WorkSpaces section of the AWS CLI Reference](#).

Actions

The following actions are supported:

- [AcceptAccountLinkInvitation](#)
- [AssociateConnectionAlias](#)
- [AssociateIpGroups](#)
- [AssociateWorkspaceApplication](#)
- [AuthorizeIpRules](#)
- [CopyWorkspacelImage](#)
- [CreateAccountLinkInvitation](#)
- [CreateConnectClientAddIn](#)
- [CreateConnectionAlias](#)
- [CreateIpGroup](#)
- [CreateStandbyWorkspaces](#)
- [CreateTags](#)
- [CreateUpdatedWorkspacelImage](#)
- [CreateWorkspaceBundle](#)
- [CreateWorkspacelImage](#)
- [CreateWorkspaces](#)
- [CreateWorkspacesPool](#)
- [DeleteAccountLinkInvitation](#)
- [DeleteClientBranding](#)
- [DeleteConnectClientAddIn](#)
- [DeleteConnectionAlias](#)
- [DeleteIpGroup](#)
- [DeleteTags](#)
- [DeleteWorkspaceBundle](#)
- [DeleteWorkspacelImage](#)
- [DeployWorkspaceApplications](#)
- [DeregisterWorkspaceDirectory](#)

- [DescribeAccount](#)
- [DescribeAccountModifications](#)
- [DescribeApplicationAssociations](#)
- [DescribeApplications](#)
- [DescribeBundleAssociations](#)
- [DescribeClientBranding](#)
- [DescribeClientProperties](#)
- [DescribeConnectClientAddIns](#)
- [DescribeConnectionAliases](#)
- [DescribeConnectionAliasPermissions](#)
- [DescribeImageAssociations](#)
- [DescribeIpGroups](#)
- [DescribeTags](#)
- [DescribeWorkspaceAssociations](#)
- [DescribeWorkspaceBundles](#)
- [DescribeWorkspaceDirectories](#)
- [DescribeWorkspacelImagePermissions](#)
- [DescribeWorkspacelImages](#)
- [DescribeWorkspaces](#)
- [DescribeWorkspacesConnectionStatus](#)
- [DescribeWorkspaceSnapshots](#)
- [DescribeWorkspacesPools](#)
- [DescribeWorkspacesPoolSessions](#)
- [DisassociateConnectionAlias](#)
- [DisassociateIpGroups](#)
- [DisassociateWorkspaceApplication](#)
- [GetAccountLink](#)
- [ImportClientBranding](#)
- [ImportWorkspacelImage](#)
- [ListAccountLinks](#)

- [ListAvailableManagementCidrRanges](#)
- [MigrateWorkspace](#)
- [ModifyAccount](#)
- [ModifyCertificateBasedAuthProperties](#)
- [ModifyClientProperties](#)
- [ModifySamlProperties](#)
- [ModifySelfservicePermissions](#)
- [ModifyStreamingProperties](#)
- [ModifyWorkspaceAccessProperties](#)
- [ModifyWorkspaceCreationProperties](#)
- [ModifyWorkspaceProperties](#)
- [ModifyWorkspaceState](#)
- [RebootWorkspaces](#)
- [RebuildWorkspaces](#)
- [RegisterWorkspaceDirectory](#)
- [RejectAccountLinkInvitation](#)
- [RestoreWorkspace](#)
- [RevokelpRules](#)
- [StartWorkspaces](#)
- [StartWorkspacesPool](#)
- [StopWorkspaces](#)
- [StopWorkspacesPool](#)
- [TerminateWorkspaces](#)
- [TerminateWorkspacesPool](#)
- [TerminateWorkspacesPoolSession](#)
- [UpdateConnectClientAddIn](#)
- [UpdateConnectionAliasPermission](#)
- [UpdateRulesOfIpGroup](#)
- [UpdateWorkspaceBundle](#)
- [UpdateWorkspacelImagePermission](#)

- [UpdateWorkspacesPool](#)

AcceptAccountLinkInvitation

Accepts the account link invitation.

Important

There's currently no unlinking capability after you accept the account linking invitation.

Request Syntax

```
{
  "ClientToken": "string",
  "LinkId": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

ClientToken

A string of up to 64 ASCII characters that Amazon EFS uses to ensure idempotent creation.

Type: String

Pattern: `^\.{1,64}$`

Required: No

LinkId

The identifier of the account link.

Type: String

Pattern: `^link-.\{8,24\}$`

Required: Yes

Response Syntax

```
{
  "AccountLink": {
    "AccountLinkId": "string",
    "AccountLinkStatus": "string",
    "SourceAccountId": "string",
    "TargetAccountId": "string"
  }
}
```

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

AccountLink

Information about the account link.

Type: [AccountLink](#) object

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

ConflictException

The TargetAccountId is already linked or invited.

HTTP Status Code: 400

InternalServerError

Unexpected server error occurred.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

ValidationException

You either haven't provided a `TargetAccountId` or are using the same value for `TargetAccountId` and `SourceAccountId`.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

AssociateConnectionAlias

Associates the specified connection alias with the specified directory to enable cross-Region redirection. For more information, see [Cross-Region Redirection for Amazon WorkSpaces](#).

Note

Before performing this operation, call [DescribeConnectionAliases](#) to make sure that the current state of the connection alias is CREATED.

Request Syntax

```
{
  "AliasId": "string",
  "ResourceId": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

AliasId

The identifier of the connection alias.

Type: String

Length Constraints: Minimum length of 13. Maximum length of 68.

Pattern: `^wsca-[0-9a-z]{8,63}$`

Required: Yes

ResourceId

The identifier of the directory to associate the connection alias with.

Type: String

Length Constraints: Minimum length of 1.

Required: Yes

Response Syntax

```
{  
  "ConnectionIdentifier": "string"  
}
```

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

ConnectionIdentifier

The identifier of the connection alias association. You use the connection identifier in the DNS TXT record when you're configuring your DNS routing policies.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 20.

Pattern: `^[a-zA-Z0-9]+$`

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

InvalidResourceStateException

The state of the resource is not valid for this operation.

HTTP Status Code: 400

OperationNotSupportedException

This operation is not supported.

HTTP Status Code: 400

ResourceAssociatedException

The resource is associated with a directory.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

AssociateIpGroups

Associates the specified IP access control group with the specified directory.

Request Syntax

```
{  
  "DirectoryId": "string",  
  "GroupIds": [ "string" ]  
}
```

Request Parameters

The request accepts the following data in JSON format.

DirectoryId

The identifier of the directory.

Type: String

Length Constraints: Minimum length of 10. Maximum length of 65.

Pattern: $^(d-[0-9a-f]{8,63}$)|(wsd-[0-9a-z]{8,63}$)$

Required: Yes

GroupIds

The identifiers of one or more IP access control groups.

Type: Array of strings

Pattern: $wsipg-[0-9a-z]{8,63}$$

Required: Yes

Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

InvalidResourceStateException

The state of the resource is not valid for this operation.

HTTP Status Code: 400

OperationNotSupportedException

This operation is not supported.

HTTP Status Code: 400

ResourceLimitExceededException

Your resource limits have been exceeded.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)

- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

AssociateWorkspaceApplication

Associates the specified application to the specified WorkSpace.

Request Syntax

```
{  
  "ApplicationId": "string",  
  "WorkspaceId": "string"  
}
```

Request Parameters

The request accepts the following data in JSON format.

ApplicationId

The identifier of the application.

Type: String

Pattern: `^wsa-[0-9a-z]{8,63}$`

Required: Yes

WorkspaceId

The identifier of the WorkSpace.

Type: String

Pattern: `^ws-[0-9a-z]{8,63}$`

Required: Yes

Response Syntax

```
{  
  "Association": {  
    "AssociatedResourceId": "string",  
    "AssociatedResourceType": "string",  
    "Created": number,  
  }
```



```
"LastUpdatedTime": number,  
"State": "string",  
"StateReason": {  
  "ErrorCode": "string",  
  "ErrorMessage": "string"  
},  
"WorkspaceId": "string"  
}
```

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

Association

Information about the association between the specified WorkSpace and the specified application.

Type: [WorkspaceResourceAssociation](#) object

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

ApplicationNotSupportedException

The specified application is not supported.

HTTP Status Code: 400

ComputeNotCompatibleException

The compute type of the WorkSpace is not compatible with the application.

HTTP Status Code: 400

IncompatibleApplicationsException

The specified application is not compatible with the resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

OperatingSystemNotCompatibleException

The operating system of the WorkSpace is not compatible with the application.

HTTP Status Code: 400

OperationNotSupportedException

This operation is not supported.

HTTP Status Code: 400

ResourceAlreadyExistsException

The specified resource already exists.

HTTP Status Code: 400

ResourceInUseException

The specified resource is currently in use.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

AuthorizeIpRules

Adds one or more rules to the specified IP access control group.

This action gives users permission to access their WorkSpaces from the CIDR address ranges specified in the rules.

Request Syntax

```
{
  "GroupId": "string",
  "UserRules": [
    {
      "ipRule": "string",
      "ruleDesc": "string"
    }
  ]
}
```

Request Parameters

The request accepts the following data in JSON format.

GroupId

The identifier of the group.

Type: String

Pattern: `wsipg-[0-9a-z]{8,63}$`

Required: Yes

UserRules

The rules to add to the group.

Type: Array of [IpRuleItem](#) objects

Required: Yes

Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

InvalidResourceStateException

The state of the resource is not valid for this operation.

HTTP Status Code: 400

ResourceLimitExceededException

Your resource limits have been exceeded.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)

- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

CopyWorkspacelImage

Copies the specified image from the specified Region to the current Region. For more information about copying images, see [Copy a Custom WorkSpaces Image](#).

In the China (Ningxia) Region, you can copy images only within the same Region.

In AWS GovCloud (US), to copy images to and from other Regions, contact AWS Support.

Important

Before copying a shared image, be sure to verify that it has been shared from the correct AWS account. To determine if an image has been shared and to see the ID of the AWS account that owns an image, use the [DescribeWorkSpaceImages](#) and [DescribeWorkspacelImagePermissions](#) API operations.

Request Syntax

```
{
  "Description": "string",
  "Name": "string",
  "SourceImageId": "string",
  "SourceRegion": "string",
  "Tags": [
    {
      "Key": "string",
      "Value": "string"
    }
  ]
}
```

Request Parameters

The request accepts the following data in JSON format.

Description

A description of the image.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

Pattern: `^[a-zA-Z0-9_./() -]+$`

Required: No

Name

The name of the image.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `^[a-zA-Z0-9_./()\-\]+$`

Required: Yes

SourceImageId

The identifier of the source image.

Type: String

Pattern: `wsi-[0-9a-z]{9,63}$`

Required: Yes

SourceRegion

The identifier of the source Region.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 31.

Pattern: `^[-0-9a-z]{1,31}$`

Required: Yes

Tags

The tags for the image.

Type: Array of [Tag](#) objects

Required: No

Response Syntax

```
{  
  "ImageId": "string"  
}
```

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

ImageId

The identifier of the image.

Type: String

Pattern: `wsi-[0-9a-z]{9,63}$`

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

OperationNotSupportedException

This operation is not supported.

HTTP Status Code: 400

ResourceAlreadyExistsException

The specified resource already exists.

HTTP Status Code: 400

ResourceLimitExceededException

Your resource limits have been exceeded.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

ResourceUnavailableException

The specified resource is not available.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

CreateAccountLinkInvitation

Creates the account link invitation.

Request Syntax

```
{  
  "ClientToken": "string",  
  "TargetAccountId": "string"  
}
```

Request Parameters

The request accepts the following data in JSON format.

ClientToken

A string of up to 64 ASCII characters that Amazon EFS uses to ensure idempotent creation.

Type: String

Pattern: `^[1,64]$`

Required: No

TargetAccountId

The identifier of the target account.

Type: String

Pattern: `^\d{12}$`

Required: Yes

Response Syntax

```
{  
  "AccountLink": {  
    "AccountLinkId": "string",  
    "AccountLinkStatus": "string",  
  }  
}
```

```
    "SourceAccountId": "string",  
    "TargetAccountId": "string"  
  }  
}
```

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

AccountLink

Information about the account link.

Type: [AccountLink](#) object

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

ConflictException

The TargetAccountId is already linked or invited.

HTTP Status Code: 400

InternalServerError

Unexpected server error occurred.

HTTP Status Code: 400

ValidationException

You either haven't provided a TargetAccountId or are using the same value for TargetAccountId and SourceAccountId.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

CreateConnectClientAddIn

Creates a client-add-in for Amazon Connect within a directory. You can create only one Amazon Connect client add-in within a directory.

This client add-in allows WorkSpaces users to seamlessly connect to Amazon Connect.

Request Syntax

```
{
  "Name": "string",
  "ResourceId": "string",
  "URL": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

Name

The name of the client add-in.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `^.*$`

Required: Yes

ResourceId

The directory identifier for which to configure the client add-in.

Type: String

Length Constraints: Minimum length of 10. Maximum length of 65.

Pattern: `^(d-[0-9a-f]{8,63}$)|(wsd-[0-9a-z]{8,63}$)`

Required: Yes

URL

The endpoint URL of the Amazon Connect client add-in.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1024.

Pattern: `^(http|https)\:\/\/\S+`

Required: Yes

Response Syntax

```
{  
  "AddInId": "string"  
}
```

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

AddInId

The client add-in identifier.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `[a-f0-9]{8}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{12}`

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

ResourceAlreadyExistsException

The specified resource already exists.

HTTP Status Code: 400

ResourceCreationFailedException

The resource could not be created.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

CreateConnectionAlias

Creates the specified connection alias for use with cross-Region redirection. For more information, see [Cross-Region Redirection for Amazon WorkSpaces](#).

Request Syntax

```
{
  "ConnectionString": "string",
  "Tags": [
    {
      "Key": "string",
      "Value": "string"
    }
  ]
}
```

Request Parameters

The request accepts the following data in JSON format.

ConnectionString

A connection string in the form of a fully qualified domain name (FQDN), such as `www.example.com`.

Important

After you create a connection string, it is always associated to your AWS account. You cannot recreate the same connection string with a different account, even if you delete all instances of it from the original account. The connection string is globally reserved for your account.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Pattern: `^[.0-9a-zA-Z\-\]{1,255}$`

Required: Yes

Tags

The tags to associate with the connection alias.

Type: Array of [Tag](#) objects

Required: No

Response Syntax

```
{  
  "AliasId": "string"  
}
```

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

AliasId

The identifier of the connection alias.

Type: String

Length Constraints: Minimum length of 13. Maximum length of 68.

Pattern: `^wsca-[0-9a-z]{8,63}$`

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

InvalidResourceStateException

The state of the resource is not valid for this operation.

HTTP Status Code: 400

OperationNotSupportedException

This operation is not supported.

HTTP Status Code: 400

ResourceAlreadyExistsException

The specified resource already exists.

HTTP Status Code: 400

ResourceLimitExceededException

Your resource limits have been exceeded.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)

- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

CreatelpGroup

Creates an IP access control group.

An IP access control group provides you with the ability to control the IP addresses from which users are allowed to access their WorkSpaces. To specify the CIDR address ranges, add rules to your IP access control group and then associate the group with your directory. You can add rules when you create the group or at any time using [AuthorizeIpRules](#).

There is a default IP access control group associated with your directory. If you don't associate an IP access control group with your directory, the default group is used. The default group includes a default rule that allows users to access their WorkSpaces from anywhere. You cannot modify the default IP access control group for your directory.

Request Syntax

```
{
  "GroupDesc": "string",
  "GroupName": "string",
  "Tags": [
    {
      "Key": "string",
      "Value": "string"
    }
  ],
  "UserRules": [
    {
      "ipRule": "string",
      "ruleDesc": "string"
    }
  ]
}
```

Request Parameters

The request accepts the following data in JSON format.

[GroupDesc](#)

The description of the group.

Type: String

Required: No

GroupName

The name of the group.

Type: String

Required: Yes

Tags

The tags. Each WorkSpaces resource can have a maximum of 50 tags.

Type: Array of [Tag](#) objects

Required: No

UserRules

The rules to add to the group.

Type: Array of [IpRuleItem](#) objects

Required: No

Response Syntax

```
{  
  "GroupId": "string"  
}
```

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

GroupId

The identifier of the group.

Type: String

Pattern: `wsipg-[0-9a-z]{8,63}$`

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

ResourceAlreadyExistsException

The specified resource already exists.

HTTP Status Code: 400

ResourceCreationFailedException

The resource could not be created.

HTTP Status Code: 400

ResourceLimitExceededException

Your resource limits have been exceeded.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)

- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

CreateStandbyWorkspaces

Creates a standby WorkSpace in a secondary Region.

Request Syntax

```
{
  "PrimaryRegion": "string",
  "StandbyWorkspaces": [
    {
      "DataReplication": "string",
      "DirectoryId": "string",
      "PrimaryWorkspaceId": "string",
      "Tags": [
        {
          "Key": "string",
          "Value": "string"
        }
      ],
      "VolumeEncryptionKey": "string"
    }
  ]
}
```

Request Parameters

The request accepts the following data in JSON format.

PrimaryRegion

The Region of the primary WorkSpace.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 31.

Pattern: `^[-0-9a-z]{1,31}$`

Required: Yes

StandbyWorkspaces

Information about the standby WorkSpace to be created.

Type: Array of [StandbyWorkspace](#) objects

Required: Yes

Response Syntax

```
{
  "FailedStandbyRequests": [
    {
      "ErrorCode": "string",
      "ErrorMessage": "string",
      "StandbyWorkspaceRequest": {
        "DataReplication": "string",
        "DirectoryId": "string",
        "PrimaryWorkspaceId": "string",
        "Tags": [
          {
            "Key": "string",
            "Value": "string"
          }
        ],
        "VolumeEncryptionKey": "string"
      }
    }
  ],
  "PendingStandbyRequests": [
    {
      "DirectoryId": "string",
      "State": "string",
      "UserName": "string",
      "WorkspaceId": "string"
    }
  ]
}
```

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

FailedStandbyRequests

Information about the standby WorkSpace that could not be created.

Type: Array of [FailedCreateStandbyWorkspacesRequest](#) objects

PendingStandbyRequests

Information about the standby WorkSpace that was created.

Type: Array of [PendingCreateStandbyWorkspacesRequest](#) objects

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

OperationNotSupportedException

This operation is not supported.

HTTP Status Code: 400

ResourceLimitExceededException

Your resource limits have been exceeded.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

CreateTags

Creates the specified tags for the specified WorkSpaces resource.

Request Syntax

```
{
  "ResourceId": "string",
  "Tags": [
    {
      "Key": "string",
      "Value": "string"
    }
  ]
}
```

Request Parameters

The request accepts the following data in JSON format.

ResourceId

The identifier of the WorkSpaces resource. The supported resource types are WorkSpaces, registered directories, images, custom bundles, IP access control groups, and connection aliases.

Type: String

Length Constraints: Minimum length of 1.

Required: Yes

Tags

The tags. Each WorkSpaces resource can have a maximum of 50 tags.

Type: Array of [Tag](#) objects

Required: Yes

Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

ResourceLimitExceededException

Your resource limits have been exceeded.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

CreateUpdatedWorkspaceImage

Creates a new updated WorkSpace image based on the specified source image. The new updated WorkSpace image has the latest drivers and other updates required by the Amazon WorkSpaces components.

To determine which WorkSpace images need to be updated with the latest Amazon WorkSpaces requirements, use [DescribeWorkspacelImages](#).

Note

- Only Windows 10, Windows Server 2016, and Windows Server 2019 WorkSpace images can be programmatically updated at this time.
- Microsoft Windows updates and other application updates are not included in the update process.
- The source WorkSpace image is not deleted. You can delete the source image after you've verified your new updated image and created a new bundle.

Request Syntax

```
{
  "Description": "string",
  "Name": "string",
  "SourceImageId": "string",
  "Tags": [
    {
      "Key": "string",
      "Value": "string"
    }
  ]
}
```

Request Parameters

The request accepts the following data in JSON format.

Description

A description of whether updates for the WorkSpace image are available.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

Pattern: `^[a-zA-Z0-9_./() -]+$`

Required: Yes

Name

The name of the new updated WorkSpace image.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `^[a-zA-Z0-9_./()\-\]+$`

Required: Yes

SourceImageId

The identifier of the source WorkSpace image.

Type: String

Pattern: `wsi-[0-9a-z]{9,63}$`

Required: Yes

Tags

The tags that you want to add to the new updated WorkSpace image.

Note

To add tags at the same time when you're creating the updated image, you must create an IAM policy that grants your IAM user permissions to use `workspaces:CreateTags`.

Type: Array of [Tag](#) objects

Required: No

Response Syntax

```
{  
  "ImageId": "string"  
}
```

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

[ImageId](#)

The identifier of the new updated WorkSpace image.

Type: String

Pattern: `wsi-[0-9a-z]{9,63}$`

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

InvalidResourceStateException

The state of the resource is not valid for this operation.

HTTP Status Code: 400

OperationNotSupportedException

This operation is not supported.

HTTP Status Code: 400

ResourceAlreadyExistsException

The specified resource already exists.

HTTP Status Code: 400

ResourceLimitExceededException

Your resource limits have been exceeded.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

CreateWorkspaceBundle

Creates the specified Workspace bundle. For more information about creating Workspace bundles, see [Create a Custom WorkSpaces Image and Bundle](#).

Request Syntax

```
{
  "BundleDescription": "string",
  "BundleName": "string",
  "ComputeType": {
    "Name": "string"
  },
  "ImageId": "string",
  "RootStorage": {
    "Capacity": "string"
  },
  "Tags": [
    {
      "Key": "string",
      "Value": "string"
    }
  ],
  "UserStorage": {
    "Capacity": "string"
  }
}
```

Request Parameters

The request accepts the following data in JSON format.

BundleDescription

The description of the bundle.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Pattern: `^[a-zA-Z0-9_./() -]+$`

Required: Yes

BundleName

The name of the bundle.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `^[a-zA-Z0-9_./()\-\]+$`

Required: Yes

ComputeType

Describes the compute type of the bundle.

Type: [ComputeType](#) object

Required: Yes

ImageId

The identifier of the image that is used to create the bundle.

Type: String

Pattern: `wsi-[0-9a-z]{9,63}$`

Required: Yes

RootStorage

Describes the root volume for a WorkSpace bundle.

Type: [RootStorage](#) object

Required: No

Tags

The tags associated with the bundle.

Note

To add tags at the same time when you're creating the bundle, you must create an IAM policy that grants your IAM user permissions to use `workspaces:CreateTags`.

Type: Array of [Tag](#) objects

Required: No

[UserStorage](#)

Describes the user volume for a Workspace bundle.

Type: [UserStorage](#) object

Required: Yes

Response Syntax

```
{
  "WorkspaceBundle": {
    "BundleId": "string",
    "BundleType": "string",
    "ComputeType": {
      "Name": "string"
    },
    "CreationTime": number,
    "Description": "string",
    "ImageId": "string",
    "LastUpdatedTime": number,
    "Name": "string",
    "Owner": "string",
    "RootStorage": {
      "Capacity": "string"
    },
    "State": "string",
    "UserStorage": {
      "Capacity": "string"
    }
  }
}
```

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

WorkspaceBundle

Describes a Workspace bundle.

Type: [WorkspaceBundle](#) object

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

ResourceAlreadyExistsException

The specified resource already exists.

HTTP Status Code: 400

ResourceLimitExceededException

Your resource limits have been exceeded.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

ResourceUnavailableException

The specified resource is not available.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

CreateWorkpaceImage

Creates a new WorkSpace image from an existing WorkSpace.

Request Syntax

```
{
  "Description": "string",
  "Name": "string",
  "Tags": [
    {
      "Key": "string",
      "Value": "string"
    }
  ],
  "WorkspaceId": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

Description

The description of the new WorkSpace image.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

Pattern: `^[a-zA-Z0-9_./() -]+$`

Required: Yes

Name

The name of the new WorkSpace image.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `^[a-zA-Z0-9_./()\-\]+$`

Required: Yes

Tags

The tags that you want to add to the new Workspace image. To add tags when you're creating the image, you must create an IAM policy that grants your IAM user permission to use `workspaces:CreateTags`.

Type: Array of [Tag](#) objects

Required: No

WorkspaceId

The identifier of the source Workspace

Type: String

Pattern: `^ws-[0-9a-z]{8,63}$`

Required: Yes

Response Syntax

```
{
  "Created": number,
  "Description": "string",
  "ImageId": "string",
  "Name": "string",
  "OperatingSystem": {
    "Type": "string"
  },
  "OwnerAccountId": "string",
  "RequiredTenancy": "string",
  "State": "string"
}
```

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

Created

The date when the image was created.

Type: Timestamp

Description

The description of the image.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

Pattern: `^[a-zA-Z0-9_./() -]+$`

ImageId

The identifier of the new WorkSpace image.

Type: String

Pattern: `wsi-[0-9a-z]{9,63}$`

Name

The name of the image.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `^[a-zA-Z0-9_./()\-\]+$`

OperatingSystem

The operating system that the image is running.

Type: [OperatingSystem](#) object

OwnerAccountId

The identifier of the AWS account that owns the image.

Type: String

Pattern: `^\d{12}$`

RequiredTenancy

Specifies whether the image is running on dedicated hardware. When Bring Your Own License (BYOL) is enabled, this value is set to DEDICATED. For more information, see [Bring Your Own Windows Desktop Images](#).

Type: String

Valid Values: DEFAULT | DEDICATED

State

The availability status of the image.

Type: String

Valid Values: AVAILABLE | PENDING | ERROR

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

InvalidResourceStateException

The state of the resource is not valid for this operation.

HTTP Status Code: 400

OperationNotSupportedException

This operation is not supported.

HTTP Status Code: 400

ResourceAlreadyExistsException

The specified resource already exists.

HTTP Status Code: 400

ResourceLimitExceededException

Your resource limits have been exceeded.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

CreateWorkspaces

Creates one or more WorkSpaces.

This operation is asynchronous and returns before the WorkSpaces are created.

Note

- The MANUAL running mode value is only supported by Amazon WorkSpaces Core. Contact your account team to be allow-listed to use this value. For more information, see [Amazon WorkSpaces Core](#).
- You don't need to specify the PCOIP protocol for Linux bundles because WSP is the default protocol for those bundles.
- User-decoupled WorkSpaces are only supported by Amazon WorkSpaces Core.
- Review your running mode to ensure you are using one that is optimal for your needs and budget. For more information on switching running modes, see [Can I switch between hourly and monthly billing?](#)

Request Syntax

```
{
  "Workspaces": [
    {
      "BundleId": "string",
      "DirectoryId": "string",
      "RootVolumeEncryptionEnabled": boolean,
      "Tags": [
        {
          "Key": "string",
          "Value": "string"
        }
      ],
      "UserName": "string",
      "UserVolumeEncryptionEnabled": boolean,
      "VolumeEncryptionKey": "string",
      "WorkspaceName": "string",
      "WorkspaceProperties": {
        "ComputeTypeName": "string",
```

```
    "OperatingSystemName": "string",
    "Protocols": [ "string" ],
    "RootVolumeSizeGib": number,
    "RunningMode": "string",
    "RunningModeAutoStopTimeoutInMinutes": number,
    "UserVolumeSizeGib": number
  }
}
]
```

Request Parameters

The request accepts the following data in JSON format.

Workspaces

The WorkSpaces to create. You can specify up to 25 WorkSpaces.

Type: Array of [WorkspaceRequest](#) objects

Array Members: Minimum number of 1 item. Maximum number of 25 items.

Required: Yes

Response Syntax

```
{
  "FailedRequests": [
    {
      "ErrorCode": "string",
      "ErrorMessage": "string",
      "WorkspaceRequest": {
        "BundleId": "string",
        "DirectoryId": "string",
        "RootVolumeEncryptionEnabled": boolean,
        "Tags": [
          {
            "Key": "string",
            "Value": "string"
          }
        ],
        "UserName": "string",
```

```

    "UserVolumeEncryptionEnabled": boolean,
    "VolumeEncryptionKey": "string",
    "WorkspaceName": "string",
    "WorkspaceProperties": {
        "ComputeTypeName": "string",
        "OperatingSystemName": "string",
        "Protocols": [ "string" ],
        "RootVolumeSizeGib": number,
        "RunningMode": "string",
        "RunningModeAutoStopTimeoutInMinutes": number,
        "UserVolumeSizeGib": number
    }
}
],
"PendingRequests": [
{
    "BundleId": "string",
    "ComputerName": "string",
    "DataReplicationSettings": {
        "DataReplication": "string",
        "RecoverySnapshotTime": number
    },
    "DirectoryId": "string",
    "ErrorCode": "string",
    "ErrorMessage": "string",
    "IpAddress": "string",
    "ModificationStates": [
        {
            "Resource": "string",
            "State": "string"
        }
    ],
},
"RelatedWorkspaces": [
{
    "Region": "string",
    "State": "string",
    "Type": "string",
    "WorkspaceId": "string"
}
],
"RootVolumeEncryptionEnabled": boolean,
"StandbyWorkspacesProperties": [
{

```

```

        "DataReplication": "string",
        "RecoverySnapshotTime": number,
        "StandbyWorkspaceId": "string"
    }
],
"State": "string",
"SubnetId": "string",
"UserName": "string",
"UserVolumeEncryptionEnabled": boolean,
"VolumeEncryptionKey": "string",
"WorkspaceId": "string",
"WorkspaceName": "string",
"WorkspaceProperties": {
    "ComputeTypeName": "string",
    "OperatingSystemName": "string",
    "Protocols": [ "string" ],
    "RootVolumeSizeGib": number,
    "RunningMode": "string",
    "RunningModeAutoStopTimeoutInMinutes": number,
    "UserVolumeSizeGib": number
}
}
]
}

```

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

FailedRequests

Information about the WorkSpaces that could not be created.

Type: Array of [FailedCreateWorkspaceRequest](#) objects

PendingRequests

Information about the WorkSpaces that were created.

Because this operation is asynchronous, the identifier returned is not immediately available for use with other operations. For example, if you call [DescribeWorkspaces](#) before the WorkSpace is created, the information returned can be incomplete.

Type: Array of [Workspace](#) objects

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

ResourceLimitExceededException

Your resource limits have been exceeded.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

CreateWorkspacesPool

Creates a pool of WorkSpaces.

Request Syntax

```
{
  "ApplicationSettings": {
    "SettingsGroup": "string",
    "Status": "string"
  },
  "BundleId": "string",
  "Capacity": {
    "DesiredUserSessions": number
  },
  "Description": "string",
  "DirectoryId": "string",
  "PoolName": "string",
  "Tags": [
    {
      "Key": "string",
      "Value": "string"
    }
  ],
  "TimeoutSettings": {
    "DisconnectTimeoutInSeconds": number,
    "IdleDisconnectTimeoutInSeconds": number,
    "MaxUserDurationInSeconds": number
  }
}
```

Request Parameters

The request accepts the following data in JSON format.

ApplicationSettings

Indicates the application settings of the pool.

Type: [ApplicationSettingsRequest](#) object

Required: No

BundleId

The identifier of the bundle for the pool.

Type: String

Pattern: `^wsb-[0-9a-z]{8,63}$`

Required: Yes

Capacity

The user capacity of the pool.

Type: [Capacity](#) object

Required: Yes

Description

The pool description.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Pattern: `^[a-zA-Z0-9_./() -]+$`

Required: Yes

DirectoryId

The identifier of the directory for the pool.

Type: String

Length Constraints: Minimum length of 10. Maximum length of 65.

Pattern: `^(d-[0-9a-f]{8,63}$)|(wsd-[0-9a-z]{8,63}$)`

Required: Yes

PoolName

The name of the pool.

Type: String

Pattern: `^[A-Za-z0-9][A-Za-z0-9_.-]{0,63}$`

Required: Yes

Tags

The tags for the pool.

Type: Array of [Tag](#) objects

Required: No

TimeoutSettings

Indicates the timeout settings of the pool.

Type: [TimeoutSettings](#) object

Required: No

Response Syntax

```
{
  "WorkspacesPool": {
    "ApplicationSettings": {
      "S3BucketName": "string",
      "SettingsGroup": "string",
      "Status": "string"
    },
    "BundleId": "string",
    "CapacityStatus": {
      "ActiveUserSessions": number,
      "ActualUserSessions": number,
      "AvailableUserSessions": number,
      "DesiredUserSessions": number
    },
    "CreatedAt": number,
    "Description": "string",
    "DirectoryId": "string",
    "Errors": [
      {
        "ErrorCode": "string",
        "ErrorMessage": "string"
      }
    ]
  }
}
```

```
    ],  
    "PoolArn": "string",  
    "PoolId": "string",  
    "PoolName": "string",  
    "State": "string",  
    "TimeoutSettings": {  
        "DisconnectTimeoutInSeconds": number,  
        "IdleDisconnectTimeoutInSeconds": number,  
        "MaxUserDurationInSeconds": number  
    }  
  }  
}
```

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

WorkspacesPool

Indicates the pool to create.

Type: [WorkspacesPool](#) object

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

OperationNotSupportedException

This operation is not supported.

HTTP Status Code: 400

ResourceAlreadyExistsException

The specified resource already exists.

HTTP Status Code: 400

ResourceLimitExceededException

Your resource limits have been exceeded.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

DeleteAccountLinkInvitation

Deletes the account link invitation.

Request Syntax

```
{  
  "ClientToken": "string",  
  "LinkId": "string"  
}
```

Request Parameters

The request accepts the following data in JSON format.

ClientToken

A string of up to 64 ASCII characters that Amazon EFS uses to ensure idempotent creation.

Type: String

Pattern: `^[1,64]$`

Required: No

LinkId

The identifier of the account link.

Type: String

Pattern: `^link-.{8,24}$`

Required: Yes

Response Syntax

```
{  
  "AccountLink": {  
    "AccountLinkId": "string",  
    "AccountLinkStatus": "string",  
  }  
}
```

```
    "SourceAccountId": "string",  
    "TargetAccountId": "string"  
  }  
}
```

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

AccountLink

Information about the account link.

Type: [AccountLink](#) object

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

ConflictException

The TargetAccountId is already linked or invited.

HTTP Status Code: 400

InternalServerError

Unexpected server error occurred.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

ValidationException

You either haven't provided a `TargetAccountId` or are using the same value for `TargetAccountId` and `SourceAccountId`.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

DeleteClientBranding

Deletes customized client branding. Client branding allows you to customize your WorkSpace's client login portal. You can tailor your login portal company logo, the support email address, support link, link to reset password, and a custom message for users trying to sign in.

After you delete your customized client branding, your login portal reverts to the default client branding.

Request Syntax

```
{  
  "Platforms": [ "string" ],  
  "ResourceId": "string"  
}
```

Request Parameters

The request accepts the following data in JSON format.

Platforms

The device type for which you want to delete client branding.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 6 items.

Valid Values: DeviceTypeWindows | DeviceTypeOsx | DeviceTypeAndroid | DeviceTypeIos | DeviceTypeLinux | DeviceTypeWeb

Required: Yes

ResourceId

The directory identifier of the WorkSpace for which you want to delete client branding.

Type: String

Length Constraints: Minimum length of 10. Maximum length of 65.

Pattern: $^(d-[0-9a-f]{8,63}$)|(wsd-[0-9a-z]{8,63}$)$

Required: Yes

Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)

- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

DeleteConnectClientAddIn

Deletes a client-add-in for Amazon Connect that is configured within a directory.

Request Syntax

```
{
  "AddInId": "string",
  "ResourceId": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

AddInId

The identifier of the client add-in to delete.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `[a-f0-9]{8}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{12}`

Required: Yes

ResourceId

The directory identifier for which the client add-in is configured.

Type: String

Length Constraints: Minimum length of 10. Maximum length of 65.

Pattern: `^(d-[0-9a-f]{8,63}$)|(wsd-[0-9a-z]{8,63}$)`

Required: Yes

Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

DeleteConnectionAlias

Deletes the specified connection alias. For more information, see [Cross-Region Redirection for Amazon WorkSpaces](#).

Important

If you will no longer be using a fully qualified domain name (FQDN) as the registration code for your WorkSpaces users, you must take certain precautions to prevent potential security issues. For more information, see [Security Considerations if You Stop Using Cross-Region Redirection](#).

Note

To delete a connection alias that has been shared, the shared account must first disassociate the connection alias from any directories it has been associated with. Then you must unshare the connection alias from the account it has been shared with. You can delete a connection alias only after it is no longer shared with any accounts or associated with any directories.

Request Syntax

```
{
  "AliasId": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

AliasId

The identifier of the connection alias to delete.

Type: String

Length Constraints: Minimum length of 13. Maximum length of 68.

Pattern: `^wsca-[0-9a-z]{8,63}$`

Required: Yes

Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

InvalidResourceStateException

The state of the resource is not valid for this operation.

HTTP Status Code: 400

OperationNotSupportedException

This operation is not supported.

HTTP Status Code: 400

ResourceAssociatedException

The resource is associated with a directory.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

DeletelpGroup

Deletes the specified IP access control group.

You cannot delete an IP access control group that is associated with a directory.

Request Syntax

```
{  
  "GroupId": "string"  
}
```

Request Parameters

The request accepts the following data in JSON format.

GroupId

The identifier of the IP access control group.

Type: String

Pattern: `wsipg-[0-9a-z]{8,63}$`

Required: Yes

Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

ResourceAssociatedException

The resource is associated with a directory.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

DeleteTags

Deletes the specified tags from the specified WorkSpaces resource.

Request Syntax

```
{
  "ResourceId": "string",
  "TagKeys": [ "string" ]
}
```

Request Parameters

The request accepts the following data in JSON format.

ResourceId

The identifier of the WorkSpaces resource. The supported resource types are WorkSpaces, registered directories, images, custom bundles, IP access control groups, and connection aliases.

Type: String

Length Constraints: Minimum length of 1.

Required: Yes

TagKeys

The tag keys.

Type: Array of strings

Length Constraints: Minimum length of 1.

Required: Yes

Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

DeleteWorkspaceBundle

Deletes the specified Workspace bundle. For more information about deleting Workspace bundles, see [Delete a Custom WorkSpaces Bundle or Image](#).

Request Syntax

```
{
  "BundleId": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

BundleId

The identifier of the bundle.

Type: String

Pattern: `^wsb-[0-9a-z]{8,63}$`

Required: No

Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

ResourceAssociatedException

The resource is associated with a directory.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

DeleteWorkpaceImage

Deletes the specified image from your account. To delete an image, you must first delete any bundles that are associated with the image and unshare the image if it is shared with other accounts.

Request Syntax

```
{  
  "ImageId": "string"  
}
```

Request Parameters

The request accepts the following data in JSON format.

ImageId

The identifier of the image.

Type: String

Pattern: wsi-[0-9a-z]{9,63}\$

Required: Yes

Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidResourceStateException

The state of the resource is not valid for this operation.

HTTP Status Code: 400

ResourceAssociatedException

The resource is associated with a directory.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

DeployWorkspaceApplications

Deploys associated applications to the specified WorkSpace

Request Syntax

```
{  
  "Force": boolean,  
  "WorkspaceId": "string"  
}
```

Request Parameters

The request accepts the following data in JSON format.

Force

Indicates whether the force flag is applied for the specified WorkSpace. When the force flag is enabled, it allows previously failed deployments to be retried.

Type: Boolean

Required: No

WorkspaceId

The identifier of the WorkSpace.

Type: String

Pattern: `^ws-[0-9a-z]{8,63}$`

Required: Yes

Response Syntax

```
{  
  "Deployment": {  
    "Associations": [  
      {
```

```
    "AssociatedResourceId": "string",
    "AssociatedResourceType": "string",
    "Created": number,
    "LastUpdatedTime": number,
    "State": "string",
    "StateReason": {
      "ErrorCode": "string",
      "ErrorMessage": "string"
    },
    "WorkspaceId": "string"
  }
]
}
```

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

Deployment

The list of deployed associations and information about them.

Type: [WorkspaceApplicationDeployment](#) object

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

IncompatibleApplicationsException

The specified application is not compatible with the resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

OperationNotSupportedException

This operation is not supported.

HTTP Status Code: 400

ResourceInUseException

The specified resource is currently in use.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

DeregisterWorkspaceDirectory

Deregisters the specified directory. This operation is asynchronous and returns before the WorkSpace directory is deregistered. If any WorkSpaces are registered to this directory, you must remove them before you can deregister the directory.

Note

Simple AD and AD Connector are made available to you free of charge to use with WorkSpaces. If there are no WorkSpaces being used with your Simple AD or AD Connector directory for 30 consecutive days, this directory will be automatically deregistered for use with Amazon WorkSpaces, and you will be charged for this directory as per the [AWS Directory Service pricing terms](#).

To delete empty directories, see [Delete the Directory for Your WorkSpaces](#). If you delete your Simple AD or AD Connector directory, you can always create a new one when you want to start using WorkSpaces again.

Request Syntax

```
{
  "DirectoryId": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

[DirectoryId](#)

The identifier of the directory. If any WorkSpaces are registered to this directory, you must remove them before you deregister the directory, or you will receive an `OperationNotSupportedException` error.

Type: String

Length Constraints: Minimum length of 10. Maximum length of 65.

Pattern: `^(d-[0-9a-f]{8,63}$)|(wsd-[0-9a-z]{8,63}$)`

Required: Yes

Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

InvalidResourceStateException

The state of the resource is not valid for this operation.

HTTP Status Code: 400

OperationNotSupportedException

This operation is not supported.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

DescribeAccount

Retrieves a list that describes the configuration of Bring Your Own License (BYOL) for the specified account.

Response Syntax

```
{
  "DedicatedTenancyAccountType": "string",
  "DedicatedTenancyManagementCidrRange": "string",
  "DedicatedTenancySupport": "string"
}
```

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

DedicatedTenancyAccountType

The type of linked account.

Type: String

Valid Values: SOURCE_ACCOUNT | TARGET_ACCOUNT

DedicatedTenancyManagementCidrRange

The IP address range, specified as an IPv4 CIDR block, used for the management network interface.

The management network interface is connected to a secure Amazon WorkSpaces management network. It is used for interactive streaming of the Workspace desktop to Amazon WorkSpaces clients, and to allow Amazon WorkSpaces to manage the Workspace.

Type: String

Pattern: (^([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])\.([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])\.0\.0)(\/(16\$))\$

DedicatedTenancySupport

The status of BYOL (whether BYOL is enabled or disabled).

Type: String

Valid Values: ENABLED | DISABLED

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

DescribeAccountModifications

Retrieves a list that describes modifications to the configuration of Bring Your Own License (BYOL) for the specified account.

Request Syntax

```
{
  "NextToken": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

NextToken

If you received a NextToken from a previous call that was paginated, provide this token to receive the next set of results.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Required: No

Response Syntax

```
{
  "AccountModifications": [
    {
      "DedicatedTenancyManagementCidrRange": "string",
      "DedicatedTenancySupport": "string",
      "ErrorCode": "string",
      "ErrorMessage": "string",
      "ModificationState": "string",
      "StartTime": number
    }
  ],
  "NextToken": "string"
}
```

```
}
```

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

AccountModifications

The list of modifications to the configuration of BYOL.

Type: Array of [AccountModification](#) objects

NextToken

The token to use to retrieve the next page of results. This value is null when there are no more results to return.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)

- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

DescribeApplicationAssociations

Describes the associations between the application and the specified associated resources.

Request Syntax

```
{
  "ApplicationId": "string",
  "AssociatedResourceTypes": [ "string" ],
  "MaxResults": number,
  "NextToken": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

ApplicationId

The identifier of the specified application.

Type: String

Pattern: `^wsa-[0-9a-z]{8,63}$`

Required: Yes

AssociatedResourceTypes

The resource type of the associated resources.

Type: Array of strings

Valid Values: WORKSPACE | BUNDLE | IMAGE

Required: Yes

MaxResults

The maximum number of associations to return.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 25.

Required: No

NextToken

If you received a NextToken from a previous call that was paginated, provide this token to receive the next set of results.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Required: No

Response Syntax

```
{
  "Associations": [
    {
      "ApplicationId": "string",
      "AssociatedResourceId": "string",
      "AssociatedResourceType": "string",
      "Created": number,
      "LastUpdatedTime": number,
      "State": "string",
      "StateReason": {
        "ErrorCode": "string",
        "ErrorMessage": "string"
      }
    }
  ],
  "NextToken": "string"
}
```

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

Associations

List of associations and information about them.

Type: Array of [ApplicationResourceAssociation](#) objects

NextToken

If you received a NextToken from a previous call that was paginated, provide this token to receive the next set of results.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

OperationNotSupportedException

This operation is not supported.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

DescribeApplications

Describes the specified applications by filtering based on their compute types, license availability, operating systems, and owners.

Request Syntax

```
{
  "ApplicationIds": [ "string" ],
  "ComputeTypeNames": [ "string" ],
  "LicenseType": "string",
  "MaxResults": number,
  "NextToken": "string",
  "OperatingSystemNames": [ "string" ],
  "Owner": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

ApplicationIds

The identifiers of one or more applications.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 25 items.

Pattern: `^wsa-[0-9a-z]{8,63}$`

Required: No

ComputeTypeNames

The compute types supported by the applications.

Type: Array of strings

Valid Values: VALUE | STANDARD | PERFORMANCE | POWER | GRAPHICS | POWERPRO | GRAPHICSPRO | GRAPHICS_G4DN | GRAPHICSPRO_G4DN

Required: No

LicenseType

The license availability for the applications.

Type: String

Valid Values: LICENSED | UNLICENSED

Required: No

MaxResults

The maximum number of applications to return.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 25.

Required: No

NextToken

If you received a NextToken from a previous call that was paginated, provide this token to receive the next set of results.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Required: No

OperatingSystemNames

The operating systems supported by the applications.

Type: Array of strings

Valid Values: AMAZON_LINUX_2 | UBUNTU_18_04 | UBUNTU_20_04 | UBUNTU_22_04 | UNKNOWN | WINDOWS_10 | WINDOWS_11 | WINDOWS_7 | WINDOWS_SERVER_2016 | WINDOWS_SERVER_2019 | WINDOWS_SERVER_2022 | RHEL_8

Required: No

Owner

The owner of the applications.

Type: String

Pattern: `^\d{12}|AMAZON$`

Required: No

Response Syntax

```
{
  "Applications": [
    {
      "ApplicationId": "string",
      "Created": number,
      "Description": "string",
      "LicenseType": "string",
      "Name": "string",
      "Owner": "string",
      "State": "string",
      "SupportedComputeTypeNames": [ "string" ],
      "SupportedOperatingSystemNames": [ "string" ]
    }
  ],
  "NextToken": "string"
}
```

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

Applications

List of information about the specified applications.

Type: Array of [WorkspaceApplication](#) objects

NextToken

If you received a NextToken from a previous call that was paginated, provide this token to receive the next set of results.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

OperationNotSupportedException

This operation is not supported.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)

- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

DescribeBundleAssociations

Describes the associations between the applications and the specified bundle.

Request Syntax

```
{  
  "AssociatedResourceTypes": [ "string" ],  
  "BundleId": "string"  
}
```

Request Parameters

The request accepts the following data in JSON format.

[AssociatedResourceTypes](#)

The resource types of the associated resource.

Type: Array of strings

Valid Values: APPLICATION

Required: Yes

[BundleId](#)

The identifier of the bundle.

Type: String

Pattern: ^wsb-[0-9a-z]{8,63}\$

Required: Yes

Response Syntax

```
{  
  "Associations": [  
    {  
      "AssociatedResourceId": "string",  
    }  
  ]  
}
```

```
    "AssociatedResourceType": "string",
    "BundleId": "string",
    "Created": number,
    "LastUpdatedTime": number,
    "State": "string",
    "StateReason": {
      "ErrorCode": "string",
      "ErrorMessage": "string"
    }
  }
]
```

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

Associations

List of information about the specified associations.

Type: Array of [BundleResourceAssociation](#) objects

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

OperationNotSupportedException

This operation is not supported.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

DescribeClientBranding

Describes the specified client branding. Client branding allows you to customize the log in page of various device types for your users. You can add your company logo, the support email address, support link, link to reset password, and a custom message for users trying to sign in.

Note

Only device types that have branding information configured will be shown in the response.

Request Syntax

```
{
  "ResourceId": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

ResourceId

The directory identifier of the WorkSpace for which you want to view client branding information.

Type: String

Length Constraints: Minimum length of 10. Maximum length of 65.

Pattern: $^(d-[0-9a-f]{8,63})|(wsd-[0-9a-z]{8,63})$

Required: Yes

Response Syntax

```
{
  "DeviceTypeAndroid": {
    "ForgotPasswordLink": "string",
```

```
    "LoginMessage": {
      "string" : "string"
    },
    "LogoUrl": "string",
    "SupportEmail": "string",
    "SupportLink": "string"
  },
  "DeviceTypeIos": {
    "ForgotPasswordLink": "string",
    "LoginMessage": {
      "string" : "string"
    },
    "Logo2xUrl": "string",
    "Logo3xUrl": "string",
    "LogoUrl": "string",
    "SupportEmail": "string",
    "SupportLink": "string"
  },
  "DeviceTypeLinux": {
    "ForgotPasswordLink": "string",
    "LoginMessage": {
      "string" : "string"
    },
    "LogoUrl": "string",
    "SupportEmail": "string",
    "SupportLink": "string"
  },
  "DeviceTypeOsx": {
    "ForgotPasswordLink": "string",
    "LoginMessage": {
      "string" : "string"
    },
    "LogoUrl": "string",
    "SupportEmail": "string",
    "SupportLink": "string"
  },
  "DeviceTypeWeb": {
    "ForgotPasswordLink": "string",
    "LoginMessage": {
      "string" : "string"
    },
    "LogoUrl": "string",
    "SupportEmail": "string",
    "SupportLink": "string"
  }
```

```
},
  "DeviceTypeWindows": {
    "ForgotPasswordLink": "string",
    "LoginMessage": {
      "string" : "string"
    },
    "LogoUrl": "string",
    "SupportEmail": "string",
    "SupportLink": "string"
  }
}
```

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

[DeviceTypeAndroid](#)

The branding information for Android devices.

Type: [DefaultClientBrandingAttributes](#) object

[DeviceTypeIos](#)

The branding information for iOS devices.

Type: [IosClientBrandingAttributes](#) object

[DeviceTypeLinux](#)

The branding information for Linux devices.

Type: [DefaultClientBrandingAttributes](#) object

[DeviceTypeOsx](#)

The branding information for macOS devices.

Type: [DefaultClientBrandingAttributes](#) object

[DeviceTypeWeb](#)

The branding information for Web access.

Type: [DefaultClientBrandingAttributes](#) object

[DeviceTypeWindows](#)

The branding information for Windows devices.

Type: [DefaultClientBrandingAttributes](#) object

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)

- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

DescribeClientProperties

Retrieves a list that describes one or more specified Amazon WorkSpaces clients.

Request Syntax

```
{
  "ResourceIds": [ "string" ]
}
```

Request Parameters

The request accepts the following data in JSON format.

ResourceIds

The resource identifier, in the form of directory IDs.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 25 items.

Length Constraints: Minimum length of 1.

Required: Yes

Response Syntax

```
{
  "ClientPropertiesList": [
    {
      "ClientProperties": {
        "LogUploadEnabled": "string",
        "ReconnectEnabled": "string"
      },
      "ResourceId": "string"
    }
  ]
}
```

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

[ClientPropertiesList](#)

Information about the specified Amazon WorkSpaces clients.

Type: Array of [ClientPropertiesResult](#) objects

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)

- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

DescribeConnectClientAddIns

Retrieves a list of Amazon Connect client add-ins that have been created.

Request Syntax

```
{
  "MaxResults": number,
  "NextToken": "string",
  "ResourceId": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

MaxResults

The maximum number of items to return.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 25.

Required: No

NextToken

If you received a NextToken from a previous call that was paginated, provide this token to receive the next set of results.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Required: No

ResourceId

The directory identifier for which the client add-in is configured.

Type: String

Length Constraints: Minimum length of 10. Maximum length of 65.

Pattern: `^(d-[0-9a-f]{8,63}$)|(wsd-[0-9a-z]{8,63}$)`

Required: Yes

Response Syntax

```
{
  "AddIns": [
    {
      "AddInId": "string",
      "Name": "string",
      "ResourceId": "string",
      "URL": "string"
    }
  ],
  "NextToken": "string"
}
```

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

AddIns

Information about client add-ins.

Type: Array of [ConnectClientAddIn](#) objects

NextToken

The token to use to retrieve the next page of results. This value is null when there are no more results to return.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

DescribeConnectionAliases

Retrieves a list that describes the connection aliases used for cross-Region redirection. For more information, see [Cross-Region Redirection for Amazon WorkSpaces](#).

Request Syntax

```
{
  "AliasIds": [ "string" ],
  "Limit": number,
  "NextToken": "string",
  "ResourceId": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

AliasIds

The identifiers of the connection aliases to describe.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 25 items.

Length Constraints: Minimum length of 13. Maximum length of 68.

Pattern: `^wsca-[0-9a-z]{8,63}$`

Required: No

Limit

The maximum number of connection aliases to return.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 25.

Required: No

NextToken

If you received a NextToken from a previous call that was paginated, provide this token to receive the next set of results.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Required: No

ResourceId

The identifier of the directory associated with the connection alias.

Type: String

Length Constraints: Minimum length of 1.

Required: No

Response Syntax

```
{
  "ConnectionAliases": [
    {
      "AliasId": "string",
      "Associations": [
        {
          "AssociatedAccountId": "string",
          "AssociationStatus": "string",
          "ConnectionIdentifier": "string",
          "ResourceId": "string"
        }
      ],
      "ConnectionString": "string",
      "OwnerAccountId": "string",
      "State": "string"
    }
  ],
  "NextToken": "string"
}
```

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

ConnectionAliases

Information about the specified connection aliases.

Type: Array of [ConnectionAlias](#) objects

Array Members: Minimum number of 1 item. Maximum number of 25 items.

NextToken

The token to use to retrieve the next page of results. This value is null when there are no more results to return.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

OperationNotSupportedException

This operation is not supported.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

DescribeConnectionAliasPermissions

Describes the permissions that the owner of a connection alias has granted to another AWS account for the specified connection alias. For more information, see [Cross-Region Redirection for Amazon WorkSpaces](#).

Request Syntax

```
{
  "AliasId": "string",
  "MaxResults": number,
  "NextToken": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

AliasId

The identifier of the connection alias.

Type: String

Length Constraints: Minimum length of 13. Maximum length of 68.

Pattern: `^wsca-[0-9a-z]{8,63}$`

Required: Yes

MaxResults

The maximum number of results to return.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 25.

Required: No

NextToken

If you received a NextToken from a previous call that was paginated, provide this token to receive the next set of results.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Required: No

Response Syntax

```
{
  "AliasId": "string",
  "ConnectionAliasPermissions": [
    {
      "AllowAssociation": boolean,
      "SharedAccountId": "string"
    }
  ],
  "NextToken": "string"
}
```

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

AliasId

The identifier of the connection alias.

Type: String

Length Constraints: Minimum length of 13. Maximum length of 68.

Pattern: `^wsca-[0-9a-z]{8,63}$`

ConnectionAliasPermissions

The permissions associated with a connection alias.

Type: Array of [ConnectionAliasPermission](#) objects

Array Members: Minimum number of 1 item. Maximum number of 25 items.

NextToken

The token to use to retrieve the next page of results. This value is null when there are no more results to return.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

OperationNotSupportedException

This operation is not supported.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)

- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

DescribeImageAssociations

Describes the associations between the applications and the specified image.

Request Syntax

```
{  
  "AssociatedResourceTypes": [ "string" ],  
  "ImageId": "string"  
}
```

Request Parameters

The request accepts the following data in JSON format.

AssociatedResourceTypes

The resource types of the associated resource.

Type: Array of strings

Valid Values: APPLICATION

Required: Yes

ImageId

The identifier of the image.

Type: String

Pattern: wsi-[0-9a-z]{9,63}\$

Required: Yes

Response Syntax

```
{  
  "Associations": [  
    {  
      "AssociatedResourceId": "string",
```

```
    "AssociatedResourceType": "string",
    "Created": number,
    "ImageId": "string",
    "LastUpdatedTime": number,
    "State": "string",
    "StateReason": {
      "ErrorCode": "string",
      "ErrorMessage": "string"
    }
  }
]
```

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

Associations

List of information about the specified associations.

Type: Array of [ImageResourceAssociation](#) objects

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

OperationNotSupportedException

This operation is not supported.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

DescribeGroups

Describes one or more of your IP access control groups.

Request Syntax

```
{
  "GroupIds": [ "string" ],
  "MaxResults": number,
  "NextToken": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

GroupIds

The identifiers of one or more IP access control groups.

Type: Array of strings

Pattern: `wsipg-[0-9a-z]{8,63}$`

Required: No

MaxResults

The maximum number of items to return.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 25.

Required: No

NextToken

If you received a NextToken from a previous call that was paginated, provide this token to receive the next set of results.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Required: No

Response Syntax

```
{
  "NextToken": "string",
  "Result": [
    {
      "groupDesc": "string",
      "groupId": "string",
      "groupName": "string",
      "userRules": [
        {
          "ipRule": "string",
          "ruleDesc": "string"
        }
      ]
    }
  ]
}
```

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

NextToken

The token to use to retrieve the next page of results. This value is null when there are no more results to return.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Result

Information about the IP access control groups.

Type: Array of [WorkspacesIpGroup](#) objects

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

DescribeTags

Describes the specified tags for the specified WorkSpaces resource.

Request Syntax

```
{
  "ResourceId": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

[ResourceId](#)

The identifier of the WorkSpaces resource. The supported resource types are WorkSpaces, registered directories, images, custom bundles, IP access control groups, and connection aliases.

Type: String

Length Constraints: Minimum length of 1.

Required: Yes

Response Syntax

```
{
  "TagList": [
    {
      "Key": "string",
      "Value": "string"
    }
  ]
}
```

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

TagList

The tags.

Type: Array of [Tag](#) objects

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

DescribeWorkspaceAssociations

Describes the associations between applications and the specified WorkSpace.

Request Syntax

```
{  
  "AssociatedResourceTypes": [ "string" ],  
  "WorkspaceId": "string"  
}
```

Request Parameters

The request accepts the following data in JSON format.

AssociatedResourceTypes

The resource types of the associated resources.

Type: Array of strings

Valid Values: APPLICATION

Required: Yes

WorkspaceId

The identifier of the WorkSpace.

Type: String

Pattern: `^ws-[0-9a-z]{8,63}$`

Required: Yes

Response Syntax

```
{  
  "Associations": [  
    {  
      "AssociatedResourceId": "string",  
    }  
  ]  
}
```

```
    "AssociatedResourceType": "string",
    "Created": number,
    "LastUpdatedTime": number,
    "State": "string",
    "StateReason": {
      "ErrorCode": "string",
      "ErrorMessage": "string"
    },
    "WorkspaceId": "string"
  }
]
```

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

Associations

List of information about the specified associations.

Type: Array of [WorkspaceResourceAssociation](#) objects

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

OperationNotSupportedException

This operation is not supported.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

DescribeWorkspaceBundles

Retrieves a list that describes the available WorkSpace bundles.

You can filter the results using either bundle ID or owner, but not both.

Request Syntax

```
{
  "BundleIds": [ "string" ],
  "NextToken": "string",
  "Owner": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

BundleIds

The identifiers of the bundles. You cannot combine this parameter with any other filter.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 25 items.

Pattern: `^wsb-[0-9a-z]{8,63}$`

Required: No

NextToken

The token for the next set of results. (You received this token from a previous call.)

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Required: No

Owner

The owner of the bundles. You cannot combine this parameter with any other filter.

To describe the bundles provided by AWS, specify AMAZON. To describe the bundles that belong to your account, don't specify a value.

Type: String

Required: No

Response Syntax

```
{
  "Bundles": [
    {
      "BundleId": "string",
      "BundleType": "string",
      "ComputeType": {
        "Name": "string"
      },
      "CreationTime": number,
      "Description": "string",
      "ImageId": "string",
      "LastUpdatedTime": number,
      "Name": "string",
      "Owner": "string",
      "RootStorage": {
        "Capacity": "string"
      },
      "State": "string",
      "UserStorage": {
        "Capacity": "string"
      }
    }
  ],
  "NextToken": "string"
}
```

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

Bundles

Information about the bundles.

Type: Array of [WorkspaceBundle](#) objects

NextToken

The token to use to retrieve the next page of results. This value is null when there are no more results to return. This token is valid for one day and must be used within that time frame.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)

- [AWS SDK for Ruby V3](#)

DescribeWorkspaceDirectories

Describes the available directories that are registered with Amazon WorkSpaces.

Request Syntax

```
{
  "DirectoryIds": [ "string" ],
  "Limit": number,
  "NextToken": "string",
  "WorkspaceDirectoryNames": [ "string" ]
}
```

Request Parameters

The request accepts the following data in JSON format.

DirectoryIds

The identifiers of the directories. If the value is null, all directories are retrieved.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 25 items.

Length Constraints: Minimum length of 10. Maximum length of 65.

Pattern: $^(d-[0-9a-f]{8,63}$)|(wsd-[0-9a-z]{8,63}$)$

Required: No

Limit

The maximum number of directories to return.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 25.

Required: No

NextToken

If you received a NextToken from a previous call that was paginated, provide this token to receive the next set of results.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Required: No

WorkspaceDirectoryNames

The names of the Workspace directories.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 25 items.

Pattern: `^[a-zA-Z0-9][a-zA-Z0-9_.\s-]{1,64}$`

Required: No

Response Syntax

```
{
  "Directories": [
    {
      "ActiveDirectoryConfig": {
        "DomainName": "string",
        "ServiceAccountSecretArn": "string"
      },
      "Alias": "string",
      "CertificateBasedAuthProperties": {
        "CertificateAuthorityArn": "string",
        "Status": "string"
      },
      "CustomerUserName": "string",
      "DirectoryId": "string",
      "DirectoryName": "string",
      "DirectoryType": "string",
      "DnsIpAddresses": [ "string ],
      "ErrorMessage": "string",
      "IamRoleId": "string",
      "ipGroupIds": [ "string ],
      "RegistrationCode": "string",
      "SamlProperties": {
        "RelayStateParameterName": "string",
        "Status": "string",
```

```
    "UserAccessUrl": "string"
  },
  "SelfservicePermissions": {
    "ChangeComputeType": "string",
    "IncreaseVolumeSize": "string",
    "RebuildWorkspace": "string",
    "RestartWorkspace": "string",
    "SwitchRunningMode": "string"
  },
  "State": "string",
  "StreamingProperties": {
    "StorageConnectors": [
      {
        "ConnectorType": "string",
        "Status": "string"
      }
    ],
    "StreamingExperiencePreferredProtocol": "string",
    "UserSettings": [
      {
        "Action": "string",
        "MaximumLength": number,
        "Permission": "string"
      }
    ]
  },
  "SubnetIds": [ "string" ],
  "Tenancy": "string",
  "UserIdentityType": "string",
  "WorkspaceAccessProperties": {
    "DeviceTypeAndroid": "string",
    "DeviceTypeChromeOs": "string",
    "DeviceTypeIos": "string",
    "DeviceTypeLinux": "string",
    "DeviceTypeOsx": "string",
    "DeviceTypeWeb": "string",
    "DeviceTypeWindows": "string",
    "DeviceTypeZeroClient": "string"
  },
  "WorkspaceCreationProperties": {
    "CustomSecurityGroupId": "string",
    "DefaultOu": "string",
    "EnableInternetAccess": boolean,
    "EnableMaintenanceMode": boolean,
```

```
        "EnableWorkDocs": boolean,
        "InstanceIamRoleArn": "string",
        "UserEnabledAsLocalAdministrator": boolean
    },
    "WorkspaceDirectoryDescription": "string",
    "WorkspaceDirectoryName": "string",
    "WorkspaceSecurityGroupId": "string",
    "WorkspaceType": "string"
}
],
"NextToken": "string"
}
```

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

Directories

Information about the directories.

Type: Array of [WorkspaceDirectory](#) objects

NextToken

The token to use to retrieve the next page of results. This value is null when there are no more results to return.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

DescribeWorkspaceImagePermissions

Describes the permissions that the owner of an image has granted to other AWS accounts for an image.

Request Syntax

```
{
  "ImageId": "string",
  "MaxResults": number,
  "NextToken": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

ImageId

The identifier of the image.

Type: String

Pattern: wsi-[0-9a-z]{9,63}\$

Required: Yes

MaxResults

The maximum number of items to return.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 25.

Required: No

NextToken

If you received a NextToken from a previous call that was paginated, provide this token to receive the next set of results.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Required: No

Response Syntax

```
{
  "ImageId": "string",
  "ImagePermissions": [
    {
      "SharedAccountId": "string"
    }
  ],
  "NextToken": "string"
}
```

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

ImageId

The identifier of the image.

Type: String

Pattern: `wsi-[0-9a-z]{9,63}$`

ImagePermissions

The identifiers of the AWS accounts that the image has been shared with.

Type: Array of [ImagePermission](#) objects

NextToken

The token to use to retrieve the next page of results. This value is null when there are no more results to return.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

DescribeWorkpaceImages

Retrieves a list that describes one or more specified images, if the image identifiers are provided. Otherwise, all images in the account are described.

Request Syntax

```
{
  "ImageIds": [ "string" ],
  "ImageType": "string",
  "MaxResults": number,
  "NextToken": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

ImageIds

The identifier of the image.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 25 items.

Pattern: `wsi-[0-9a-z]{9,63}$`

Required: No

ImageType

The type (owned or shared) of the image.

Type: String

Valid Values: OWNED | SHARED

Required: No

MaxResults

The maximum number of items to return.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 25.

Required: No

NextToken

If you received a NextToken from a previous call that was paginated, provide this token to receive the next set of results.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Required: No

Response Syntax

```
{
  "Images": [
    {
      "Created": number,
      "Description": "string",
      "ErrorCode": "string",
      "ErrorDetails": [
        {
          "ErrorCode": "string",
          "ErrorMessage": "string"
        }
      ],
      "ErrorMessage": "string",
      "ImageId": "string",
      "Name": "string",
      "OperatingSystem": {
        "Type": "string"
      },
      "OwnerAccountId": "string",
      "RequiredTenancy": "string",
      "State": "string",
      "Updates": {
        "Description": "string",
        "UpdateAvailable": boolean
      }
    }
  ]
}
```

```
    }  
  }  
],  
  "NextToken": "string"  
}
```

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

Images

Information about the images.

Type: Array of [WorkspaceImage](#) objects

NextToken

The token to use to retrieve the next page of results. This value is null when there are no more results to return.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

DescribeWorkspaces

Describes the specified WorkSpaces.

You can filter the results by using the bundle identifier, directory identifier, or owner, but you can specify only one filter at a time.

Request Syntax

```
{
  "BundleId": "string",
  "DirectoryId": "string",
  "Limit": number,
  "NextToken": "string",
  "UserName": "string",
  "WorkspaceIds": [ "string" ],
  "WorkspaceName": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

BundleId

The identifier of the bundle. All WorkSpaces that are created from this bundle are retrieved. You cannot combine this parameter with any other filter.

Type: String

Pattern: `^wsb-[0-9a-z]{8,63}$`

Required: No

DirectoryId

The identifier of the directory. In addition, you can optionally specify a specific directory user (see `UserName`). You cannot combine this parameter with any other filter.

Type: String

Length Constraints: Minimum length of 10. Maximum length of 65.

Pattern: $^(d-[0-9a-f]{8,63})|(wsd-[0-9a-z]{8,63})$

Required: No

Limit

The maximum number of items to return.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 25.

Required: No

NextToken

If you received a NextToken from a previous call that was paginated, provide this token to receive the next set of results.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Required: No

UserName

The name of the directory user. You must specify this parameter with DirectoryId.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 63.

Required: No

WorkspaceIds

The identifiers of the WorkSpaces. You cannot combine this parameter with any other filter.

Because the [CreateWorkspaces](#) operation is asynchronous, the identifier it returns is not immediately available. If you immediately call [DescribeWorkspaces](#) with this identifier, no information is returned.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 25 items.

Pattern: `^ws-[0-9a-z]{8,63}$`

Required: No

WorkspaceName

The name of the user-decoupled WorkSpace.

Type: String

Pattern: `^[a-zA-Z0-9_()][a-zA-Z0-9_().-]{1,63}$`

Required: No

Response Syntax

```
{
  "NextToken": "string",
  "Workspaces": [
    {
      "BundleId": "string",
      "ComputerName": "string",
      "DataReplicationSettings": {
        "DataReplication": "string",
        "RecoverySnapshotTime": number
      },
      "DirectoryId": "string",
      "ErrorCode": "string",
      "ErrorMessage": "string",
      "IpAddress": "string",
      "ModificationStates": [
        {
          "Resource": "string",
          "State": "string"
        }
      ],
      "RelatedWorkspaces": [
        {
          "Region": "string",
          "State": "string",
          "Type": "string",
          "WorkspaceId": "string"
        }
      ]
    }
  ]
}
```

```

    ],
    "RootVolumeEncryptionEnabled": boolean,
    "StandbyWorkspacesProperties": [
      {
        "DataReplication": "string",
        "RecoverySnapshotTime": number,
        "StandbyWorkspaceId": "string"
      }
    ],
    "State": "string",
    "SubnetId": "string",
    "UserName": "string",
    "UserVolumeEncryptionEnabled": boolean,
    "VolumeEncryptionKey": "string",
    "WorkspaceId": "string",
    "WorkspaceName": "string",
    "WorkspaceProperties": {
      "ComputeTypeName": "string",
      "OperatingSystemName": "string",
      "Protocols": [ "string " ],
      "RootVolumeSizeGib": number,
      "RunningMode": "string",
      "RunningModeAutoStopTimeoutInMinutes": number,
      "UserVolumeSizeGib": number
    }
  }
}
]
}

```

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

NextToken

The token to use to retrieve the next page of results. This value is null when there are no more results to return.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Workspaces

Information about the WorkSpaces.

Because [CreateWorkspaces](#) is an asynchronous operation, some of the returned information could be incomplete.

Type: Array of [Workspace](#) objects

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

ResourceUnavailableException

The specified resource is not available.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)

- [AWS SDK for Ruby V3](#)

DescribeWorkspacesConnectionStatus

Describes the connection status of the specified WorkSpaces.

Request Syntax

```
{  
  "NextToken": "string",  
  "WorkspaceIds": [ "string" ]  
}
```

Request Parameters

The request accepts the following data in JSON format.

NextToken

If you received a NextToken from a previous call that was paginated, provide this token to receive the next set of results.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Required: No

WorkspaceIds

The identifiers of the WorkSpaces. You can specify up to 25 WorkSpaces.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 25 items.

Pattern: `^ws-[0-9a-z]{8,63}$`

Required: No

Response Syntax

```
{
```

```
"NextToken": "string",
"WorkspacesConnectionStatus": [
  {
    "ConnectionState": "string",
    "ConnectionStateCheckTimestamp": number,
    "LastKnownUserConnectionTimestamp": number,
    "WorkspaceId": "string"
  }
]
```

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

NextToken

The token to use to retrieve the next page of results. This value is null when there are no more results to return.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

WorkspacesConnectionStatus

Information about the connection status of the WorkSpace.

Type: Array of [WorkspaceConnectionStatus](#) objects

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

DescribeWorkspaceSnapshots

Describes the snapshots for the specified Workspace.

Request Syntax

```
{  
  "WorkspaceId": "string"  
}
```

Request Parameters

The request accepts the following data in JSON format.

WorkspaceId

The identifier of the Workspace.

Type: String

Pattern: `^ws-[0-9a-z]{8,63}$`

Required: Yes

Response Syntax

```
{  
  "RebuildSnapshots": [  
    {  
      "SnapshotTime": number  
    }  
  ],  
  "RestoreSnapshots": [  
    {  
      "SnapshotTime": number  
    }  
  ]  
}
```


Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

RebuildSnapshots

Information about the snapshots that can be used to rebuild a WorkSpace. These snapshots include the user volume.

Type: Array of [Snapshot](#) objects

RestoreSnapshots

Information about the snapshots that can be used to restore a WorkSpace. These snapshots include both the root volume and the user volume.

Type: Array of [Snapshot](#) objects

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

DescribeWorkspacesPools

Describes the specified WorkSpaces Pools.

Request Syntax

```
{
  "Filters": [
    {
      "Name": "string",
      "Operator": "string",
      "Values": [ "string" ]
    }
  ],
  "Limit": number,
  "NextToken": "string",
  "PoolIds": [ "string" ]
}
```

Request Parameters

The request accepts the following data in JSON format.

Filters

The filter conditions for the WorkSpaces Pool to return.

Type: Array of [DescribeWorkspacesPoolsFilter](#) objects

Array Members: Minimum number of 1 item. Maximum number of 25 items.

Required: No

Limit

The maximum number of items to return.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 25.

Required: No

NextToken

If you received a NextToken from a previous call that was paginated, provide this token to receive the next set of results.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Required: No

PoolIds

The identifier of the WorkSpaces Pools.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 25 items.

Pattern: ^wspool-[0-9a-z]{9}\$

Required: No

Response Syntax

```
{
  "NextToken": "string",
  "WorkspacesPools": [
    {
      "ApplicationSettings": {
        "S3BucketName": "string",
        "SettingsGroup": "string",
        "Status": "string"
      },
      "BundleId": "string",
      "CapacityStatus": {
        "ActiveUserSessions": number,
        "ActualUserSessions": number,
        "AvailableUserSessions": number,
        "DesiredUserSessions": number
      },
      "CreatedAt": number,
      "Description": "string",
      "DirectoryId": "string",
```

```
    "Errors": [
      {
        "ErrorCode": "string",
        "ErrorMessage": "string"
      }
    ],
    "PoolArn": "string",
    "PoolId": "string",
    "PoolName": "string",
    "State": "string",
    "TimeoutSettings": {
      "DisconnectTimeoutInSeconds": number,
      "IdleDisconnectTimeoutInSeconds": number,
      "MaxUserDurationInSeconds": number
    }
  }
]
```

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

NextToken

If you received a NextToken from a previous call that was paginated, provide this token to receive the next set of results.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

WorkspacesPools

Information about the WorkSpaces Pools.

Type: Array of [WorkspacesPool](#) objects

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

DescribeWorkspacesPoolSessions

Retrieves a list that describes the streaming sessions for a specified pool.

Request Syntax

```
{
  "Limit": number,
  "NextToken": "string",
  "PoolId": "string",
  "UserId": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

Limit

The maximum number of items to return.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 50.

Required: No

NextToken

If you received a NextToken from a previous call that was paginated, provide this token to receive the next set of results.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Required: No

PoolId

The identifier of the pool.

Type: String

Pattern: ^wspool-[0-9a-z]{9}\$

Required: Yes

Userld

The identifier of the user.

Type: String

Length Constraints: Minimum length of 2. Maximum length of 128.

Required: No

Response Syntax

```
{
  "NextToken": "string",
  "Sessions": [
    {
      "AuthenticationType": "string",
      "ConnectionState": "string",
      "ExpirationTime": number,
      "InstanceId": "string",
      "NetworkAccessConfiguration": {
        "EniId": "string",
        "EniPrivateIpAddress": "string"
      },
      "PoolId": "string",
      "SessionId": "string",
      "StartTime": number,
      "UserId": "string"
    }
  ]
}
```

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

NextToken

If you received a NextToken from a previous call that was paginated, provide this token to receive the next set of results.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Sessions

Describes the pool sessions.

Type: Array of [WorkspacesPoolSession](#) objects

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)

- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

DisassociateConnectionAlias

Disassociates a connection alias from a directory. Disassociating a connection alias disables cross-Region redirection between two directories in different Regions. For more information, see [Cross-Region Redirection for Amazon WorkSpaces](#).

Note

Before performing this operation, call [DescribeConnectionAliases](#) to make sure that the current state of the connection alias is CREATED.

Request Syntax

```
{
  "AliasId": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

[AliasId](#)

The identifier of the connection alias to disassociate.

Type: String

Length Constraints: Minimum length of 13. Maximum length of 68.

Pattern: `^wsca-[0-9a-z]{8,63}$`

Required: Yes

Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

InvalidResourceStateException

The state of the resource is not valid for this operation.

HTTP Status Code: 400

OperationNotSupportedException

This operation is not supported.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)

- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

DisassociateIpGroups

Disassociates the specified IP access control group from the specified directory.

Request Syntax

```
{
  "DirectoryId": "string",
  "GroupIds": [ "string" ]
}
```

Request Parameters

The request accepts the following data in JSON format.

DirectoryId

The identifier of the directory.

Type: String

Length Constraints: Minimum length of 10. Maximum length of 65.

Pattern: $^(d-[0-9a-f]{8,63})|(wsd-[0-9a-z]{8,63})$

Required: Yes

GroupIds

The identifiers of one or more IP access control groups.

Type: Array of strings

Pattern: $wsipg-[0-9a-z]{8,63}$

Required: Yes

Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

InvalidResourceStateException

The state of the resource is not valid for this operation.

HTTP Status Code: 400

OperationNotSupportedException

This operation is not supported.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)

- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

DisassociateWorkspaceApplication

Disassociates the specified application from a WorkSpace.

Request Syntax

```
{  
  "ApplicationId": "string",  
  "WorkspaceId": "string"  
}
```

Request Parameters

The request accepts the following data in JSON format.

ApplicationId

The identifier of the application.

Type: String

Pattern: `^wsa-[0-9a-z]{8,63}$`

Required: Yes

WorkspaceId

The identifier of the WorkSpace.

Type: String

Pattern: `^ws-[0-9a-z]{8,63}$`

Required: Yes

Response Syntax

```
{  
  "Association": {  
    "AssociatedResourceId": "string",  
    "AssociatedResourceType": "string",  
  }  
}
```

```
    "Created": number,
    "LastUpdatedTime": number,
    "State": "string",
    "StateReason": {
      "ErrorCode": "string",
      "ErrorMessage": "string"
    },
    "WorkspaceId": "string"
  }
}
```

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

Association

Information about the targeted association.

Type: [WorkspaceResourceAssociation](#) object

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

OperationNotSupportedException

This operation is not supported.

HTTP Status Code: 400

ResourceInUseException

The specified resource is currently in use.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

GetAccountLink

Retrieves account link information.

Request Syntax

```
{  
  "LinkedAccountId": "string",  
  "LinkId": "string"  
}
```

Request Parameters

The request accepts the following data in JSON format.

[LinkedAccountId](#)

The identifier of the account link

Type: String

Pattern: `^\d{12}$`

Required: No

[LinkId](#)

The identifier of the account to link.

Type: String

Pattern: `^link-.{8,24}$`

Required: No

Response Syntax

```
{  
  "AccountLink": {  
    "AccountLinkId": "string",  
    "AccountLinkStatus": "string",  
  }  
}
```

```
    "SourceAccountId": "string",  
    "TargetAccountId": "string"  
  }  
}
```

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

AccountLink

The account link of the account link to retrieve.

Type: [AccountLink](#) object

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InternalServerError

Unexpected server error occurred.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

ValidationException

You either haven't provided a `TargetAccountId` or are using the same value for `TargetAccountId` and `SourceAccountId`.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

ImportClientBranding

Imports client branding. Client branding allows you to customize your WorkSpace's client login portal. You can tailor your login portal company logo, the support email address, support link, link to reset password, and a custom message for users trying to sign in.

After you import client branding, the default branding experience for the specified platform type is replaced with the imported experience

Note

- You must specify at least one platform type when importing client branding.
- You can import up to 6 MB of data with each request. If your request exceeds this limit, you can import client branding for different platform types using separate requests.
- In each platform type, the `SupportEmail` and `SupportLink` parameters are mutually exclusive. You can specify only one parameter for each platform type, but not both.
- Imported data can take up to a minute to appear in the WorkSpaces client.

Request Syntax

```
{
  "DeviceTypeAndroid": {
    "ForgotPasswordLink": "string",
    "LoginMessage": {
      "string" : "string"
    },
    "Logo": blob,
    "SupportEmail": "string",
    "SupportLink": "string"
  },
  "DeviceTypeIos": {
    "ForgotPasswordLink": "string",
    "LoginMessage": {
      "string" : "string"
    },
    "Logo": blob,
    "Logo2x": blob,
    "Logo3x": blob,
```

```
    "SupportEmail": "string",
    "SupportLink": "string"
  },
  "DeviceTypeLinux": {
    "ForgotPasswordLink": "string",
    "LoginMessage": {
      "string": "string"
    },
    "Logo": blob,
    "SupportEmail": "string",
    "SupportLink": "string"
  },
  "DeviceTypeOsx": {
    "ForgotPasswordLink": "string",
    "LoginMessage": {
      "string": "string"
    },
    "Logo": blob,
    "SupportEmail": "string",
    "SupportLink": "string"
  },
  "DeviceTypeWeb": {
    "ForgotPasswordLink": "string",
    "LoginMessage": {
      "string": "string"
    },
    "Logo": blob,
    "SupportEmail": "string",
    "SupportLink": "string"
  },
  "DeviceTypeWindows": {
    "ForgotPasswordLink": "string",
    "LoginMessage": {
      "string": "string"
    },
    "Logo": blob,
    "SupportEmail": "string",
    "SupportLink": "string"
  },
  "ResourceId": "string"
}
```


Request Parameters

The request accepts the following data in JSON format.

DeviceTypeAndroid

The branding information to import for Android devices.

Type: [DefaultImportClientBrandingAttributes](#) object

Required: No

DeviceTypeIos

The branding information to import for iOS devices.

Type: [IosImportClientBrandingAttributes](#) object

Required: No

DeviceTypeLinux

The branding information to import for Linux devices.

Type: [DefaultImportClientBrandingAttributes](#) object

Required: No

DeviceTypeOsx

The branding information to import for macOS devices.

Type: [DefaultImportClientBrandingAttributes](#) object

Required: No

DeviceTypeWeb

The branding information to import for web access.

Type: [DefaultImportClientBrandingAttributes](#) object

Required: No

DeviceTypeWindows

The branding information to import for Windows devices.

Type: [DefaultImportClientBrandingAttributes](#) object

Required: No

ResourceId

The directory identifier of the WorkSpace for which you want to import client branding.

Type: String

Length Constraints: Minimum length of 10. Maximum length of 65.

Pattern: $^(d-[0-9a-f]{8,63})|(wsd-[0-9a-z]{8,63})$

Required: Yes

Response Syntax

```
{
  "DeviceTypeAndroid": {
    "ForgotPasswordLink": "string",
    "LoginMessage": {
      "string": "string"
    },
    "LogoUrl": "string",
    "SupportEmail": "string",
    "SupportLink": "string"
  },
  "DeviceTypeIos": {
    "ForgotPasswordLink": "string",
    "LoginMessage": {
      "string": "string"
    },
    "Logo2xUrl": "string",
    "Logo3xUrl": "string",
    "LogoUrl": "string",
    "SupportEmail": "string",
    "SupportLink": "string"
  },
  "DeviceTypeLinux": {
    "ForgotPasswordLink": "string",
    "LoginMessage": {
      "string": "string"
    }
  }
}
```

```
    },
    "LogoUrl": "string",
    "SupportEmail": "string",
    "SupportLink": "string"
  },
  "DeviceTypeOsx": {
    "ForgotPasswordLink": "string",
    "LoginMessage": {
      "string": "string"
    },
    "LogoUrl": "string",
    "SupportEmail": "string",
    "SupportLink": "string"
  },
  "DeviceTypeWeb": {
    "ForgotPasswordLink": "string",
    "LoginMessage": {
      "string": "string"
    },
    "LogoUrl": "string",
    "SupportEmail": "string",
    "SupportLink": "string"
  },
  "DeviceTypeWindows": {
    "ForgotPasswordLink": "string",
    "LoginMessage": {
      "string": "string"
    },
    "LogoUrl": "string",
    "SupportEmail": "string",
    "SupportLink": "string"
  }
}
```

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

DeviceTypeAndroid

The branding information configured for Android devices.

Type: [DefaultClientBrandingAttributes](#) object

[DeviceTypeIos](#)

The branding information configured for iOS devices.

Type: [IosClientBrandingAttributes](#) object

[DeviceTypeLinux](#)

The branding information configured for Linux devices.

Type: [DefaultClientBrandingAttributes](#) object

[DeviceTypeOsx](#)

The branding information configured for macOS devices.

Type: [DefaultClientBrandingAttributes](#) object

[DeviceTypeWeb](#)

The branding information configured for web access.

Type: [DefaultClientBrandingAttributes](#) object

[DeviceTypeWindows](#)

The branding information configured for Windows devices.

Type: [DefaultClientBrandingAttributes](#) object

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

ResourceLimitExceededException

Your resource limits have been exceeded.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

ImportWorkspacelImage

Imports the specified Windows 10 or 11 Bring Your Own License (BYOL) image into Amazon WorkSpaces. The image must be an already licensed Amazon EC2 image that is in your AWS account, and you must own the image. For more information about creating BYOL images, see [Bring Your Own Windows Desktop Licenses](#).

Request Syntax

```
{
  "Applications": [ "string" ],
  "Ec2ImageId": "string",
  "ImageDescription": "string",
  "ImageName": "string",
  "IngestionProcess": "string",
  "Tags": [
    {
      "Key": "string",
      "Value": "string"
    }
  ]
}
```

Request Parameters

The request accepts the following data in JSON format.

Applications

If specified, the version of Microsoft Office to subscribe to. Valid only for Windows 10 and 11 BYOL images. For more information about subscribing to Office for BYOL images, see [Bring Your Own Windows Desktop Licenses](#).

Note

- Although this parameter is an array, only one item is allowed at this time.
- Windows 11 only supports Microsoft_Office_2019.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 5 items.

Valid Values: Microsoft_Office_2016 | Microsoft_Office_2019

Required: No

Ec2ImageId

The identifier of the EC2 image.

Type: String

Pattern: `^ami\-[a-f0-9]{8}|[a-f0-9]{17})$`

Required: Yes

ImageDescription

The description of the Workspace image.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

Pattern: `^[a-zA-Z0-9_./() -]+$`

Required: Yes

ImageName

The name of the Workspace image.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `^[a-zA-Z0-9_./()\-\]+$`

Required: Yes

IngestionProcess

The ingestion process to be used when importing the image, depending on which protocol you want to use for your BYOL Workspace image, either PCoIP, WorkSpaces Streaming Protocol (WSP), or bring your own protocol (BYOP). To use WSP, specify a value that ends in `_WSP`. To

use PCoIP, specify a value that does not end in `_WSP`. To use BYOP, specify a value that ends in `_BYOP`.

For non-GPU-enabled bundles (bundles other than Graphics or GraphicsPro), specify `BYOL_REGULAR`, `BYOL_REGULAR_WSP`, or `BYOL_REGULAR_BYOP`, depending on the protocol.

Note

The `BYOL_REGULAR_BYOP` and `BYOL_GRAPHICS_G4DN_BYOP` values are only supported by Amazon WorkSpaces Core. Contact your account team to be allow-listed to use these values. For more information, see [Amazon WorkSpaces Core](#).

Type: String

Valid Values: `BYOL_REGULAR` | `BYOL_GRAPHICS` | `BYOL_GRAPHICSPRO` | `BYOL_GRAPHICS_G4DN` | `BYOL_REGULAR_WSP` | `BYOL_REGULAR_BYOP` | `BYOL_GRAPHICS_G4DN_BYOP`

Required: Yes

Tags

The tags. Each WorkSpaces resource can have a maximum of 50 tags.

Type: Array of [Tag](#) objects

Required: No

Response Syntax

```
{
  "ImageId": "string"
}
```

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

ImageId

The identifier of the Workspace image.

Type: String

Pattern: wsi-[0-9a-z]{9,63}\$

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

OperationNotSupportedException

This operation is not supported.

HTTP Status Code: 400

ResourceAlreadyExistsException

The specified resource already exists.

HTTP Status Code: 400

ResourceLimitExceededException

Your resource limits have been exceeded.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

ListAccountLinks

Lists all account links.

Request Syntax

```
{  
  "LinkStatusFilter": [ "string" ],  
  "MaxResults": number,  
  "NextToken": "string"  
}
```

Request Parameters

The request accepts the following data in JSON format.

[LinkStatusFilter](#)

Filters the account based on their link status.

Type: Array of strings

Valid Values: LINKED | LINKING_FAILED | LINK_NOT_FOUND | PENDING_ACCEPTANCE_BY_TARGET_ACCOUNT | REJECTED

Required: No

[MaxResults](#)

The maximum number of accounts to return.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 25.

Required: No

[NextToken](#)

The token to use to retrieve the next page of results. This value is null when there are no more results to return.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Required: No

Response Syntax

```
{
  "AccountLinks": [
    {
      "AccountLinkId": "string",
      "AccountLinkStatus": "string",
      "SourceAccountId": "string",
      "TargetAccountId": "string"
    }
  ],
  "NextToken": "string"
}
```

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

[AccountLinks](#)

Information about the account links.

Type: Array of [AccountLink](#) objects

[NextToken](#)

The token to use to retrieve the next page of results. This value is null when there are no more results to return.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InternalServerErrorException

Unexpected server error occurred.

HTTP Status Code: 400

ValidationException

You either haven't provided a `TargetAccountId` or are using the same value for `TargetAccountId` and `SourceAccountId`.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

ListAvailableManagementCidrRanges

Retrieves a list of IP address ranges, specified as IPv4 CIDR blocks, that you can use for the network management interface when you enable Bring Your Own License (BYOL).

This operation can be run only by AWS accounts that are enabled for BYOL. If your account isn't enabled for BYOL, you'll receive an `AccessDeniedException` error.

The management network interface is connected to a secure Amazon WorkSpaces management network. It is used for interactive streaming of the WorkSpace desktop to Amazon WorkSpaces clients, and to allow Amazon WorkSpaces to manage the WorkSpace.

Request Syntax

```
{
  "ManagementCidrRangeConstraint": "string",
  "MaxResults": number,
  "NextToken": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

ManagementCidrRangeConstraint

The IP address range to search. Specify an IP address range that is compatible with your network and in CIDR notation (that is, specify the range as an IPv4 CIDR block).

Type: String

Pattern: `^(([0-9]|[1-9][0-9]|1[0-9]{2}|2[0-4][0-9]|25[0-5])\.){3}([0-9]|[1-9][0-9]|1[0-9]{2}|2[0-4][0-9]|25[0-5])(\/(3[0-2]|[1-2][0-9]|[0-9]))$`

Required: Yes

MaxResults

The maximum number of items to return.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 5.

Required: No

NextToken

If you received a NextToken from a previous call that was paginated, provide this token to receive the next set of results.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Required: No

Response Syntax

```
{
  "ManagementCidrRanges": [ "string" ],
  "NextToken": "string"
}
```

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

ManagementCidrRanges

The list of available IP address ranges, specified as IPv4 CIDR blocks.

Type: Array of strings

Pattern: $(^([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])\.([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])\.0\.0)(\/(16$))$$

NextToken

The token to use to retrieve the next page of results. This value is null when there are no more results to return.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

MigrateWorkspace

Migrates a WorkSpace from one operating system or bundle type to another, while retaining the data on the user volume.

The migration process recreates the WorkSpace by using a new root volume from the target bundle image and the user volume from the last available snapshot of the original WorkSpace. During migration, the original `D:\Users\%USERNAME%` user profile folder is renamed to `D:\Users\%USERNAME%MMddyTHHmss%.NotMigrated`. A new `D:\Users\%USERNAME%` folder is generated by the new OS. Certain files in the old user profile are moved to the new user profile.

For available migration scenarios, details about what happens during migration, and best practices, see [Migrate a WorkSpace](#).

Request Syntax

```
{
  "BundleId": "string",
  "SourceWorkspaceId": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

BundleId

The identifier of the target bundle type to migrate the WorkSpace to.

Type: String

Pattern: `^wsb-[0-9a-z]{8,63}$`

Required: Yes

SourceWorkspaceId

The identifier of the WorkSpace to migrate from.

Type: String

Pattern: `^ws-[0-9a-z]{8,63}$`

Required: Yes

Response Syntax

```
{
  "SourceWorkspaceId": "string",
  "TargetWorkspaceId": "string"
}
```

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

SourceWorkspaceId

The original identifier of the WorkSpace that is being migrated.

Type: String

Pattern: `^ws-[0-9a-z]{8,63}$`

TargetWorkspaceId

The new identifier of the WorkSpace that is being migrated. If the migration does not succeed, the target WorkSpace ID will not be used, and the WorkSpace will still have the original WorkSpace ID.

Type: String

Pattern: `^ws-[0-9a-z]{8,63}$`

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

OperationInProgressException

The properties of this WorkSpace are currently being modified. Try again in a moment.

HTTP Status Code: 400

OperationNotSupportedException

This operation is not supported.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

ResourceUnavailableException

The specified resource is not available.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)

- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

ModifyAccount

Modifies the configuration of Bring Your Own License (BYOL) for the specified account.

Request Syntax

```
{
  "DedicatedTenancyManagementCidrRange": "string",
  "DedicatedTenancySupport": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

DedicatedTenancyManagementCidrRange

The IP address range, specified as an IPv4 CIDR block, for the management network interface. Specify an IP address range that is compatible with your network and in CIDR notation (that is, specify the range as an IPv4 CIDR block). The CIDR block size must be /16 (for example, 203.0.113.25/16). It must also be specified as available by the `ListAvailableManagementCidrRanges` operation.

Type: String

Pattern: `(^[0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])\.([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])\.0\.0(\/(16$))$`

Required: No

DedicatedTenancySupport

The status of BYOL.

Type: String

Valid Values: ENABLED

Required: No

Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

InvalidResourceStateException

The state of the resource is not valid for this operation.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

ResourceUnavailableException

The specified resource is not available.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)

- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

ModifyCertificateBasedAuthProperties

Modifies the properties of the certificate-based authentication you want to use with your WorkSpaces.

Request Syntax

```
{
  "CertificateBasedAuthProperties": {
    "CertificateAuthorityArn": "string",
    "Status": "string"
  },
  "PropertiesToDelete": [ "string" ],
  "ResourceId": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

CertificateBasedAuthProperties

The properties of the certificate-based authentication.

Type: [CertificateBasedAuthProperties](#) object

Required: No

PropertiesToDelete

The properties of the certificate-based authentication you want to delete.

Type: Array of strings

Valid Values: CERTIFICATE_BASED_AUTH_PROPERTIES_CERTIFICATE_AUTHORITY_ARN

Required: No

ResourceId

The resource identifiers, in the form of directory IDs.

Type: String

Length Constraints: Minimum length of 10. Maximum length of 65.

Pattern: `^(d-[0-9a-f]{8,63}$)|(wsd-[0-9a-z]{8,63}$)`

Required: Yes

Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

OperationNotSupportedException

This operation is not supported.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

ModifyClientProperties

Modifies the properties of the specified Amazon WorkSpaces clients.

Request Syntax

```
{
  "ClientProperties": {
    "LogUploadEnabled": "string",
    "ReconnectEnabled": "string"
  },
  "ResourceId": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

ClientProperties

Information about the Amazon WorkSpaces client.

Type: [ClientProperties](#) object

Required: Yes

ResourceId

The resource identifiers, in the form of directory IDs.

Type: String

Length Constraints: Minimum length of 1.

Required: Yes

Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

OperationNotSupportedException

This operation is not supported.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

ModifySamlProperties

Modifies multiple properties related to SAML 2.0 authentication, including the enablement status, user access URL, and relay state parameter name that are used for configuring federation with an SAML 2.0 identity provider.

Request Syntax

```
{
  "PropertiesToDelete": [ "string" ],
  "ResourceId": "string",
  "SamlProperties": {
    "RelayStateParameterName": "string",
    "Status": "string",
    "UserAccessUrl": "string"
  }
}
```

Request Parameters

The request accepts the following data in JSON format.

PropertiesToDelete

The SAML properties to delete as part of your request.

Specify one of the following options:

- SAML_PROPERTIES_USER_ACCESS_URL to delete the user access URL.
- SAML_PROPERTIES_RELAY_STATE_PARAMETER_NAME to delete the relay state parameter name.

Type: Array of strings

Valid Values: SAML_PROPERTIES_USER_ACCESS_URL |
SAML_PROPERTIES_RELAY_STATE_PARAMETER_NAME

Required: No

ResourceId

The directory identifier for which you want to configure SAML properties.

Type: String

Length Constraints: Minimum length of 10. Maximum length of 65.

Pattern: $^(d-[0-9a-f]{8,63})|(wsd-[0-9a-z]{8,63})$

Required: Yes

SamlProperties

The properties for configuring SAML 2.0 authentication.

Type: [SamlProperties](#) object

Required: No

Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

OperationNotSupportedException

This operation is not supported.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

ModifySelfservicePermissions

Modifies the self-service WorkSpace management capabilities for your users. For more information, see [Enable Self-Service Workspace Management Capabilities for Your Users](#).

Request Syntax

```
{
  "ResourceId": "string",
  "SelfservicePermissions": {
    "ChangeComputeType": "string",
    "IncreaseVolumeSize": "string",
    "RebuildWorkspace": "string",
    "RestartWorkspace": "string",
    "SwitchRunningMode": "string"
  }
}
```

Request Parameters

The request accepts the following data in JSON format.

ResourceId

The identifier of the directory.

Type: String

Length Constraints: Minimum length of 10. Maximum length of 65.

Pattern: $^(d-[0-9a-f]{8,63}$)|(wsd-[0-9a-z]{8,63}$)$

Required: Yes

SelfservicePermissions

The permissions to enable or disable self-service capabilities.

Type: [SelfservicePermissions](#) object

Required: Yes

Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

OperationNotSupportedException

This operation is not supported.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)

- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

ModifyStreamingProperties

Modifies the specified streaming properties.

Request Syntax

```
{
  "ResourceId": "string",
  "StreamingProperties": {
    "StorageConnectors": [
      {
        "ConnectorType": "string",
        "Status": "string"
      }
    ],
    "StreamingExperiencePreferredProtocol": "string",
    "UserSettings": [
      {
        "Action": "string",
        "MaximumLength": number,
        "Permission": "string"
      }
    ]
  }
}
```

Request Parameters

The request accepts the following data in JSON format.

ResourceId

The identifier of the resource.

Type: String

Length Constraints: Minimum length of 10. Maximum length of 65.

Pattern: $^(d-[0-9a-f]{8,63}$)|(wsd-[0-9a-z]{8,63}$)$

Required: Yes

StreamingProperties

The streaming properties to configure.

Type: [StreamingProperties](#) object

Required: No

Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

OperationNotSupportedException

This operation is not supported.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

ModifyWorkspaceAccessProperties

Specifies which devices and operating systems users can use to access their WorkSpaces. For more information, see [Control Device Access](#).

Request Syntax

```
{
  "ResourceId": "string",
  "WorkspaceAccessProperties": {
    "DeviceTypeAndroid": "string",
    "DeviceTypeChromeOs": "string",
    "DeviceTypeIos": "string",
    "DeviceTypeLinux": "string",
    "DeviceTypeOsx": "string",
    "DeviceTypeWeb": "string",
    "DeviceTypeWindows": "string",
    "DeviceTypeZeroClient": "string"
  }
}
```

Request Parameters

The request accepts the following data in JSON format.

ResourceId

The identifier of the directory.

Type: String

Length Constraints: Minimum length of 10. Maximum length of 65.

Pattern: $^(d-[0-9a-f]{8,63}$)|(wsd-[0-9a-z]{8,63}$)$

Required: Yes

WorkspaceAccessProperties

The device types and operating systems to enable or disable for access.

Type: [WorkspaceAccessProperties](#) object

Required: Yes

Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

ModifyWorkspaceCreationProperties

Modify the default properties used to create WorkSpaces.

Request Syntax

```
{
  "ResourceId": "string",
  "WorkspaceCreationProperties": {
    "CustomSecurityGroupId": "string",
    "DefaultOu": "string",
    "EnableInternetAccess": boolean,
    "EnableMaintenanceMode": boolean,
    "EnableWorkDocs": boolean,
    "InstanceIamRoleArn": "string",
    "UserEnabledAsLocalAdministrator": boolean
  }
}
```

Request Parameters

The request accepts the following data in JSON format.

ResourceId

The identifier of the directory.

Type: String

Length Constraints: Minimum length of 10. Maximum length of 65.

Pattern: $^(d-[0-9a-f]{8,63})|(wsd-[0-9a-z]{8,63})$

Required: Yes

WorkspaceCreationProperties

The default properties for creating WorkSpaces.

Type: [WorkspaceCreationProperties](#) object

Required: Yes

Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

OperationNotSupportedException

This operation is not supported.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)

- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

ModifyWorkspaceProperties

Modifies the specified WorkSpace properties. For important information about how to modify the size of the root and user volumes, see [Modify a WorkSpace](#).

Note

The MANUAL running mode value is only supported by Amazon WorkSpaces Core. Contact your account team to be allow-listed to use this value. For more information, see [Amazon WorkSpaces Core](#).

Request Syntax

```
{
  "DataReplication": "string",
  "WorkspaceId": "string",
  "WorkspaceProperties": {
    "ComputeTypeName": "string",
    "OperatingSystemName": "string",
    "Protocols": [ "string" ],
    "RootVolumeSizeGib": number,
    "RunningMode": "string",
    "RunningModeAutoStopTimeoutInMinutes": number,
    "UserVolumeSizeGib": number
  }
}
```

Request Parameters

The request accepts the following data in JSON format.

DataReplication

Indicates the data replication status.

Type: String

Valid Values: NO_REPLICATION | PRIMARY_AS_SOURCE

Required: No

WorkspaceId

The identifier of the WorkSpace.

Type: String

Pattern: `^ws-[0-9a-z]{8,63}$`

Required: Yes

WorkspaceProperties

The properties of the WorkSpace.

Type: [WorkspaceProperties](#) object

Required: No

Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

InvalidResourceStateException

The state of the resource is not valid for this operation.

HTTP Status Code: 400

OperationInProgressException

The properties of this WorkSpace are currently being modified. Try again in a moment.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

ResourceUnavailableException

The specified resource is not available.

HTTP Status Code: 400

UnsupportedWorkspaceConfigurationException

The configuration of this WorkSpace is not supported for this operation. For more information, see [Required Configuration and Service Components for WorkSpaces](#) .

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

ModifyWorkspaceState

Sets the state of the specified WorkSpace.

To maintain a WorkSpace without being interrupted, set the WorkSpace state to ADMIN_MAINTENANCE. WorkSpaces in this state do not respond to requests to reboot, stop, start, rebuild, or restore. An AutoStop WorkSpace in this state is not stopped. Users cannot log into a WorkSpace in the ADMIN_MAINTENANCE state.

Request Syntax

```
{  
  "WorkspaceId": "string",  
  "WorkspaceState": "string"  
}
```

Request Parameters

The request accepts the following data in JSON format.

WorkspaceId

The identifier of the WorkSpace.

Type: String

Pattern: `^ws-[0-9a-z]{8,63}$`

Required: Yes

WorkspaceState

The WorkSpace state.

Type: String

Valid Values: AVAILABLE | ADMIN_MAINTENANCE

Required: Yes

Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

InvalidResourceStateException

The state of the resource is not valid for this operation.

HTTP Status Code: 400

OperationNotSupportedException

This operation is not supported.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)

- [AWS SDK for Ruby V3](#)

RebootWorkspaces

Reboots the specified WorkSpaces.

You cannot reboot a Workspace unless its state is AVAILABLE, UNHEALTHY, or REBOOTING. Reboot a Workspace in the REBOOTING state only if your Workspace has been stuck in the REBOOTING state for over 20 minutes.

This operation is asynchronous and returns before the WorkSpaces have rebooted.

Request Syntax

```
{
  "RebootWorkspaceRequests": [
    {
      "WorkspaceId": "string"
    }
  ]
}
```

Request Parameters

The request accepts the following data in JSON format.

RebootWorkspaceRequests

The WorkSpaces to reboot. You can specify up to 25 WorkSpaces.

Type: Array of [RebootRequest](#) objects

Array Members: Minimum number of 1 item. Maximum number of 25 items.

Required: Yes

Response Syntax

```
{
  "FailedRequests": [
    {
      "ErrorCode": "string",
```

```
    "ErrorMessage": "string",  
    "WorkspaceId": "string"  
  }  
]  
}
```

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

FailedRequests

Information about the WorkSpaces that could not be rebooted.

Type: Array of [FailedWorkspaceChangeRequest](#) objects

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

OperationNotSupportedException

This operation is not supported.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)

- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

RebuildWorkspaces

Rebuilds the specified WorkSpace.

You cannot rebuild a WorkSpace unless its state is AVAILABLE, ERROR, UNHEALTHY, STOPPED, or REBOOTING.

Rebuilding a WorkSpace is a potentially destructive action that can result in the loss of data. For more information, see [Rebuild a WorkSpace](#).

This operation is asynchronous and returns before the WorkSpaces have been completely rebuilt.

Request Syntax

```
{
  "RebuildWorkspaceRequests": [
    {
      "WorkspaceId": "string"
    }
  ]
}
```

Request Parameters

The request accepts the following data in JSON format.

[RebuildWorkspaceRequests](#)

The WorkSpace to rebuild. You can specify a single WorkSpace.

Type: Array of [RebuildRequest](#) objects

Array Members: Fixed number of 1 item.

Required: Yes

Response Syntax

```
{
  "FailedRequests": [
```

```
{
  "ErrorCode": "string",
  "ErrorMessage": "string",
  "WorkspaceId": "string"
}
]
```

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

FailedRequests

Information about the WorkSpace that could not be rebuilt.

Type: Array of [FailedWorkspaceChangeRequest](#) objects

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

OperationNotSupportedException

This operation is not supported.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)

- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

RegisterWorkspaceDirectory

Registers the specified directory. This operation is asynchronous and returns before the Workspace directory is registered. If this is the first time you are registering a directory, you will need to create the `workspaces_DefaultRole` role before you can register a directory. For more information, see [Creating the `workspaces_DefaultRole` Role](#).

Request Syntax

```
{
  "ActiveDirectoryConfig": {
    "DomainName": "string",
    "ServiceAccountSecretArn": "string"
  },
  "DirectoryId": "string",
  "EnableSelfService": boolean,
  "EnableWorkDocs": boolean,
  "SubnetIds": [ "string" ],
  "Tags": [
    {
      "Key": "string",
      "Value": "string"
    }
  ],
  "Tenancy": "string",
  "UserIdentityType": "string",
  "WorkspaceDirectoryDescription": "string",
  "WorkspaceDirectoryName": "string",
  "WorkspaceType": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

[ActiveDirectoryConfig](#)

The active directory config of the directory.

Type: [ActiveDirectoryConfig](#) object

Required: No

DirectoryId

The identifier of the directory. You cannot register a directory if it does not have a status of Active. If the directory does not have a status of Active, you will receive an `InvalidResourceStateException` error. If you have already registered the maximum number of directories that you can register with Amazon WorkSpaces, you will receive a `ResourceLimitExceededException` error. Deregister directories that you are not using for WorkSpaces, and try again.

Type: String

Length Constraints: Minimum length of 10. Maximum length of 65.

Pattern: `^(d-[0-9a-f]{8,63}$)|(wsd-[0-9a-z]{8,63}$)`

Required: No

EnableSelfService

Indicates whether self-service capabilities are enabled or disabled.

Type: Boolean

Required: No

EnableWorkDocs

Indicates whether Amazon WorkDocs is enabled or disabled. If you have enabled this parameter and WorkDocs is not available in the Region, you will receive an `OperationNotSupportedException` error. Set `EnableWorkDocs` to disabled, and try again.

Type: Boolean

Required: No

SubnetIds

The identifiers of the subnets for your virtual private cloud (VPC). Make sure that the subnets are in supported Availability Zones. The subnets must also be in separate Availability Zones. If these conditions are not met, you will receive an `OperationNotSupportedException` error.

Type: Array of strings

Array Members: Maximum number of 2 items.

Length Constraints: Minimum length of 15. Maximum length of 24.

Pattern: `^(subnet-([\0-9a-f]{8}|[\0-9a-f]{17}))$`

Required: No

Tags

The tags associated with the directory.

Type: Array of [Tag](#) objects

Required: No

Tenancy

Indicates whether your WorkSpace directory is dedicated or shared. To use Bring Your Own License (BYOL) images, this value must be set to DEDICATED and your AWS account must be enabled for BYOL. If your account has not been enabled for BYOL, you will receive an `InvalidParameterValueException` error. For more information about BYOL images, see [Bring Your Own Windows Desktop Images](#).

Type: String

Valid Values: DEDICATED | SHARED

Required: No

UserIdentityType

The type of identity management the user is using.

Type: String

Valid Values: CUSTOMER_MANAGED | AWS_DIRECTORY_SERVICE

Required: No

WorkspaceDirectoryDescription

Description of the directory to register.

Type: String

Pattern: `^([a-zA-Z0-9_])[\a-zA-Z0-9_@#%*+=:?./!\s-]{1,255}$`

Required: No

WorkspaceDirectoryName

The name of the directory to register.

Type: String

Pattern: `^[a-zA-Z0-9][a-zA-Z0-9_.\s-]{1,64}$`

Required: No

WorkspaceType

Indicates whether the directory's Workspace type is personal or pools.

Type: String

Valid Values: PERSONAL | POOLS

Required: No

Response Syntax

```
{
  "DirectoryId": "string",
  "State": "string"
}
```

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

DirectoryId

The identifier of the directory.

Type: String

Length Constraints: Minimum length of 10. Maximum length of 65.

Pattern: `^(d-[0-9a-f]{8,63}$)|(wsd-[0-9a-z]{8,63}$)`

State

The registration status of the WorkSpace directory.

Type: String

Valid Values: REGISTERING | REGISTERED | DEREGISTERING | DEREGISTERED | ERROR

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

InvalidResourceStateException

The state of the resource is not valid for this operation.

HTTP Status Code: 400

OperationNotSupportedException

This operation is not supported.

HTTP Status Code: 400

ResourceAlreadyExistsException

The specified resource already exists.

HTTP Status Code: 400

ResourceLimitExceededException

Your resource limits have been exceeded.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

UnsupportedNetworkConfigurationException

The configuration of this network is not supported for this operation, or your network configuration conflicts with the Amazon WorkSpaces management network IP range. For more information, see [Configure a VPC for Amazon WorkSpaces](#).

HTTP Status Code: 400

WorkspacesDefaultRoleNotFoundException

The `workspaces_DefaultRole` role could not be found. If this is the first time you are registering a directory, you will need to create the `workspaces_DefaultRole` role before you can register a directory. For more information, see [Creating the workspaces_DefaultRole Role](#).

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

RejectAccountLinkInvitation

Rejects the account link invitation.

Request Syntax

```
{  
  "ClientToken": "string",  
  "LinkId": "string"  
}
```

Request Parameters

The request accepts the following data in JSON format.

ClientToken

The client token of the account link invitation to reject.

Type: String

Pattern: `^\.{1,64}$`

Required: No

LinkId

The identifier of the account link

Type: String

Pattern: `^link-.\{8,24\}$`

Required: Yes

Response Syntax

```
{  
  "AccountLink": {  
    "AccountLinkId": "string",  
    "AccountLinkStatus": "string",  
  }  
}
```

```
    "SourceAccountId": "string",  
    "TargetAccountId": "string"  
  }  
}
```

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

AccountLink

Information about the account link.

Type: [AccountLink](#) object

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

ConflictException

The TargetAccountId is already linked or invited.

HTTP Status Code: 400

InternalServerError

Unexpected server error occurred.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

ValidationException

You either haven't provided a `TargetAccountId` or are using the same value for `TargetAccountId` and `SourceAccountId`.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

RestoreWorkspace

Restores the specified Workspace to its last known healthy state.

You cannot restore a Workspace unless its state is `AVAILABLE`, `ERROR`, `UNHEALTHY`, or `STOPPED`.

Restoring a Workspace is a potentially destructive action that can result in the loss of data. For more information, see [Restore a Workspace](#).

This operation is asynchronous and returns before the Workspace is completely restored.

Request Syntax

```
{
  "WorkspaceId": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

WorkspaceId

The identifier of the Workspace.

Type: String

Pattern: `^ws-[0-9a-z]{8,63}$`

Required: Yes

Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

OperationNotSupportedException

This operation is not supported.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

RevokeIpRules

Removes one or more rules from the specified IP access control group.

Request Syntax

```
{  
  "GroupId": "string",  
  "UserRules": [ "string" ]  
}
```

Request Parameters

The request accepts the following data in JSON format.

GroupId

The identifier of the group.

Type: String

Pattern: `wsipg-[0-9a-z]{8,63}$`

Required: Yes

UserRules

The rules to remove from the group.

Type: Array of strings

Required: Yes

Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

InvalidResourceStateException

The state of the resource is not valid for this operation.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

StartWorkspaces

Starts the specified WorkSpaces.

You cannot start a Workspace unless it has a running mode of AutoStop and a state of STOPPED.

Request Syntax

```
{
  "StartWorkspaceRequests": [
    {
      "WorkspaceId": "string"
    }
  ]
}
```

Request Parameters

The request accepts the following data in JSON format.

StartWorkspaceRequests

The WorkSpaces to start. You can specify up to 25 WorkSpaces.

Type: Array of [StartRequest](#) objects

Array Members: Minimum number of 1 item. Maximum number of 25 items.

Required: Yes

Response Syntax

```
{
  "FailedRequests": [
    {
      "ErrorCode": "string",
      "ErrorMessage": "string",
      "WorkspaceId": "string"
    }
  ]
}
```

```
}
```

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

FailedRequests

Information about the WorkSpaces that could not be started.

Type: Array of [FailedWorkspaceChangeRequest](#) objects

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

StartWorkspacesPool

Starts the specified pool.

You cannot start a pool unless it has a running mode of AutoStop and a state of STOPPED.

Request Syntax

```
{  
  "PoolId": "string"  
}
```

Request Parameters

The request accepts the following data in JSON format.

PoolId

The identifier of the pool.

Type: String

Pattern: ^wspool-[0-9a-z]{9}\$

Required: Yes

Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

InvalidResourceStateException

The state of the resource is not valid for this operation.

HTTP Status Code: 400

OperationInProgressException

The properties of this WorkSpace are currently being modified. Try again in a moment.

HTTP Status Code: 400

OperationNotSupportedException

This operation is not supported.

HTTP Status Code: 400

ResourceLimitExceededException

Your resource limits have been exceeded.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)

- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

StopWorkspaces

Stops the specified WorkSpaces.

You cannot stop a WorkSpace unless it has a running mode of AutoStop and a state of AVAILABLE, IMPAIRED, UNHEALTHY, or ERROR.

Request Syntax

```
{
  "StopWorkspaceRequests": [
    {
      "WorkspaceId": "string"
    }
  ]
}
```

Request Parameters

The request accepts the following data in JSON format.

StopWorkspaceRequests

The WorkSpaces to stop. You can specify up to 25 WorkSpaces.

Type: Array of [StopRequest](#) objects

Array Members: Minimum number of 1 item. Maximum number of 25 items.

Required: Yes

Response Syntax

```
{
  "FailedRequests": [
    {
      "ErrorCode": "string",
      "ErrorMessage": "string",
      "WorkspaceId": "string"
    }
  ]
}
```

```
]
}
```

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

[FailedRequests](#)

Information about the WorkSpaces that could not be stopped.

Type: Array of [FailedWorkspaceChangeRequest](#) objects

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

StopWorkspacesPool

Stops the specified pool.

You cannot stop a WorkSpace pool unless it has a running mode of AutoStop and a state of AVAILABLE, IMPAIRED, UNHEALTHY, or ERROR.

Request Syntax

```
{  
  "PoolId": "string"  
}
```

Request Parameters

The request accepts the following data in JSON format.

PoolId

The identifier of the pool.

Type: String

Pattern: ^wspool-[0-9a-z]{9}\$

Required: Yes

Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

InvalidResourceStateException

The state of the resource is not valid for this operation.

HTTP Status Code: 400

OperationInProgressException

The properties of this WorkSpace are currently being modified. Try again in a moment.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

TerminateWorkspaces

Terminates the specified WorkSpaces.

Important

Terminating a WorkSpace is a permanent action and cannot be undone. The user's data is destroyed. If you need to archive any user data, contact AWS Support before terminating the WorkSpace.

You can terminate a WorkSpace that is in any state except SUSPENDED.

This operation is asynchronous and returns before the WorkSpaces have been completely terminated. After a WorkSpace is terminated, the TERMINATED state is returned only briefly before the WorkSpace directory metadata is cleaned up, so this state is rarely returned. To confirm that a WorkSpace is terminated, check for the WorkSpace ID by using [DescribeWorkspaces](#). If the WorkSpace ID isn't returned, then the WorkSpace has been successfully terminated.

Note

Simple AD and AD Connector are made available to you free of charge to use with WorkSpaces. If there are no WorkSpaces being used with your Simple AD or AD Connector directory for 30 consecutive days, this directory will be automatically deregistered for use with Amazon WorkSpaces, and you will be charged for this directory as per the [AWS Directory Service pricing terms](#).

To delete empty directories, see [Delete the Directory for Your WorkSpaces](#). If you delete your Simple AD or AD Connector directory, you can always create a new one when you want to start using WorkSpaces again.

Request Syntax

```
{
  "TerminateWorkspaceRequests": [
    {
      "WorkspaceId": "string"
    }
  ]
}
```

```
]
}
```

Request Parameters

The request accepts the following data in JSON format.

TerminateWorkspaceRequests

The WorkSpaces to terminate. You can specify up to 25 WorkSpaces.

Type: Array of [TerminateRequest](#) objects

Array Members: Minimum number of 1 item. Maximum number of 25 items.

Required: Yes

Response Syntax

```
{
  "FailedRequests": [
    {
      "ErrorCode": "string",
      "ErrorMessage": "string",
      "WorkspaceId": "string"
    }
  ]
}
```

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

FailedRequests

Information about the WorkSpaces that could not be terminated.

Type: Array of [FailedWorkspaceChangeRequest](#) objects

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

TerminateWorkspacesPool

Terminates the specified pool.

Request Syntax

```
{  
  "PoolId": "string"  
}
```

Request Parameters

The request accepts the following data in JSON format.

PoolId

The identifier of the pool.

Type: String

Pattern: ^wspool-[0-9a-z]{9}\$

Required: Yes

Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

InvalidResourceStateException

The state of the resource is not valid for this operation.

HTTP Status Code: 400

OperationInProgressException

The properties of this WorkSpace are currently being modified. Try again in a moment.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

TerminateWorkspacesPoolSession

Terminates the pool session.

Request Syntax

```
{  
  "SessionId": "string"  
}
```

Request Parameters

The request accepts the following data in JSON format.

SessionId

The identifier of the pool session.

Type: String

Length Constraints: Fixed length of 36.

Pattern: [a-f0-9]{8}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{12}

Required: Yes

Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

OperationInProgressException

The properties of this WorkSpace are currently being modified. Try again in a moment.

HTTP Status Code: 400

OperationNotSupportedException

This operation is not supported.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

UpdateConnectClientAddIn

Updates a Amazon Connect client add-in. Use this action to update the name and endpoint URL of a Amazon Connect client add-in.

Request Syntax

```
{
  "AddInId": "string",
  "Name": "string",
  "ResourceId": "string",
  "URL": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

AddInId

The identifier of the client add-in to update.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `[a-f0-9]{8}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{12}`

Required: Yes

Name

The name of the client add-in.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `^.*$`

Required: No

ResourceId

The directory identifier for which the client add-in is configured.

Type: String

Length Constraints: Minimum length of 10. Maximum length of 65.

Pattern: `^(d-[0-9a-f]{8,63}$)|(wsd-[0-9a-z]{8,63}$)`

Required: Yes

URL

The endpoint URL of the Amazon Connect client add-in.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1024.

Pattern: `^(http|https)\:\/\/\S+`

Required: No

Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

UpdateConnectionAliasPermission

Shares or unshares a connection alias with one account by specifying whether that account has permission to associate the connection alias with a directory. If the association permission is granted, the connection alias is shared with that account. If the association permission is revoked, the connection alias is unshared with the account. For more information, see [Cross-Region Redirection for Amazon WorkSpaces](#).

Note

- Before performing this operation, call [DescribeConnectionAliases](#) to make sure that the current state of the connection alias is CREATED.
- To delete a connection alias that has been shared, the shared account must first disassociate the connection alias from any directories it has been associated with. Then you must unshare the connection alias from the account it has been shared with. You can delete a connection alias only after it is no longer shared with any accounts or associated with any directories.

Request Syntax

```
{
  "AliasId": "string",
  "ConnectionAliasPermission": {
    "AllowAssociation": boolean,
    "SharedAccountId": "string"
  }
}
```

Request Parameters

The request accepts the following data in JSON format.

AliasId

The identifier of the connection alias that you want to update permissions for.

Type: String

Length Constraints: Minimum length of 13. Maximum length of 68.

Pattern: `^wsca-[0-9a-z]{8,63}$`

Required: Yes

ConnectionAliasPermission

Indicates whether to share or unshare the connection alias with the specified AWS account.

Type: [ConnectionAliasPermission](#) object

Required: Yes

Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

InvalidResourceStateException

The state of the resource is not valid for this operation.

HTTP Status Code: 400

OperationNotSupportedException

This operation is not supported.

HTTP Status Code: 400

ResourceAssociatedException

The resource is associated with a directory.

HTTP Status Code: 400

ResourceLimitExceededException

Your resource limits have been exceeded.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

UpdateRulesOfIpGroup

Replaces the current rules of the specified IP access control group with the specified rules.

Request Syntax

```
{
  "GroupId": "string",
  "UserRules": [
    {
      "ipRule": "string",
      "ruleDesc": "string"
    }
  ]
}
```

Request Parameters

The request accepts the following data in JSON format.

GroupId

The identifier of the group.

Type: String

Pattern: `wsipg-[0-9a-z]{8,63}$`

Required: Yes

UserRules

One or more rules.

Type: Array of [IpRuleItem](#) objects

Required: Yes

Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

InvalidResourceStateException

The state of the resource is not valid for this operation.

HTTP Status Code: 400

ResourceLimitExceededException

Your resource limits have been exceeded.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)

- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

UpdateWorkspaceBundle

Updates a WorkSpace bundle with a new image. For more information about updating WorkSpace bundles, see [Update a Custom WorkSpaces Bundle](#).

Important

Existing WorkSpaces aren't automatically updated when you update the bundle that they're based on. To update existing WorkSpaces that are based on a bundle that you've updated, you must either rebuild the WorkSpaces or delete and recreate them.

Request Syntax

```
{
  "BundleId": "string",
  "ImageId": "string"
}
```

Request Parameters

The request accepts the following data in JSON format.

BundleId

The identifier of the bundle.

Type: String

Pattern: `^wsb-[0-9a-z]{8,63}$`

Required: No

ImageId

The identifier of the image.

Type: String

Pattern: `wsi-[0-9a-z]{9,63}$`

Required: No

Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

OperationNotSupportedException

This operation is not supported.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

ResourceUnavailableException

The specified resource is not available.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

UpdateWorkspaceImagePermission

Shares or unshares an image with one account in the same AWS Region by specifying whether that account has permission to copy the image. If the copy image permission is granted, the image is shared with that account. If the copy image permission is revoked, the image is unshared with the account.

After an image has been shared, the recipient account can copy the image to other Regions as needed.

In the China (Ningxia) Region, you can copy images only within the same Region.

In AWS GovCloud (US), to copy images to and from other Regions, contact AWS Support.

For more information about sharing images, see [Share or Unshare a Custom WorkSpaces Image](#).

Note

- To delete an image that has been shared, you must unshare the image before you delete it.
- Sharing Bring Your Own License (BYOL) images across AWS accounts isn't supported at this time in AWS GovCloud (US). To share BYOL images across accounts in AWS GovCloud (US), contact AWS Support.

Request Syntax

```
{  
  "AllowCopyImage": boolean,  
  "ImageId": "string",  
  "SharedAccountId": "string"  
}
```

Request Parameters

The request accepts the following data in JSON format.

AllowCopyImage

The permission to copy the image. This permission can be revoked only after an image has been shared.

Type: Boolean

Required: Yes

ImageId

The identifier of the image.

Type: String

Pattern: `wsi-[0-9a-z]{9,63}`\$

Required: Yes

SharedAccountId

The identifier of the AWS account to share or unshare the image with.

Important

Before sharing the image, confirm that you are sharing to the correct AWS account ID.

Type: String

Pattern: `^\d{12}`\$

Required: Yes

Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

OperationNotSupportedException

This operation is not supported.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

ResourceUnavailableException

The specified resource is not available.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)

- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

UpdateWorkspacesPool

Updates the specified pool.

Request Syntax

```
{
  "ApplicationSettings": {
    "SettingsGroup": "string",
    "Status": "string"
  },
  "BundleId": "string",
  "Capacity": {
    "DesiredUserSessions": number
  },
  "Description": "string",
  "DirectoryId": "string",
  "PoolId": "string",
  "TimeoutSettings": {
    "DisconnectTimeoutInSeconds": number,
    "IdleDisconnectTimeoutInSeconds": number,
    "MaxUserDurationInSeconds": number
  }
}
```

Request Parameters

The request accepts the following data in JSON format.

ApplicationSettings

The persistent application settings for users in the pool.

Type: [ApplicationSettingsRequest](#) object

Required: No

BundleId

The identifier of the bundle.

Type: String

Pattern: `^wsb-[0-9a-z]{8,63}$`

Required: No

Capacity

The desired capacity for the pool.

Type: [Capacity](#) object

Required: No

Description

Describes the specified pool to update.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Pattern: `^[a-zA-Z0-9_./() -]+$`

Required: No

DirectoryId

The identifier of the directory.

Type: String

Length Constraints: Minimum length of 10. Maximum length of 65.

Pattern: `^(d-[0-9a-f]{8,63}$)|(wsd-[0-9a-z]{8,63}$)`

Required: No

PoolId

The identifier of the specified pool to update.

Type: String

Pattern: `^wspool-[0-9a-z]{9}$`

Required: Yes

TimeoutSettings

Indicates the timeout settings of the specified pool.

Type: [TimeoutSettings](#) object

Required: No

Response Syntax

```
{
  "WorkspacesPool": {
    "ApplicationSettings": {
      "S3BucketName": "string",
      "SettingsGroup": "string",
      "Status": "string"
    },
    "BundleId": "string",
    "CapacityStatus": {
      "ActiveUserSessions": number,
      "ActualUserSessions": number,
      "AvailableUserSessions": number,
      "DesiredUserSessions": number
    },
    "CreatedAt": number,
    "Description": "string",
    "DirectoryId": "string",
    "Errors": [
      {
        "ErrorCode": "string",
        "ErrorMessage": "string"
      }
    ],
    "PoolArn": "string",
    "PoolId": "string",
    "PoolName": "string",
    "State": "string",
    "TimeoutSettings": {
      "DisconnectTimeoutInSeconds": number,
      "IdleDisconnectTimeoutInSeconds": number,
      "MaxUserDurationInSeconds": number
    }
  }
}
```

```
}
```

Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

WorkspacesPool

Describes the specified pool.

Type: [WorkspacesPool](#) object

Errors

For information about the errors that are common to all actions, see [Common Errors](#).

AccessDeniedException

The user is not authorized to access a resource.

HTTP Status Code: 400

InvalidParameterValuesException

One or more parameter values are not valid.

HTTP Status Code: 400

InvalidResourceStateException

The state of the resource is not valid for this operation.

HTTP Status Code: 400

OperationInProgressException

The properties of this WorkSpace are currently being modified. Try again in a moment.

HTTP Status Code: 400

OperationNotSupportedException

This operation is not supported.

HTTP Status Code: 400

ResourceLimitExceededException

Your resource limits have been exceeded.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

Data Types

The Amazon WorkSpaces API contains several data types that various actions use. This section describes each data type in detail.

Note

The order of each element in a data type structure is not guaranteed. Applications should not assume a particular order.

The following data types are supported:

- [AccountLink](#)
- [AccountModification](#)
- [ActiveDirectoryConfig](#)
- [ApplicationResourceAssociation](#)
- [ApplicationSettingsRequest](#)
- [ApplicationSettingsResponse](#)
- [AssociationStateReason](#)
- [BundleResourceAssociation](#)
- [Capacity](#)
- [CapacityStatus](#)
- [CertificateBasedAuthProperties](#)
- [ClientProperties](#)
- [ClientPropertiesResult](#)
- [ComputeType](#)
- [ConnectClientAddIn](#)
- [ConnectionAlias](#)
- [ConnectionAliasAssociation](#)
- [ConnectionAliasPermission](#)
- [DataReplicationSettings](#)
- [DefaultClientBrandingAttributes](#)

- [DefaultImportClientBrandingAttributes](#)
- [DefaultWorkspaceCreationProperties](#)
- [DescribeWorkspacesPoolsFilter](#)
- [ErrorDetails](#)
- [FailedCreateStandbyWorkspacesRequest](#)
- [FailedCreateWorkspaceRequest](#)
- [FailedWorkspaceChangeRequest](#)
- [ImagePermission](#)
- [ImageResourceAssociation](#)
- [IosClientBrandingAttributes](#)
- [IosImportClientBrandingAttributes](#)
- [IpRuleItem](#)
- [ModificationState](#)
- [NetworkAccessConfiguration](#)
- [OperatingSystem](#)
- [PendingCreateStandbyWorkspacesRequest](#)
- [RebootRequest](#)
- [RebuildRequest](#)
- [RelatedWorkspaceProperties](#)
- [RootStorage](#)
- [SamlProperties](#)
- [SelfservicePermissions](#)
- [Snapshot](#)
- [StandbyWorkspace](#)
- [StandbyWorkspacesProperties](#)
- [StartRequest](#)
- [StopRequest](#)
- [StorageConnector](#)
- [StreamingProperties](#)
- [Tag](#)

- [TerminateRequest](#)
- [TimeoutSettings](#)
- [UpdateResult](#)
- [UserSetting](#)
- [UserStorage](#)
- [Workspace](#)
- [WorkspaceAccessProperties](#)
- [WorkSpaceApplication](#)
- [WorkSpaceApplicationDeployment](#)
- [WorkspaceBundle](#)
- [WorkspaceConnectionStatus](#)
- [WorkspaceCreationProperties](#)
- [WorkspaceDirectory](#)
- [WorkspacelImage](#)
- [WorkspaceProperties](#)
- [WorkspaceRequest](#)
- [WorkspaceResourceAssociation](#)
- [WorkspacesIpGroup](#)
- [WorkspacesPool](#)
- [WorkspacesPoolError](#)
- [WorkspacesPoolSession](#)

AccountLink

Information about about the account link.

Contents

AccountLinkId

The identifier of the account link.

Type: String

Pattern: `^link-.{8,24}$`

Required: No

AccountLinkStatus

The status of the account link.

Type: String

Valid Values: LINKED | LINKING_FAILED | LINK_NOT_FOUND | PENDING_ACCEPTANCE_BY_TARGET_ACCOUNT | REJECTED

Required: No

SourceAccountId

The identifier of the source account.

Type: String

Pattern: `^\d{12}$`

Required: No

TargetAccountId

The identifier of the target account.

Type: String

Pattern: `^\d{12}$`

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

AccountModification

Describes a modification to the configuration of Bring Your Own License (BYOL) for the specified account.

Contents

DedicatedTenancyManagementCidrRange

The IP address range, specified as an IPv4 CIDR block, for the management network interface used for the account.

Type: String

Pattern: `(^[0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])\.([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])\.0\.0)(\/(16$))$`

Required: No

DedicatedTenancySupport

The status of BYOL (whether BYOL is being enabled or disabled).

Type: String

Valid Values: ENABLED | DISABLED

Required: No

ErrorCode

The error code that is returned if the configuration of BYOL cannot be modified.

Type: String

Required: No

ErrorMessage

The text of the error message that is returned if the configuration of BYOL cannot be modified.

Type: String

Required: No

ModificationState

The state of the modification to the configuration of BYOL.

Type: String

Valid Values: PENDING | COMPLETED | FAILED

Required: No

StartTime

The timestamp when the modification of the BYOL configuration was started.

Type: Timestamp

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

ActiveDirectoryConfig

Information about the Active Directory config.

Contents

DomainName

The name of the domain.

Type: String

Pattern: `^[a-zA-Z0-9]+[\.\-]+([a-zA-Z0-9])+$`

Required: Yes

ServiceAccountSecretArn

Indicates the secret ARN on the service account.

Type: String

Pattern: `^arn:aws[a-z-]{0,7}:secretsmanager:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:secret:[A-Za-z0-9][A-Za-z0-9_/.-]{8,519}$`

Required: Yes

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

ApplicationResourceAssociation

Describes the association between an application and an application resource.

Contents

ApplicationId

The identifier of the application.

Type: String

Pattern: `^wsa-[0-9a-z]{8,63}$`

Required: No

AssociatedResourceId

The identifier of the associated resource.

Type: String

Length Constraints: Minimum length of 1.

Required: No

AssociatedResourceType

The resource type of the associated resource.

Type: String

Valid Values: `WORKSPACE` | `BUNDLE` | `IMAGE`

Required: No

Created

The time the association was created.

Type: Timestamp

Required: No

LastUpdatedTime

The time the association status was last updated.

Type: Timestamp

Required: No

State

The status of the application resource association.

Type: String

Valid Values: PENDING_INSTALL | PENDING_INSTALL_DEPLOYMENT | PENDING_UNINSTALL | PENDING_UNINSTALL_DEPLOYMENT | INSTALLING | UNINSTALLING | ERROR | COMPLETED | REMOVED

Required: No

StateReason

The reason the association deployment failed.

Type: [AssociationStateReason](#) object

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

ApplicationSettingsRequest

The persistent application settings for WorkSpaces Pools users.

Contents

Status

Enables or disables persistent application settings for users during their pool sessions.

Type: String

Valid Values: DISABLED | ENABLED

Required: Yes

SettingsGroup

The path prefix for the S3 bucket where users' persistent application settings are stored. You can allow the same persistent application settings to be used across multiple pools by specifying the same settings group for each pool.

Type: String

Length Constraints: Maximum length of 100.

Pattern: `^[A-Za-z0-9_./()!*'-]+`

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

ApplicationSettingsResponse

Describes the persistent application settings for WorkSpaces Pools users.

Contents

Status

Specifies whether persistent application settings are enabled for users during their pool sessions.

Type: String

Valid Values: DISABLED | ENABLED

Required: Yes

S3BucketName

The S3 bucket where users' persistent application settings are stored. When persistent application settings are enabled for the first time for an account in an AWS Region, an S3 bucket is created. The bucket is unique to the AWS account and the Region.

Type: String

Length Constraints: Minimum length of 3. Maximum length of 63.

Pattern: `^[a-z0-9][\.\-a-z0-9]{1,61}[a-z0-9]$`

Required: No

SettingsGroup

The path prefix for the S3 bucket where users' persistent application settings are stored.

Type: String

Length Constraints: Maximum length of 100.

Pattern: `^[A-Za-z0-9_./()!*'-]+$`

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

AssociationStateReason

Indicates the reason that the association deployment failed, including the error code and error message.

Contents

ErrorCode

The error code of the association deployment failure.

Type: String

Valid Values: `ValidationError.InsufficientDiskSpace` |
`ValidationError.InsufficientMemory` |
`ValidationError.UnsupportedOperatingSystem` |
`DeploymentError.InternalServerError` |
`DeploymentError.WorkspaceUnreachable`

Required: No

ErrorMessage

The error message of the association deployment failure.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 2048.

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

BundleResourceAssociation

Describes the association between an application and a bundle resource.

Contents

AssociatedResourceId

The identifier of the associated resource.

Type: String

Length Constraints: Minimum length of 1.

Required: No

AssociatedResourceType

The resource type of the associated resources.

Type: String

Valid Values: APPLICATION

Required: No

BundleId

The identifier of the bundle.

Type: String

Pattern: `^wsb-[0-9a-z]{8,63}$`

Required: No

Created

The time the association is created.

Type: Timestamp

Required: No

LastUpdatedTime

The time the association status was last updated.

Type: Timestamp

Required: No

State

The status of the bundle resource association.

Type: String

Valid Values: PENDING_INSTALL | PENDING_INSTALL_DEPLOYMENT | PENDING_UNINSTALL | PENDING_UNINSTALL_DEPLOYMENT | INSTALLING | UNINSTALLING | ERROR | COMPLETED | REMOVED

Required: No

StateReason

The reason the association deployment failed.

Type: [AssociationStateReason](#) object

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

Capacity

Describes the user capacity for a pool of WorkSpaces.

Contents

DesiredUserSessions

The desired number of user sessions for a multi-session pool. This is not allowed for single-session pools.

Type: Integer

Valid Range: Minimum value of 0.

Required: Yes

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

CapacityStatus

Describes the capacity status for a pool of WorkSpaces.

Contents

ActiveUserSessions

The number of user sessions currently being used for pool sessions. This only applies to multi-session pools.

Type: Integer

Valid Range: Minimum value of 0.

Required: Yes

ActualUserSessions

The total number of session slots that are available for a pool of WorkSpaces.

Type: Integer

Valid Range: Minimum value of 0.

Required: Yes

AvailableUserSessions

The number of user sessions currently being used for pool sessions. This only applies to multi-session pools.

Type: Integer

Valid Range: Minimum value of 0.

Required: Yes

DesiredUserSessions

The total number of sessions slots that are either running or pending. This represents the total number of concurrent streaming sessions your pool can support in a steady state.

Type: Integer

Valid Range: Minimum value of 0.

Required: Yes

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

CertificateBasedAuthProperties

Describes the properties of the certificate-based authentication you want to use with your WorkSpaces.

Contents

CertificateAuthorityArn

The Amazon Resource Name (ARN) of the AWS Certificate Manager Private CA resource.

Type: String

Length Constraints: Minimum length of 5. Maximum length of 200.

Pattern: `arn:[\w+=/, .@-]+:[\w+=/, .@-]+:[\w+=/, .@-]*:[0-9]*:[\w+=, .@-]+(\/[\w+=, .@-]+)*`

Required: No

Status

The status of the certificate-based authentication properties.

Type: String

Valid Values: DISABLED | ENABLED

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

ClientProperties

Describes an Amazon WorkSpaces client.

Contents

LogUploadEnabled

Specifies whether users can upload diagnostic log files of Amazon WorkSpaces client directly to WorkSpaces to troubleshoot issues when using the WorkSpaces client. When enabled, the log files will be sent to WorkSpaces automatically and will be applied to all users in the specified directory.

Type: String

Valid Values: ENABLED | DISABLED

Required: No

ReconnectEnabled

Specifies whether users can cache their credentials on the Amazon WorkSpaces client. When enabled, users can choose to reconnect to their WorkSpaces without re-entering their credentials.

Type: String

Valid Values: ENABLED | DISABLED

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

ClientPropertiesResult

Information about the Amazon WorkSpaces client.

Contents

ClientProperties

Information about the Amazon WorkSpaces client.

Type: [ClientProperties](#) object

Required: No

ResourceId

The resource identifier, in the form of a directory ID.

Type: String

Length Constraints: Minimum length of 1.

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

ComputeType

Describes the compute type of the bundle.

Contents

Name

The compute type.

Type: String

Valid Values: VALUE | STANDARD | PERFORMANCE | POWER | GRAPHICS | POWERPRO | GRAPHICSPRO | GRAPHICS_G4DN | GRAPHICSPRO_G4DN

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

ConnectClientAddIn

Describes an Amazon Connect client add-in.

Contents

AddInId

The client add-in identifier.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `[a-f0-9]{8}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{12}`

Required: No

Name

The name of the client add in.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `^.*$`

Required: No

ResourceId

The directory identifier for which the client add-in is configured.

Type: String

Length Constraints: Minimum length of 10. Maximum length of 65.

Pattern: `^(d-[0-9a-f]{8,63}$)|(wsd-[0-9a-z]{8,63}$)`

Required: No

URL

The endpoint URL of the client add-in.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1024.

Pattern: `^(http|https)\:\/\S+`

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

ConnectionAlias

Describes a connection alias. Connection aliases are used for cross-Region redirection. For more information, see [Cross-Region Redirection for Amazon WorkSpaces](#).

Contents

AliasId

The identifier of the connection alias.

Type: String

Length Constraints: Minimum length of 13. Maximum length of 68.

Pattern: `^wsca-[0-9a-z]{8,63}$`

Required: No

Associations

The association status of the connection alias.

Type: Array of [ConnectionAliasAssociation](#) objects

Array Members: Minimum number of 1 item. Maximum number of 25 items.

Required: No

ConnectionString

The connection string specified for the connection alias. The connection string must be in the form of a fully qualified domain name (FQDN), such as `www.example.com`.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Pattern: `^[.0-9a-zA-Z\-\-]{1,255}$`

Required: No

OwnerAccountId

The identifier of the AWS account that owns the connection alias.

Type: String

Pattern: `^\d{12}$`

Required: No

State

The current state of the connection alias.

Type: String

Valid Values: CREATING | CREATED | DELETING

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

ConnectionAliasAssociation

Describes a connection alias association that is used for cross-Region redirection. For more information, see [Cross-Region Redirection for Amazon WorkSpaces](#).

Contents

AssociatedAccountId

The identifier of the AWS account that associated the connection alias with a directory.

Type: String

Pattern: `^\d{12}$`

Required: No

AssociationStatus

The association status of the connection alias.

Type: String

Valid Values: NOT_ASSOCIATED | ASSOCIATED_WITH_OWNER_ACCOUNT | ASSOCIATED_WITH_SHARED_ACCOUNT | PENDING_ASSOCIATION | PENDING_DISASSOCIATION

Required: No

ConnectionIdentifier

The identifier of the connection alias association. You use the connection identifier in the DNS TXT record when you're configuring your DNS routing policies.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 20.

Pattern: `^[a-zA-Z0-9]+$`

Required: No

ResourceId

The identifier of the directory associated with a connection alias.

Type: String

Length Constraints: Minimum length of 1.

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

ConnectionAliasPermission

Describes the permissions for a connection alias. Connection aliases are used for cross-Region redirection. For more information, see [Cross-Region Redirection for Amazon WorkSpaces](#).

Contents

AllowAssociation

Indicates whether the specified AWS account is allowed to associate the connection alias with a directory.

Type: Boolean

Required: Yes

SharedAccountId

The identifier of the AWS account that the connection alias is shared with.

Type: String

Pattern: `^\d{12}$`

Required: Yes

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

DataReplicationSettings

Describes the data replication settings.

Contents

DataReplication

Indicates whether data replication is enabled, and if enabled, the type of data replication.

Type: String

Valid Values: NO_REPLICATION | PRIMARY_AS_SOURCE

Required: No

RecoverySnapshotTime

The date and time at which the last successful snapshot was taken of the primary WorkSpace used for replicating data.

Type: Timestamp

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

DefaultClientBrandingAttributes

Returns default client branding attributes that were imported. These attributes display on the client login screen.

Important

Client branding attributes are public facing. Ensure that you don't include sensitive information.

Contents

ForgotPasswordLink

The forgotten password link. This is the web address that users can go to if they forget the password for their WorkSpace.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 200.

Pattern: `^(http|https)\:\/\/\S+`

Required: No

LoginMessage

The login message. Specified as a key value pair, in which the key is a locale and the value is the localized message for that locale. The only key supported is en_US. The HTML tags supported include the following: a, b, blockquote, br, cite, code, dd, dl, dt, div, em, i, li, ol, p, pre, q, small, span, strike, strong, sub, sup, u, ul.

Type: String to string map

Key Length Constraints: Fixed length of 5.

Key Pattern: `^[a-z]{2}_[A-Z]{2}$`

Value Length Constraints: Minimum length of 0. Maximum length of 2000.

Value Pattern: `^.*$`

Required: No

LogoUrl

The logo. The only image format accepted is a binary data object that is converted from a .png file.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 200.

Pattern: `^(http|https)\:\/\S+`

Required: No

SupportEmail

The support email. The company's customer support email address.

Note

- In each platform type, the `SupportEmail` and `SupportLink` parameters are mutually exclusive. You can specify one parameter for each platform type, but not both.
- The default email is `workspaces-feedback@amazon.com`.

Type: String

Length Constraints: Minimum length of 6. Maximum length of 64.

Pattern: `^[a-zA-Z0-9._%+-]+@[a-zA-Z0-9.-]+\.[a-zA-Z]{2,4}$`

Required: No

SupportLink

The support link. The link for the company's customer support page for their Workspace.

Note

- In each platform type, the `SupportEmail` and `SupportLink` parameters are mutually exclusive. You can specify one parameter for each platform type, but not both.

- The default support link is `workspaces-feedback@amazon.com`.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 200.

Pattern: `^(http|https)\:/\S+`

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

DefaultImportClientBrandingAttributes

The default client branding attributes to be imported. These attributes display on the client login screen.

Important

Client branding attributes are public facing. Ensure that you do not include sensitive information.

Contents

ForgotPasswordLink

The forgotten password link. This is the web address that users can go to if they forget the password for their WorkSpace.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 200.

Pattern: `^(http|https)\:\/\/\S+`

Required: No

LoginMessage

The login message. Specified as a key value pair, in which the key is a locale and the value is the localized message for that locale. The only key supported is en_US. The HTML tags supported include the following: a, b, blockquote, br, cite, code, dd, dl, dt, div, em, i, li, ol, p, pre, q, small, span, strike, strong, sub, sup, u, ul.

Type: String to string map

Key Length Constraints: Fixed length of 5.

Key Pattern: `^[a-z]{2}_[A-Z]{2}$`

Value Length Constraints: Minimum length of 0. Maximum length of 2000.

Value Pattern: `^.*$`

Required: No

Logo

The logo. The only image format accepted is a binary data object that is converted from a .png file.

Type: Base64-encoded binary data object

Length Constraints: Minimum length of 1. Maximum length of 1500000.

Required: No

SupportEmail

The support email. The company's customer support email address.

Note

- In each platform type, the `SupportEmail` and `SupportLink` parameters are mutually exclusive. You can specify one parameter for each platform type, but not both.
- The default email is `workspaces-feedback@amazon.com`.

Type: String

Length Constraints: Minimum length of 6. Maximum length of 64.

Pattern: `^[a-zA-Z0-9._%+-]+@[a-zA-Z0-9.-]+\.[a-zA-Z]{2,4}$`

Required: No

SupportLink

The support link. The link for the company's customer support page for their Workspace.

Note

- In each platform type, the `SupportEmail` and `SupportLink` parameters are mutually exclusive. You can specify one parameter for each platform type, but not both.

- The default support link is `workspaces-feedback@amazon.com`.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 200.

Pattern: `^(http|https)\:/\S+`

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

DefaultWorkspaceCreationProperties

Describes the default values that are used to create WorkSpaces. For more information, see [Update Directory Details for Your WorkSpaces](#).

Contents

CustomSecurityGroupId

The identifier of the default security group to apply to WorkSpaces when they are created. For more information, see [Security Groups for Your WorkSpaces](#).

Type: String

Length Constraints: Minimum length of 11. Maximum length of 20.

Pattern: `^(sg-([0-9a-f]{8}|[0-9a-f]{17}))$`

Required: No

DefaultOu

The organizational unit (OU) in the directory for the WorkSpace machine accounts.

Type: String

Required: No

EnableInternetAccess

Specifies whether to automatically assign an Elastic public IP address to WorkSpaces in this directory by default. If enabled, the Elastic public IP address allows outbound internet access from your WorkSpaces when you're using an internet gateway in the Amazon VPC in which your WorkSpaces are located. If you're using a Network Address Translation (NAT) gateway for outbound internet access from your VPC, or if your WorkSpaces are in public subnets and you manually assign them Elastic IP addresses, you should disable this setting. This setting applies to new WorkSpaces that you launch or to existing WorkSpaces that you rebuild. For more information, see [Configure a VPC for Amazon WorkSpaces](#).

Type: Boolean

Required: No

EnableMaintenanceMode

Specifies whether maintenance mode is enabled for WorkSpaces. For more information, see [Workspace Maintenance](#).

Type: Boolean

Required: No

EnableWorkDocs

Specifies whether the directory is enabled for Amazon WorkDocs.

Type: Boolean

Required: No

InstanceIamRoleArn

Indicates the IAM role ARN of the instance.

Type: String

Pattern: `^arn:aws[a-z-]{0,7}:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:/_+=, @.\-]{0,1023}$`

Required: No

UserEnabledAsLocalAdministrator

Specifies whether Workspace users are local administrators on their WorkSpaces.

Type: Boolean

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)

- [AWS SDK for Ruby V3](#)

DescribeWorkspacesPoolsFilter

Describes the filter conditions for WorkSpaces Pools to return.

Contents

Name

The name of the pool to filter.

Type: String

Valid Values: PoolName

Required: Yes

Operator

The operator values for filtering WorkSpaces Pools.

Type: String

Valid Values: EQUALS | NOTEQUALS | CONTAINS | NOTCONTAINS

Required: Yes

Values

The values for filtering WorkSpaces Pools.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 25 items.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `^[A-Za-z0-9][A-Za-z0-9_.-]+`

Required: Yes

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

ErrorDetails

Describes in-depth details about the error. These details include the possible causes of the error and troubleshooting information.

Contents

ErrorCode

Indicates the error code returned.

Type: String

Valid Values: OutdatedPowershellVersion | OfficeInstalled | PCoIPAgentInstalled | WindowsUpdatesEnabled | AutoMountDisabled | WorkspacesBYOLAccountNotFound | WorkspacesBYOLAccountDisabled | DHCPDisabled | DiskFreeSpace | AdditionalDrivesAttached | OSNotSupported | DomainJoined | AzureDomainJoined | FirewallEnabled | VMWareToolsInstalled | DiskSizeExceeded | IncompatiblePartitioning | PendingReboot | AutoLogonEnabled | RealTimeUniversalDisabled | MultipleBootPartition | Requires64BitOS | ZeroRearmCount | InPlaceUpgrade | AntiVirusInstalled | UEFINotSupported

Required: No

ErrorMessage

The text of the error message related the error code.

Type: String

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)

- [AWS SDK for Ruby V3](#)

FailedCreateStandbyWorkspacesRequest

Describes the standby WorkSpace that could not be created.

Contents

ErrorCode

The error code that is returned if the standby WorkSpace could not be created.

Type: String

Required: No

ErrorMessage

The text of the error message that is returned if the standby WorkSpace could not be created.

Type: String

Required: No

StandbyWorkspaceRequest

Information about the standby WorkSpace that could not be created.

Type: [StandbyWorkspace](#) object

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

FailedCreateWorkspaceRequest

Describes a Workspace that cannot be created.

Contents

ErrorCode

The error code that is returned if the Workspace cannot be created.

Type: String

Required: No

ErrorMessage

The text of the error message that is returned if the Workspace cannot be created.

Type: String

Required: No

WorkspaceRequest

Information about the Workspace.

Type: [WorkspaceRequest](#) object

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

FailedWorkspaceChangeRequest

Describes a WorkSpace that could not be rebooted. ([RebootWorkspaces](#)), rebuilt ([RebuildWorkspaces](#)), restored ([RestoreWorkspace](#)), terminated ([TerminateWorkspaces](#)), started ([StartWorkspaces](#)), or stopped ([StopWorkspaces](#)).

Contents

ErrorCode

The error code that is returned if the WorkSpace cannot be rebooted.

Type: String

Required: No

ErrorMessage

The text of the error message that is returned if the WorkSpace cannot be rebooted.

Type: String

Required: No

WorkspaceId

The identifier of the WorkSpace.

Type: String

Pattern: `^ws-[0-9a-z]{8,63}$`

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

ImagePermission

Describes the AWS accounts that have been granted permission to use a shared image. For more information about sharing images, see [Share or Unshare a Custom WorkSpaces Image](#).

Contents

SharedAccountId

The identifier of the AWS account that an image has been shared with.

Type: String

Pattern: `^\d{12}$`

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

ImageResourceAssociation

Describes the association between an application and an image resource.

Contents

AssociatedResourceId

The identifier of the associated resource.

Type: String

Length Constraints: Minimum length of 1.

Required: No

AssociatedResourceType

The resource type of the associated resources.

Type: String

Valid Values: APPLICATION

Required: No

Created

The time the association is created.

Type: Timestamp

Required: No

ImageId

The identifier of the image.

Type: String

Pattern: `wsi-[0-9a-z]{9,63}$`

Required: No

LastUpdatedTime

The time the association status was last updated.

Type: Timestamp

Required: No

State

The status of the image resource association.

Type: String

Valid Values: PENDING_INSTALL | PENDING_INSTALL_DEPLOYMENT | PENDING_UNINSTALL | PENDING_UNINSTALL_DEPLOYMENT | INSTALLING | UNINSTALLING | ERROR | COMPLETED | REMOVED

Required: No

StateReason

The reason the association deployment failed.

Type: [AssociationStateReason](#) object

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

iosClientBrandingAttributes

The client branding attributes for iOS device types. These attributes are displayed on the iOS client login screen only.

Important

Client branding attributes are public facing. Ensure you do not include sensitive information.

Contents

ForgotPasswordLink

The forgotten password link. This is the web address that users can go to if they forget the password for their WorkSpace.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 200.

Pattern: `^(http|https)\:\/\/\S+`

Required: No

LoginMessage

The login message. Specified as a key value pair, in which the key is a locale and the value is the localized message for that locale. The only key supported is en_US. The HTML tags supported include the following: a, b, blockquote, br, cite, code, dd, dl, dt, div, em, i, li, ol, p, pre, q, small, span, strike, strong, sub, sup, u, ul.

Type: String to string map

Key Length Constraints: Fixed length of 5.

Key Pattern: `^[a-z]{2}_[A-Z]{2}$`

Value Length Constraints: Minimum length of 0. Maximum length of 2000.

Value Pattern: `^.*$`

Required: No

Logo2xUrl

The @2x version of the logo. This is the higher resolution display that offers a scale factor of 2.0 (or @2x). The only image format accepted is a binary data object that is converted from a .png file.

Note

For more information about iOS image size and resolution, see [Image Size and Resolution](#) in the *Apple Human Interface Guidelines*.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 200.

Pattern: `^(http|https)\:\/\/\S+`

Required: No

Logo3xUrl

The @3x version of the logo. This is the higher resolution display that offers a scale factor of 3.0 (or @3x). The only image format accepted is a binary data object that is converted from a .png file.

Note

For more information about iOS image size and resolution, see [Image Size and Resolution](#) in the *Apple Human Interface Guidelines*.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 200.

Pattern: `^(http|https)\:\/\/\S+`

Required: No

LogoUrl

The logo. This is the standard-resolution display that has a 1:1 pixel density (or @1x), where one pixel is equal to one point. The only image format accepted is a binary data object that is converted from a .png file.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 200.

Pattern: `^(http|https)\:/\S+`

Required: No

SupportEmail

The support email. The company's customer support email address.

Note

- In each platform type, the `SupportEmail` and `SupportLink` parameters are mutually exclusive. You can specify one parameter for each platform type, but not both.
- The default email is `workspaces-feedback@amazon.com`.

Type: String

Length Constraints: Minimum length of 6. Maximum length of 64.

Pattern: `^[a-zA-Z0-9._%+-]+@[a-zA-Z0-9.-]+\.[a-zA-Z]{2,4}$`

Required: No

SupportLink

The support link. The link for the company's customer support page for their Workspace.

Note

- In each platform type, the `SupportEmail` and `SupportLink` parameters are mutually exclusive. You can specify one parameter for each platform type, but not both.

- The default support link is `workspaces-feedback@amazon.com`.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 200.

Pattern: `^(http|https)\:/\S+`

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

iosImportClientBrandingAttributes

The client branding attributes to import for iOS device types. These attributes are displayed on the iOS client login screen.

Important

Client branding attributes are public facing. Ensure you do not include sensitive information.

Contents

ForgotPasswordLink

The forgotten password link. This is the web address that users can go to if they forget the password for their WorkSpace.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 200.

Pattern: `^(http|https)\:\/\/\S+`

Required: No

LoginMessage

The login message. Specified as a key value pair, in which the key is a locale and the value is the localized message for that locale. The only key supported is en_US. The HTML tags supported include the following: a, b, blockquote, br, cite, code, dd, dl, dt, div, em, i, li, ol, p, pre, q, small, span, strike, strong, sub, sup, u, ul.

Type: String to string map

Key Length Constraints: Fixed length of 5.

Key Pattern: `^[a-z]{2}_[A-Z]{2}$`

Value Length Constraints: Minimum length of 0. Maximum length of 2000.

Value Pattern: `^.*$`

Required: No

Logo

The logo. This is the standard-resolution display that has a 1:1 pixel density (or @1x), where one pixel is equal to one point. The only image format accepted is a binary data object that is converted from a .png file.

Type: Base64-encoded binary data object

Length Constraints: Minimum length of 1. Maximum length of 447000.

Required: No

Logo2x

The @2x version of the logo. This is the higher resolution display that offers a scale factor of 2.0 (or @2x). The only image format accepted is a binary data object that is converted from a .png file.

Note

For more information about iOS image size and resolution, see [Image Size and Resolution](#) in the *Apple Human Interface Guidelines*.

Type: Base64-encoded binary data object

Length Constraints: Minimum length of 1. Maximum length of 1770000.

Required: No

Logo3x

The @3x version of the logo. This is the higher resolution display that offers a scale factor of 3.0 (or @3x). The only image format accepted is a binary data object that is converted from a .png file.

Note

For more information about iOS image size and resolution, see [Image Size and Resolution](#) in the *Apple Human Interface Guidelines*.

Type: Base64-encoded binary data object

Length Constraints: Minimum length of 1. Maximum length of 1770000.

Required: No

SupportEmail

The support email. The company's customer support email address.

Note

- In each platform type, the `SupportEmail` and `SupportLink` parameters are mutually exclusive. You can specify one parameter for each platform type, but not both.
- The default email is `workspaces-feedback@amazon.com`.

Type: String

Length Constraints: Minimum length of 6. Maximum length of 64.

Pattern: `^[a-zA-Z0-9._%+-]+@[a-zA-Z0-9.-]+\.[a-zA-Z]{2,4}$`

Required: No

SupportLink

The support link. The link for the company's customer support page for their Workspace.

Note

- In each platform type, the `SupportEmail` and `SupportLink` parameters are mutually exclusive. You can specify one parameter for each platform type, but not both.
- The default support link is `workspaces-feedback@amazon.com`.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 200.

Pattern: `^(http|https)\:\/\/\S+`

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

IpRuleItem

Describes a rule for an IP access control group.

Contents

ipRule

The IP address range, in CIDR notation.

Type: String

Required: No

ruleDesc

The description.

Type: String

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

ModificationState

Describes a Workspace modification.

Contents

Resource

The resource.

Type: String

Valid Values: ROOT_VOLUME | USER_VOLUME | COMPUTE_TYPE

Required: No

State

The modification state.

Type: String

Valid Values: UPDATE_INITIATED | UPDATE_IN_PROGRESS

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

NetworkAccessConfiguration

Describes the network details of a WorkSpaces Pool.

Contents

EniId

The resource identifier of the elastic network interface that is attached to instances in your VPC. All network interfaces have the eni-xxxxxxx resource identifier.

Type: String

Length Constraints: Minimum length of 1.

Required: No

EniPrivateIpAddress

The private IP address of the elastic network interface that is attached to instances in your VPC.

Type: String

Length Constraints: Minimum length of 1.

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

OperatingSystem

The operating system that the image is running.

Contents

Type

The operating system.

Type: String

Valid Values: WINDOWS | LINUX

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

PendingCreateStandbyWorkspacesRequest

Information about the standby WorkSpace.

Contents

DirectoryId

The identifier of the directory for the standby WorkSpace.

Type: String

Length Constraints: Minimum length of 10. Maximum length of 65.

Pattern: `^(d-[0-9a-f]{8,63}$)|(wsd-[0-9a-z]{8,63}$)`

Required: No

State

The operational state of the standby WorkSpace.

Type: String

Valid Values: PENDING | AVAILABLE | IMPAIRED | UNHEALTHY | REBOOTING | STARTING | REBUILDING | RESTORING | MAINTENANCE | ADMIN_MAINTENANCE | TERMINATING | TERMINATED | SUSPENDED | UPDATING | STOPPING | STOPPED | ERROR

Required: No

UserName

Describes the standby WorkSpace that was created.

Because this operation is asynchronous, the identifier returned is not immediately available for use with other operations. For example, if you call [DescribeWorkspaces](#) before the WorkSpace is created, the information returned can be incomplete.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 63.

Required: No

WorkspaceId

The identifier of the standby Workspace.

Type: String

Pattern: `^ws-[0-9a-z]{8,63}$`

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

RebootRequest

Describes the information used to reboot a Workspace.

Contents

WorkspaceId

The identifier of the Workspace.

Type: String

Pattern: `^ws-[0-9a-z]{8,63}$`

Required: Yes

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

RebuildRequest

Describes the information used to rebuild a WorkSpace.

Contents

WorkspaceId

The identifier of the WorkSpace.

Type: String

Pattern: `^ws-[0-9a-z]{8,63}$`

Required: Yes

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

RelatedWorkspaceProperties

Describes the related WorkSpace. The related WorkSpace could be a standby WorkSpace or primary WorkSpace related to the specified WorkSpace.

Contents

Region

The Region of the related WorkSpace.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 31.

Pattern: `^[-0-9a-z]{1,31}$`

Required: No

State

Indicates the state of the WorkSpace.

Type: String

Valid Values: PENDING | AVAILABLE | IMPAIRED | UNHEALTHY | REBOOTING | STARTING | REBUILDING | RESTORING | MAINTENANCE | ADMIN_MAINTENANCE | TERMINATING | TERMINATED | SUSPENDED | UPDATING | STOPPING | STOPPED | ERROR

Required: No

Type

Indicates the type of WorkSpace.

Type: String

Valid Values: PRIMARY | STANDBY

Required: No

WorkspaceId

The identifier of the related WorkSpace.

Type: String

Pattern: `^ws-[0-9a-z]{8,63}$`

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

RootStorage

Describes the root volume for a Workspace bundle.

Contents

Capacity

The size of the root volume.

Type: String

Length Constraints: Minimum length of 1.

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

SamlProperties

Describes the enablement status, user access URL, and relay state parameter name that are used for configuring federation with an SAML 2.0 identity provider.

Contents

RelayStateParameterName

The relay state parameter name supported by the SAML 2.0 identity provider (IdP). When the end user is redirected to the user access URL from the WorkSpaces client application, this relay state parameter name is appended as a query parameter to the URL along with the relay state endpoint to return the user to the client application session.

To use SAML 2.0 authentication with WorkSpaces, the IdP must support IdP-initiated deep linking for the relay state URL. Consult your IdP documentation for more information.

Type: String

Length Constraints: Minimum length of 1.

Required: No

Status

Indicates the status of SAML 2.0 authentication. These statuses include the following.

- If the setting is `DISABLED`, end users will be directed to login with their directory credentials.
- If the setting is `ENABLED`, end users will be directed to login via the user access URL. Users attempting to connect to WorkSpaces from a client application that does not support SAML 2.0 authentication will not be able to connect.
- If the setting is `ENABLED_WITH_DIRECTORY_LOGIN_FALLBACK`, end users will be directed to login via the user access URL on supported client applications, but will not prevent clients that do not support SAML 2.0 authentication from connecting as if SAML 2.0 authentication was disabled.

Type: String

Valid Values: `DISABLED` | `ENABLED` | `ENABLED_WITH_DIRECTORY_LOGIN_FALLBACK`

Required: No

UserAccessUrl

The SAML 2.0 identity provider (IdP) user access URL is the URL a user would navigate to in their web browser in order to federate from the IdP and directly access the application, without any SAML 2.0 service provider (SP) bindings.

Type: String

Length Constraints: Minimum length of 8. Maximum length of 200.

Pattern: `^(http|https)\:\/\/\S+$`

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

SelfservicePermissions

Describes the self-service permissions for a directory. For more information, see [Enable Self-Service Workspace Management Capabilities for Your Users](#).

Contents

ChangeComputeType

Specifies whether users can change the compute type (bundle) for their Workspace.

Type: String

Valid Values: ENABLED | DISABLED

Required: No

IncreaseVolumeSize

Specifies whether users can increase the volume size of the drives on their Workspace.

Type: String

Valid Values: ENABLED | DISABLED

Required: No

RebuildWorkspace

Specifies whether users can rebuild the operating system of a Workspace to its original state.

Type: String

Valid Values: ENABLED | DISABLED

Required: No

RestartWorkspace

Specifies whether users can restart their Workspace.

Type: String

Valid Values: ENABLED | DISABLED

Required: No

SwitchRunningMode

Specifies whether users can switch the running mode of their Workspace.

Type: String

Valid Values: ENABLED | DISABLED

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

Snapshot

Describes a snapshot.

Contents

SnapshotTime

The time when the snapshot was created.

Type: Timestamp

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

StandbyWorkspace

Describes a standby WorkSpace.

Contents

DirectoryId

The identifier of the directory for the standby WorkSpace.

Type: String

Length Constraints: Minimum length of 10. Maximum length of 65.

Pattern: `^(d-[0-9a-f]{8,63}$)|(wsd-[0-9a-z]{8,63}$)`

Required: Yes

PrimaryWorkspaceId

The identifier of the standby WorkSpace.

Type: String

Pattern: `^ws-[0-9a-z]{8,63}$`

Required: Yes

DataReplication

Indicates whether data replication is enabled, and if enabled, the type of data replication.

Type: String

Valid Values: NO_REPLICATION | PRIMARY_AS_SOURCE

Required: No

Tags

The tags associated with the standby WorkSpace.

Type: Array of [Tag](#) objects

Required: No

VolumeEncryptionKey

The volume encryption key of the standby Workspace.

Type: String

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

StandbyWorkspacesProperties

Describes the properties of the related standby WorkSpaces.

Contents

DataReplication

Indicates whether data replication is enabled, and if enabled, the type of data replication.

Type: String

Valid Values: NO_REPLICATION | PRIMARY_AS_SOURCE

Required: No

RecoverySnapshotTime

The date and time at which the last successful snapshot was taken of the primary WorkSpace used for replicating data.

Type: Timestamp

Required: No

StandbyWorkspaceId

The identifier of the standby WorkSpace

Type: String

Pattern: ^ws-[0-9a-z]{8,63}\$

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)

- [AWS SDK for Ruby V3](#)

StartRequest

Information used to start a Workspace.

Contents

WorkspaceId

The identifier of the Workspace.

Type: String

Pattern: `^ws-[0-9a-z]{8,63}$`

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

StopRequest

Describes the information used to stop a Workspace.

Contents

WorkspaceId

The identifier of the Workspace.

Type: String

Pattern: `^ws-[0-9a-z]{8,63}$`

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

StorageConnector

Describes the storage connector.

Contents

ConnectorType

The type of connector used to save user files.

Type: String

Valid Values: HOME_FOLDER

Required: Yes

Status

Indicates if the storage connector is enabled or disabled.

Type: String

Valid Values: ENABLED | DISABLED

Required: Yes

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

StreamingProperties

Describes the streaming properties.

Contents

StorageConnectors

Indicates the storage connector used

Type: Array of [StorageConnector](#) objects

Array Members: Minimum number of 1 item.

Required: No

StreamingExperiencePreferredProtocol

Indicates the type of preferred protocol for the streaming experience.

Type: String

Valid Values: TCP | UDP

Required: No

UserSettings

Indicates the permission settings associated with the user.

Type: Array of [UserSetting](#) objects

Array Members: Minimum number of 1 item.

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)

- [AWS SDK for Ruby V3](#)

Tag

Describes a tag.

Contents

Key

The key of the tag.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 127.

Required: Yes

Value

The value of the tag.

Type: String

Length Constraints: Maximum length of 255.

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

TerminateRequest

Describes the information used to terminate a WorkSpace.

Contents

WorkspaceId

The identifier of the WorkSpace.

Type: String

Pattern: `^ws-[0-9a-z]{8,63}$`

Required: Yes

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

TimeoutSettings

Describes the timeout settings for a pool of WorkSpaces.

Contents

DisconnectTimeoutInSeconds

Specifies the amount of time, in seconds, that a streaming session remains active after users disconnect. If users try to reconnect to the streaming session after a disconnection or network interruption within the time set, they are connected to their previous session. Otherwise, they are connected to a new session with a new streaming instance.

Type: Integer

Valid Range: Minimum value of 60. Maximum value of 36000.

Required: No

IdleDisconnectTimeoutInSeconds

The amount of time in seconds a connection will stay active while idle.

Type: Integer

Valid Range: Minimum value of 0. Maximum value of 36000.

Required: No

MaxUserDurationInSeconds

Specifies the maximum amount of time, in seconds, that a streaming session can remain active. If users are still connected to a streaming instance five minutes before this limit is reached, they are prompted to save any open documents before being disconnected. After this time elapses, the instance is terminated and replaced by a new instance.

Type: Integer

Valid Range: Minimum value of 600. Maximum value of 432000.

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

UpdateResult

Describes whether a WorkSpace image needs to be updated with the latest drivers and other components required by Amazon WorkSpaces.

Note

Only Windows 10 WorkSpace images can be programmatically updated at this time.

Contents

Description

A description of whether updates for the WorkSpace image are pending or available.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Pattern: `^[a-zA-Z0-9_./() -]+$`

Required: No

UpdateAvailable

Indicates whether updated drivers or other components are available for the specified WorkSpace image.

Type: Boolean

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)

- [AWS SDK for Ruby V3](#)

UserSetting

Information about the user's permission settings.

Contents

Action

Indicates the type of action.

Type: String

Valid Values: CLIPBOARD_COPY_FROM_LOCAL_DEVICE | CLIPBOARD_COPY_TO_LOCAL_DEVICE | PRINTING_TO_LOCAL_DEVICE | SMART_CARD

Required: Yes

Permission

Indicates if the setting is enabled or disabled.

Type: String

Valid Values: ENABLED | DISABLED

Required: Yes

MaximumLength

Indicates the maximum character length for the specified user setting.

Type: Integer

Valid Range: Minimum value of 0.

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)

- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

UserStorage

Describes the user volume for a Workspace bundle.

Contents

Capacity

The size of the user volume.

Type: String

Length Constraints: Minimum length of 1.

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

Workspace

Describes a WorkSpace.

Contents

BundleId

The identifier of the bundle used to create the WorkSpace.

Type: String

Pattern: `^wsb-[0-9a-z]{8,63}$`

Required: No

ComputerName

The name of the WorkSpace, as seen by the operating system. The format of this name varies. For more information, see [Launch a WorkSpace](#).

Type: String

Required: No

DataReplicationSettings

Indicates the settings of the data replication.

Type: [DataReplicationSettings](#) object

Required: No

DirectoryId

The identifier of the AWS Directory Service directory for the WorkSpace.

Type: String

Length Constraints: Minimum length of 10. Maximum length of 65.

Pattern: `^(d-[0-9a-f]{8,63}$)|(wsd-[0-9a-z]{8,63}$)`

Required: No

ErrorCode

The error code that is returned if the WorkSpace cannot be created.

Type: String

Required: No

ErrorMessage

The text of the error message that is returned if the WorkSpace cannot be created.

Type: String

Required: No

IpAddress

The IP address of the WorkSpace.

Type: String

Required: No

ModificationStates

The modification states of the WorkSpace.

Type: Array of [ModificationState](#) objects

Required: No

RelatedWorkspaces

The standby WorkSpace or primary WorkSpace related to the specified WorkSpace.

Type: Array of [RelatedWorkspaceProperties](#) objects

Required: No

RootVolumeEncryptionEnabled

Indicates whether the data stored on the root volume is encrypted.

Type: Boolean

Required: No

StandbyWorkspacesProperties

The properties of the standby WorkSpace

Type: Array of [StandbyWorkspacesProperties](#) objects

Required: No

State

The operational state of the WorkSpace.

- PENDING – The WorkSpace is in a waiting state (for example, the WorkSpace is being created).
- AVAILABLE – The WorkSpace is running and has passed the health checks.
- IMPAIRED – Refer to UNHEALTHY state.
- UNHEALTHY – The WorkSpace is not responding to health checks.
- REBOOTING – The WorkSpace is being rebooted (restarted).
- STARTING – The WorkSpace is starting up and health checks are being run.
- REBUILDING – The WorkSpace is being rebuilt.
- RESTORING – The WorkSpace is being restored.
- MAINTENANCE – The WorkSpace is undergoing scheduled maintenance by AWS.
- ADMIN_MAINTENANCE – The WorkSpace is undergoing maintenance by the WorkSpaces administrator.
- TERMINATING – The WorkSpace is being deleted.
- TERMINATED – The WorkSpace has been deleted.
- SUSPENDED – The WorkSpace has been suspended for image creation.
- UPDATING – The WorkSpace is undergoing an update.
- STOPPING – The WorkSpace is being stopped.
- STOPPED – The WorkSpace has been stopped.
- ERROR – The WorkSpace is an error state (for example, an error occurred during startup).

Note

After a WorkSpace is terminated, the TERMINATED state is returned only briefly before the WorkSpace directory metadata is cleaned up, so this state is rarely returned.

To confirm that a WorkSpace is terminated, check for the WorkSpace ID by using [DescribeWorkSpaces](#). If the WorkSpace ID isn't returned, then the WorkSpace has been successfully terminated.

Type: String

Valid Values: PENDING | AVAILABLE | IMPAIRED | UNHEALTHY | REBOOTING | STARTING | REBUILDING | RESTORING | MAINTENANCE | ADMIN_MAINTENANCE | TERMINATING | TERMINATED | SUSPENDED | UPDATING | STOPPING | STOPPED | ERROR

Required: No

SubnetId

The identifier of the subnet for the WorkSpace.

Type: String

Length Constraints: Minimum length of 15. Maximum length of 24.

Pattern: `^(subnet-([0-9a-f]{8}|[0-9a-f]{17}))$`

Required: No

UserName

The user for the WorkSpace.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 63.

Required: No

UserVolumeEncryptionEnabled

Indicates whether the data stored on the user volume is encrypted.

Type: Boolean

Required: No

VolumeEncryptionKey

The ARN of the symmetric AWS KMS key used to encrypt data stored on your Workspace. Amazon WorkSpaces does not support asymmetric KMS keys.

Type: String

Required: No

WorkspaceId

The identifier of the Workspace.

Type: String

Pattern: `^ws-[0-9a-z]{8,63}$`

Required: No

WorkspaceName

The name of the user-decoupled Workspace.

Type: String

Pattern: `^[a-zA-Z0-9_()][a-zA-Z0-9_().-]{1,63}$`

Required: No

WorkspaceProperties

The properties of the Workspace.

Type: [WorkspaceProperties](#) object

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)

- [AWS SDK for Ruby V3](#)

WorkspaceAccessProperties

The device types and operating systems that can be used to access a WorkSpace. For more information, see [Amazon WorkSpaces Client Network Requirements](#).

Contents

DeviceTypeAndroid

Indicates whether users can use Android and Android-compatible Chrome OS devices to access their WorkSpaces.

Type: String

Valid Values: ALLOW | DENY

Required: No

DeviceTypeChromeOs

Indicates whether users can use Chromebooks to access their WorkSpaces.

Type: String

Valid Values: ALLOW | DENY

Required: No

DeviceTypeIos

Indicates whether users can use iOS devices to access their WorkSpaces.

Type: String

Valid Values: ALLOW | DENY

Required: No

DeviceTypeLinux

Indicates whether users can use Linux clients to access their WorkSpaces.

Type: String

Valid Values: ALLOW | DENY

Required: No

DeviceTypeOsx

Indicates whether users can use macOS clients to access their WorkSpaces.

Type: String

Valid Values: ALLOW | DENY

Required: No

DeviceTypeWeb

Indicates whether users can access their WorkSpaces through a web browser.

Type: String

Valid Values: ALLOW | DENY

Required: No

DeviceTypeWindows

Indicates whether users can use Windows clients to access their WorkSpaces.

Type: String

Valid Values: ALLOW | DENY

Required: No

DeviceTypeZeroClient

Indicates whether users can use zero client devices to access their WorkSpaces.

Type: String

Valid Values: ALLOW | DENY

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

WorkspaceApplication

Describes the Workspace application.

Contents

ApplicationId

The identifier of the application.

Type: String

Pattern: `^wsa-[0-9a-z]{8,63}$`

Required: No

Created

The time the application is created.

Type: Timestamp

Required: No

Description

The description of the Workspace application.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 2048.

Required: No

LicenseType

The license availability for the applications.

Type: String

Valid Values: LICENSED | UNLICENSED

Required: No

Name

The name of the Workspace application.

Type: String

Length Constraints: Minimum length of 1.

Required: No

Owner

The owner of the WorkSpace application.

Type: String

Pattern: `^\d{12}|AMAZON$`

Required: No

State

The status of WorkSpace application.

Type: String

Valid Values: PENDING | ERROR | AVAILABLE | UNINSTALL_ONLY

Required: No

SupportedComputeTypeNames

The supported compute types of the WorkSpace application.

Type: Array of strings

Valid Values: VALUE | STANDARD | PERFORMANCE | POWER | GRAPHICS | POWERPRO | GRAPHICSPRO | GRAPHICS_G4DN | GRAPHICSPRO_G4DN

Required: No

SupportedOperatingSystemNames

The supported operating systems of the WorkSpace application.

Type: Array of strings

Valid Values: AMAZON_LINUX_2 | UBUNTU_18_04 | UBUNTU_20_04 | UBUNTU_22_04 | UNKNOWN | WINDOWS_10 | WINDOWS_11 | WINDOWS_7 | WINDOWS_SERVER_2016 | WINDOWS_SERVER_2019 | WINDOWS_SERVER_2022 | RHEL_8

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

WorkspaceApplicationDeployment

Describes the Workspace application deployment.

Contents

Associations

The associations between the applications and the associated resources.

Type: Array of [WorkspaceResourceAssociation](#) objects

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

WorkspaceBundle

Describes a Workspace bundle.

Contents

BundleId

The identifier of the bundle.

Type: String

Pattern: `^wsb-[0-9a-z]{8,63}$`

Required: No

BundleType

The type of Workspace bundle.

Type: String

Valid Values: REGULAR | STANDBY

Required: No

ComputeType

The compute type of the bundle. For more information, see [Amazon WorkSpaces Bundles](#).

Type: [ComputeType](#) object

Required: No

CreationTime

The time when the bundle was created.

Type: Timestamp

Required: No

Description

The description of the bundle.

Type: String

Required: No

ImageId

The identifier of the image that was used to create the bundle.

Type: String

Pattern: `wsi-[0-9a-z]{9,63}`\$

Required: No

LastUpdatedTime

The last time that the bundle was updated.

Type: Timestamp

Required: No

Name

The name of the bundle.

Type: String

Length Constraints: Minimum length of 1.

Required: No

Owner

The owner of the bundle. This is the account identifier of the owner, or AMAZON if the bundle is provided by AWS.

Type: String

Required: No

RootStorage

The size of the root volume.

Type: [RootStorage](#) object

Required: No

State

The state of the Workspace bundle.

Type: String

Valid Values: AVAILABLE | PENDING | ERROR

Required: No

UserStorage

The size of the user volume.

Type: [UserStorage](#) object

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

WorkspaceConnectionStatus

Describes the connection status of a WorkSpace.

Contents

ConnectionState

The connection state of the WorkSpace. The connection state is unknown if the WorkSpace is stopped.

Type: String

Valid Values: CONNECTED | DISCONNECTED | UNKNOWN

Required: No

ConnectionStateCheckTimestamp

The timestamp of the connection status check.

Type: Timestamp

Required: No

LastKnownUserConnectionTimestamp

The timestamp of the last known user connection.

Type: Timestamp

Required: No

WorkspaceId

The identifier of the WorkSpace.

Type: String

Pattern: `^ws-[0-9a-z]{8,63}$`

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

WorkspaceCreationProperties

Describes the default properties that are used for creating WorkSpaces. For more information, see [Update Directory Details for Your WorkSpaces](#).

Contents

CustomSecurityGroupId

The identifier of your custom security group.

Type: String

Length Constraints: Minimum length of 11. Maximum length of 20.

Pattern: `^(sg-([0-9a-f]{8}|[0-9a-f]{17}))$`

Required: No

DefaultOu

The default organizational unit (OU) for your WorkSpaces directories. This string must be the full Lightweight Directory Access Protocol (LDAP) distinguished name for the target domain and OU. It must be in the form "`OU=value,DC=value,DC=value`", where *value* is any string of characters, and the number of domain components (DCs) is two or more. For example, `OU=WorkSpaces_machines,DC=machines,DC=example,DC=com`.

Important

- To avoid errors, certain characters in the distinguished name must be escaped. For more information, see [Distinguished Names](#) in the Microsoft documentation.
- The API doesn't validate whether the OU exists.

Type: String

Required: No

EnableInternetAccess

Indicates whether internet access is enabled for your WorkSpaces.

Type: Boolean

Required: No

EnableMaintenanceMode

Indicates whether maintenance mode is enabled for your WorkSpaces. For more information, see [WorkSpace Maintenance](#).

Type: Boolean

Required: No

EnableWorkDocs

Indicates whether Amazon WorkDocs is enabled for your WorkSpaces.

Note

If WorkDocs is already enabled for a WorkSpaces directory and you disable it, new WorkSpaces launched in the directory will not have WorkDocs enabled. However, WorkDocs remains enabled for any existing WorkSpaces, unless you either disable users' access to WorkDocs or you delete the WorkDocs site. To disable users' access to WorkDocs, see [Disabling Users](#) in the *Amazon WorkDocs Administration Guide*. To delete a WorkDocs site, see [Deleting a Site](#) in the *Amazon WorkDocs Administration Guide*. If you enable WorkDocs on a directory that already has existing WorkSpaces, the existing WorkSpaces and any new WorkSpaces that are launched in the directory will have WorkDocs enabled.

Type: Boolean

Required: No

InstancelamRoleArn

Indicates the IAM role ARN of the instance.

Type: String

Pattern: `^arn:aws[a-z-]{0,7}:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=@.\-]{0,1023}$`

Required: No

UserEnabledAsLocalAdministrator

Indicates whether users are local administrators of their WorkSpaces.

Type: Boolean

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

WorkspaceDirectory

Describes a directory that is used with Amazon WorkSpaces.

Contents

ActiveDirectoryConfig

Information about the Active Directory config.

Type: [ActiveDirectoryConfig](#) object

Required: No

Alias

The directory alias.

Type: String

Required: No

CertificateBasedAuthProperties

The certificate-based authentication properties used to authenticate SAML 2.0 Identity Provider (IdP) user identities to Active Directory for WorkSpaces login.

Type: [CertificateBasedAuthProperties](#) object

Required: No

CustomerUserName

The user name for the service account.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 63.

Required: No

DirectoryId

The directory identifier.

Type: String

Length Constraints: Minimum length of 10. Maximum length of 65.

Pattern: `^(d-[0-9a-f]{8,63}$)|(wsd-[0-9a-z]{8,63}$)`

Required: No

DirectoryName

The name of the directory.

Type: String

Required: No

DirectoryType

The directory type.

Type: String

Valid Values: SIMPLE_AD | AD_CONNECTOR | CUSTOMER_MANAGED

Required: No

DnsIpAddresses

The IP addresses of the DNS servers for the directory.

Type: Array of strings

Required: No

ErrorMessage

The error message returned.

Type: String

Required: No

IamRoleId

The identifier of the IAM role. This is the role that allows Amazon WorkSpaces to make calls to other services, such as Amazon EC2, on your behalf.

Type: String

Pattern: `^arn:aws[a-z-]{0,7}:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=@.\-]{0,1023}$`

Required: No

ipGroupIds

The identifiers of the IP access control groups associated with the directory.

Type: Array of strings

Pattern: `wsipg-[0-9a-z]{8,63}$`

Required: No

RegistrationCode

The registration code for the directory. This is the code that users enter in their Amazon WorkSpaces client application to connect to the directory.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 20.

Required: No

SamlProperties

Describes the enablement status, user access URL, and relay state parameter name that are used for configuring federation with an SAML 2.0 identity provider.

Type: [SamlProperties](#) object

Required: No

SelfservicePermissions

The default self-service permissions for WorkSpaces in the directory.

Type: [SelfservicePermissions](#) object

Required: No

State

The state of the directory's registration with Amazon WorkSpaces. After a directory is deregistered, the DEREGISTERED state is returned very briefly before the directory metadata is cleaned up, so this state is rarely returned. To confirm that a directory is deregistered, check for the directory ID by using [DescribeWorkspaceDirectories](#). If the directory ID isn't returned, then the directory has been successfully deregistered.

Type: String

Valid Values: REGISTERING | REGISTERED | DEREGISTERING | DEREGISTERED | ERROR

Required: No

StreamingProperties

The streaming properties to configure.

Type: [StreamingProperties](#) object

Required: No

SubnetIds

The identifiers of the subnets used with the directory.

Type: Array of strings

Array Members: Maximum number of 2 items.

Length Constraints: Minimum length of 15. Maximum length of 24.

Pattern: `^(subnet-([0-9a-f]{8}|[0-9a-f]{17}))$`

Required: No

Tenancy

Specifies whether the directory is dedicated or shared. To use Bring Your Own License (BYOL), this value must be set to DEDICATED. For more information, see [Bring Your Own Windows Desktop Images](#).

Type: String

Valid Values: DEDICATED | SHARED

Required: No

UserIdentityType

Indicates the identity type of the specified user.

Type: String

Valid Values: CUSTOMER_MANAGED | AWS_DIRECTORY_SERVICE

Required: No

WorkspaceAccessProperties

The devices and operating systems that users can use to access WorkSpaces.

Type: [WorkspaceAccessProperties](#) object

Required: No

WorkspaceCreationProperties

The default creation properties for all WorkSpaces in the directory.

Type: [DefaultWorkspaceCreationProperties](#) object

Required: No

WorkspaceDirectoryDescription

The description of the WorkSpace directory

Type: String

Pattern: `^[a-zA-Z0-9_][\a-zA-Z0-9_@#%*+=:?./!\s-]{1,255}$`

Required: No

WorkspaceDirectoryName

The name fo the WorkSpace directory.

Type: String

Pattern: `^[a-zA-Z0-9][a-zA-Z0-9_.\s-]{1,64}$`

Required: No

WorkspaceSecurityGroupId

The identifier of the security group that is assigned to new WorkSpaces.

Type: String

Length Constraints: Minimum length of 11. Maximum length of 20.

Pattern: `^(sg-([0-9a-f]{8}|[0-9a-f]{17}))$`

Required: No

WorkspaceType

Indicates whether the directory's Workspace type is personal or pools.

Type: String

Valid Values: PERSONAL | POOLS

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

WorkspaceImage

Describes a Workspace image.

Contents

Created

The date when the image was created. If the image has been shared, the AWS account that the image has been shared with sees the original creation date of the image.

Type: Timestamp

Required: No

Description

The description of the image.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

Pattern: `^[a-zA-Z0-9_./() -]+$`

Required: No

ErrorCode

The error code that is returned for the image.

Type: String

Required: No

ErrorDetails

Additional details of the error returned for the image, including the possible causes of the errors and troubleshooting information.

Type: Array of [ErrorDetails](#) objects

Required: No

ErrorMessage

The text of the error message that is returned for the image.

Type: String

Required: No

ImageId

The identifier of the image.

Type: String

Pattern: `wsi-[0-9a-z]{9,63}`\$

Required: No

Name

The name of the image.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `^[a-zA-Z0-9_./()\-\]+$`

Required: No

OperatingSystem

The operating system that the image is running.

Type: [OperatingSystem](#) object

Required: No

OwnerId

The identifier of the AWS account that owns the image.

Type: String

Pattern: `^\d{12}`\$

Required: No

RequiredTenancy

Specifies whether the image is running on dedicated hardware. When Bring Your Own License (BYOL) is enabled, this value is set to DEDICATED. For more information, see [Bring Your Own Windows Desktop Images](#).

Type: String

Valid Values: DEFAULT | DEDICATED

Required: No

State

The status of the image.

Type: String

Valid Values: AVAILABLE | PENDING | ERROR

Required: No

Updates

The updates (if any) that are available for the specified image.

Type: [UpdateResult](#) object

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

WorkspaceProperties

Describes a WorkSpace.

Contents

ComputeTypeName

The compute type. For more information, see [Amazon WorkSpaces Bundles](#).

Type: String

Valid Values: VALUE | STANDARD | PERFORMANCE | POWER | GRAPHICS | POWERPRO | GRAPHICSPRO | GRAPHICS_G4DN | GRAPHICSPRO_G4DN

Required: No

OperatingSystemName

The name of the operating system.

Type: String

Valid Values: AMAZON_LINUX_2 | UBUNTU_18_04 | UBUNTU_20_04 | UBUNTU_22_04 | UNKNOWN | WINDOWS_10 | WINDOWS_11 | WINDOWS_7 | WINDOWS_SERVER_2016 | WINDOWS_SERVER_2019 | WINDOWS_SERVER_2022 | RHEL_8

Required: No

Protocols

The protocol. For more information, see [Protocols for Amazon WorkSpaces](#).

Note

- Only available for WorkSpaces created with PCoIP bundles.
- The Protocols property is case sensitive. Ensure you use PCOIP or WSP.
- Unavailable for Windows 7 WorkSpaces and WorkSpaces using GPU-based bundles (Graphics, GraphicsPro, Graphics.g4dn, and GraphicsPro.g4dn).

Type: Array of strings

Valid Values: PC0IP | WSP

Required: No

RootVolumeSizeGib

The size of the root volume. For important information about how to modify the size of the root and user volumes, see [Modify a Workspace](#).

Type: Integer

Required: No

RunningMode

The running mode. For more information, see [Manage the Workspace Running Mode](#).

Note

The MANUAL value is only supported by Amazon WorkSpaces Core. Contact your account team to be allow-listed to use this value. For more information, see [Amazon WorkSpaces Core](#).

Review your running mode to ensure you are using one that is optimal for your needs and budget. For more information on switching running modes, see [Can I switch between hourly and monthly billing?](#)

Type: String

Valid Values: AUTO_STOP | ALWAYS_ON | MANUAL

Required: No

RunningModeAutoStopTimeoutInMinutes

The time after a user logs off when WorkSpaces are automatically stopped. Configured in 60-minute intervals.

Type: Integer

Required: No

UserVolumeSizeGib

The size of the user storage. For important information about how to modify the size of the root and user volumes, see [Modify a Workspace](#).

Type: Integer

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

WorkspaceRequest

Describes the information used to create a Workspace.

Contents

BundleId

The identifier of the bundle for the Workspace. You can use [DescribeWorkspaceBundles](#) to list the available bundles.

Type: String

Pattern: `^wsb-[0-9a-z]{8,63}$`

Required: Yes

DirectoryId

The identifier of the AWS Directory Service directory for the Workspace. You can use [DescribeWorkspaceDirectories](#) to list the available directories.

Type: String

Length Constraints: Minimum length of 10. Maximum length of 65.

Pattern: `^(d-[0-9a-f]{8,63}$)|(wsd-[0-9a-z]{8,63}$)`

Required: Yes

UserName

The user name of the user for the Workspace. This user name must exist in the AWS Directory Service directory for the Workspace.

The reserved keyword, [UNDEFINED], is used when creating user-decoupled WorkSpaces.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 63.

Required: Yes

RootVolumeEncryptionEnabled

Indicates whether the data stored on the root volume is encrypted.

Type: Boolean

Required: No

Tags

The tags for the Workspace.

Type: Array of [Tag](#) objects

Required: No

UserVolumeEncryptionEnabled

Indicates whether the data stored on the user volume is encrypted.

Type: Boolean

Required: No

VolumeEncryptionKey

The ARN of the symmetric AWS KMS key used to encrypt data stored on your Workspace. Amazon WorkSpaces does not support asymmetric KMS keys.

Type: String

Required: No

WorkspaceName

The name of the user-decoupled Workspace.

Type: String

Pattern: `^[a-zA-Z0-9_()][a-zA-Z0-9_().-]{1,63}$`

Required: No

WorkspaceProperties

The Workspace properties.

Type: [WorkspaceProperties](#) object

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

WorkspaceResourceAssociation

Describes the association between an application and a WorkSpace resource.

Contents

AssociatedResourceId

The identifier of the associated resource.

Type: String

Length Constraints: Minimum length of 1.

Required: No

AssociatedResourceType

The resource types of the associated resource.

Type: String

Valid Values: APPLICATION

Required: No

Created

The time the association is created.

Type: Timestamp

Required: No

LastUpdatedTime

The time the association status was last updated.

Type: Timestamp

Required: No

State

The status of the WorkSpace resource association.

Type: String

Valid Values: PENDING_INSTALL | PENDING_INSTALL_DEPLOYMENT | PENDING_UNINSTALL | PENDING_UNINSTALL_DEPLOYMENT | INSTALLING | UNINSTALLING | ERROR | COMPLETED | REMOVED

Required: No

StateReason

The reason the association deployment failed.

Type: [AssociationStateReason](#) object

Required: No

WorkspaceId

The identifier of the WorkSpace.

Type: String

Pattern: ^ws-[0-9a-z]{8,63}\$

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

WorkspacesIpGroup

Describes an IP access control group.

Contents

groupDesc

The description of the group.

Type: String

Required: No

groupId

The identifier of the group.

Type: String

Pattern: `wsipg-[0-9a-z]{8,63}$`

Required: No

groupName

The name of the group.

Type: String

Required: No

userRules

The rules.

Type: Array of [IpRuleItem](#) objects

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

WorkspacesPool

Describes a pool of WorkSpaces.

Contents

BundleId

The identifier of the bundle used by the pool.

Type: String

Pattern: `^wsb-[0-9a-z]{8,63}$`

Required: Yes

CapacityStatus

The capacity status for the pool

Type: [CapacityStatus](#) object

Required: Yes

CreatedAt

The time the pool was created.

Type: Timestamp

Required: Yes

DirectoryId

The identifier of the directory used by the pool.

Type: String

Length Constraints: Minimum length of 10. Maximum length of 65.

Pattern: `^(d-[0-9a-f]{8,63}$)|(wsd-[0-9a-z]{8,63}$)`

Required: Yes

PoolArn

The Amazon Resource Name (ARN) for the pool.

Type: String

Pattern: `^arn:aws[a-z-]{0,7}:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+@.\-]{0,1023}$`

Required: Yes

PoolId

The identifier of a pool.

Type: String

Pattern: `^wspool-[0-9a-z]{9}$`

Required: Yes

PoolName

The name of the pool,

Type: String

Pattern: `^[A-Za-z0-9][A-Za-z0-9_-.]{0,63}$`

Required: Yes

State

The current state of the pool.

Type: String

Valid Values: CREATING | DELETING | RUNNING | STARTING | STOPPED | STOPPING
| UPDATING

Required: Yes

ApplicationSettings

The persistent application settings for users of the pool.

Type: [ApplicationSettingsResponse](#) object

Required: No

Description

The description of the pool.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Pattern: `^[a-zA-Z0-9_./() -]+$`

Required: No

Errors

The pool errors.

Type: Array of [WorkspacesPoolError](#) objects

Required: No

TimeoutSettings

The amount of time that a pool session remains active after users disconnect. If they try to reconnect to the pool session after a disconnection or network interruption within this time interval, they are connected to their previous session. Otherwise, they are connected to a new session with a new pool instance.

Type: [TimeoutSettings](#) object

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

WorkspacesPoolError

Describes a pool error.

Contents

ErrorCode

The error code.

Type: String

Valid Values: IAM_SERVICE_ROLE_IS_MISSING |
IAM_SERVICE_ROLE_MISSING_ENI_DESCRIBE_ACTION |
IAM_SERVICE_ROLE_MISSING_ENI_CREATE_ACTION |
IAM_SERVICE_ROLE_MISSING_ENI_DELETE_ACTION |
NETWORK_INTERFACE_LIMIT_EXCEEDED | INTERNAL_SERVICE_ERROR
| MACHINE_ROLE_IS_MISSING | STS_DISABLED_IN_REGION |
SUBNET_HAS_INSUFFICIENT_IP_ADDRESSES |
IAM_SERVICE_ROLE_MISSING_DESCRIBE_SUBNET_ACTION |
SUBNET_NOT_FOUND | IMAGE_NOT_FOUND | INVALID_SUBNET_CONFIGURATION
| SECURITY_GROUPS_NOT_FOUND | IGW_NOT_ATTACHED |
IAM_SERVICE_ROLE_MISSING_DESCRIBE_SECURITY_GROUPS_ACTION |
WORKSPACES_POOL_STOPPED | WORKSPACES_POOL_INSTANCE_PROVISIONING_FAILURE
| DOMAIN_JOIN_ERROR_FILE_NOT_FOUND | DOMAIN_JOIN_ERROR_ACCESS_DENIED |
DOMAIN_JOIN_ERROR_LOGON_FAILURE | DOMAIN_JOIN_ERROR_INVALID_PARAMETER
| DOMAIN_JOIN_ERROR_MORE_DATA | DOMAIN_JOIN_ERROR_NO_SUCH_DOMAIN |
DOMAIN_JOIN_ERROR_NOT_SUPPORTED |
DOMAIN_JOIN_NERR_INVALID_WORKGROUP_NAME |
DOMAIN_JOIN_NERR_WORKSTATION_NOT_STARTED |
DOMAIN_JOIN_ERROR_DS_MACHINE_ACCOUNT_QUOTA_EXCEEDED |
DOMAIN_JOIN_NERR_PASSWORD_EXPIRED | DOMAIN_JOIN_INTERNAL_SERVICE_ERROR
| DOMAIN_JOIN_ERROR_SECRET_ACTION_PERMISSION_IS_MISSING
| DOMAIN_JOIN_ERROR_SECRET_DECRYPTION_FAILURE |
DOMAIN_JOIN_ERROR_SECRET_STATE_INVALID |
DOMAIN_JOIN_ERROR_SECRET_NOT_FOUND |
DOMAIN_JOIN_ERROR_SECRET_VALUE_KEY_NOT_FOUND |
DOMAIN_JOIN_ERROR_SECRET_INVALID | BUNDLE_NOT_FOUND |

DIRECTORY_NOT_FOUND | INSUFFICIENT_PERMISSIONS_ERROR |
DEFAULT_OU_IS_MISSING

Required: No

ErrorMessage

The error message.

Type: String

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

WorkspacesPoolSession

Describes a pool session.

Contents

PoolId

The identifier of the pool.

Type: String

Pattern: `^wspool-[0-9a-z]{9}$`

Required: Yes

SessionId

The identifier of the session.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `[a-f0-9]{8}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{12}`

Required: Yes

UserId

The identifier of the user.

Type: String

Length Constraints: Minimum length of 2. Maximum length of 128.

Required: Yes

AuthenticationType

The authentication method. The user is authenticated using a WorkSpaces Pools URL (API) or SAML 2.0 federation (SAML).

Type: String

Valid Values: SAML

Required: No

ConnectionState

Specifies whether a user is connected to the pool session.

Type: String

Valid Values: CONNECTED | NOT_CONNECTED

Required: No

ExpirationTime

The time that the pool session ended.

Type: Timestamp

Required: No

InstanceId

The identifier for the instance hosting the session.

Type: String

Pattern: `^i-[a-f0-9]{8}(?:[a-f0-9]{9})?$`

Required: No

NetworkAccessConfiguration

Describes the network details of the pool.

Type: [NetworkAccessConfiguration](#) object

Required: No

StartTime

The time that the pool session started.

Type: Timestamp

Required: No

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

Common Errors

This section lists the errors common to the API actions of all AWS services. For errors specific to an API action for this service, see the topic for that API action.

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 400

IncompleteSignature

The request signature does not conform to AWS standards.

HTTP Status Code: 400

InternalFailure

The request processing has failed because of an unknown error, exception or failure.

HTTP Status Code: 500

InvalidAction

The action or operation requested is invalid. Verify that the action is typed correctly.

HTTP Status Code: 400

InvalidClientTokenId

The X.509 certificate or AWS access key ID provided does not exist in our records.

HTTP Status Code: 403

NotAuthorized

You do not have permission to perform this action.

HTTP Status Code: 400

OptInRequired

The AWS access key ID needs a subscription for the service.

HTTP Status Code: 403

RequestExpired

The request reached the service more than 15 minutes after the date stamp on the request or more than 15 minutes after the request expiration date (such as for pre-signed URLs), or the date stamp on the request is more than 15 minutes in the future.

HTTP Status Code: 400

ServiceUnavailable

The request has failed due to a temporary failure of the server.

HTTP Status Code: 503

ThrottlingException

The request was denied due to request throttling.

HTTP Status Code: 400

ValidationError

The input fails to satisfy the constraints specified by an AWS service.

HTTP Status Code: 400

WorkSpaces Core API actions

You can use the following APIs to perform various actions for WorkSpaces Core. We have provided some recommendations next to these actions to help you create your workflow.

- Deployment and setup
 - [CreateTags](#) - Possible
 - [CreateWorkspaceBundle](#) - Required
 - [CreateWorkspaces](#) - Required
 - [DescribeAccount](#) - Required
 - [DescribeAccountModifications](#) - Possible
 - [ImportWorkspacelImage](#) - Possible, but we highly recommend partners have an interface to import images into Amazon WorkSpaces using this API.
 - [ModifyAccount](#) - Possible
 - [ListAvailableManagementCidrRanges](#) - Possible, but we highly recommend partners have an interface to onboard customers into Amazon WorkSpaces BYOL using this API.
 - [RegisterWorkspaceDirectory](#) - Required
 - [EnableInternetAccess](#) - Optional
 - [EnableWorkDocs](#) - Optional
 - [Tags](#) - Optional
- Operations
 - [CopyWorkspacelImage](#) - Possible, but we highly recommend this action. It supports an `UpdateWorkspaceBundle` image process and copying from one region to another.
 - [CreateWorkspacelImage](#) - Required
 - [DescribeTags](#) - Possible, but we highly recommend partners have an interface to use and modify tags on Amazon WorkSpaces desktops using this API.
 - [DescribeWorkspaceBundles](#) - Required
 - [DescribeWorkspaceDirectories](#) - Required
 - [DescribeWorkspacelImagePermissions](#) - Required
 - [DescribeWorkspacelImages](#) - Required for creation of new desktops and within a workflow to use the `UpdateWorkspaceBundle` API that updates an image within a bundle.
 - [DescribeWorkspaces](#) - Required

- [DescribeWorkspaceSnapshots](#) - Possible, but we highly recommend partners have an interface to view snapshots into Amazon WorkSpaces desktops using this API.
- [MigrateWorkspace](#) - Possible, but we highly recommend partners have an interface to migrate an Amazon WorkSpaces desktop from one bundle to another using this API.
- [ModifyWorkspaceCreationProperties](#) - Possible, but we highly recommend partners have an interface to modify the following properties:
 - Custom Security Group
 - Default OU
 - EnableInternetAccess
 - EnableMaintenanceMode
 - EnableWorkDocs
 - UserEnabledAsLocalAdministrator
- [ModifyWorkspaceProperties](#) - Possible, but we highly recommend partners have an interface to modify the following properties:
 - [ComputeTypeName](#)
 - [RootVolumeSizeGib](#)
 - [RunningMode](#) (can change to Manual)
 - [RunningModeAutoStopTimeoutInMinutes](#)
 - [UserVolumeSizeGib](#)
- [ModifyWorkspaceState](#) - Required
- [RebootWorkspaces](#) - Required
- [RebuildWorkspaces](#) - Required
- [RestoreWorkspace](#) - Required
- [StartWorkspaces](#) - Required
- [StopWorkspaces](#) - Required
- [UpdateWorkspaceBundle](#) - Required
- [UpdateWorkspaceImagePermission](#) - Possible, but we highly recommend partners have an interface to modify these properties.
- Termination
 - [DeleteTags](#) - Possible
 - [DeleteWorkspaceBundle](#) - Required

- [DeleteWorkspacelImage](#) - Required
- [DeregisterWorkspaceDirectory](#) - Required
- [TerminateWorkspaces](#) - Required

Logging WorkSpaces API Calls by Using CloudTrail

The WorkSpaces API is integrated with AWS CloudTrail, a service that provides a record of actions taken by a user, role, or an AWS service in WorkSpaces. CloudTrail captures API calls for WorkSpaces as events. The calls captured include calls from the WorkSpaces console and code calls to the WorkSpaces API operations. If you create a trail, you can enable continuous delivery of CloudTrail events to an Amazon S3 bucket, including events for WorkSpaces. If you don't configure a trail, you can still view the most recent events in the CloudTrail console in **Event history**. Using the information collected by CloudTrail, you can determine the request that was made to WorkSpaces, the IP address from which the request was made, who made the request, when it was made, and additional details.

To learn more about CloudTrail, including how to configure and enable it, see the [AWS CloudTrail User Guide](#).

WorkSpaces Information in CloudTrail

CloudTrail is enabled on your AWS account when you create the account. When supported event activity occurs in WorkSpaces, that activity is recorded in a CloudTrail event along with other AWS service events in **Event history**. For example, calls to create, rebuild, or terminate WorkSpaces generate entries in CloudTrail log files. For more information, see [Actions](#).

You can view, search, and download recent events in your AWS account. For more information, see [Viewing Events with CloudTrail Event History](#).

For an ongoing record of events in your AWS account, including events for WorkSpaces, create a trail. A *trail* enables CloudTrail to deliver log files to an Amazon S3 bucket. By default, when you create a trail in the console, the trail applies to all AWS Regions. The trail logs events from all Regions in the AWS partition and delivers the log files to the Amazon S3 bucket that you specify. Additionally, you can configure other AWS services to further analyze and act upon the event data collected in CloudTrail logs. For more information, see the following:

- [Overview for Creating a Trail](#)
- [CloudTrail Supported Services and Integrations](#)
- [Configuring Amazon SNS Notifications for CloudTrail](#)
- [Receiving CloudTrail Log Files from Multiple Regions](#) and [Receiving CloudTrail Log Files from Multiple Accounts](#)

Example: WorkSpaces Log File Entry

A trail is a configuration that enables delivery of events as log files to an Amazon S3 bucket that you specify. CloudTrail log files contain one or more log entries. An event represents a single request from any source and includes information about the requested action, the date and time of the action, request parameters, and so on. CloudTrail log files aren't an ordered stack trace of the public API calls, so they don't appear in any specific order.

Any sensitive information, such as passwords, authentication tokens, file comments, and file contents are redacted in the log entries.

The following shows an example of a CloudTrail log entry for WorkSpaces.

```
{
  "Records" : [
    {
      "eventVersion" : "1.02",
      "userIdentity" :
      {
        "type" : "IAMUser",
        "principalId" : "user_id",
        "arn" : "user_arn",
        "accountId" : "account_id",
        "accessKeyId" : "access_key_id",
        "userName" : "username"
      },
      "eventTime" : "event_time",
      "eventSource" : "workspaces.amazonaws.com",
      "eventName" : "DescribeWorkspaces",
      "awsRegion" : "region",
      "sourceIPAddress" : "IP_address",
      "userAgent" : "user_agent",
      "requestParameters" :
      {
        "requestContext" :
        {
          "awsAccountId" : "account_id"
        }
      },
      "responseElements" :
      {
        "workspaces" : [
```

```
    {
      "bundleId" : "bundle_id",
      "userName" : "workspace_user_name",
      "ipAddress" : ";ip_address",
      "directoryId" : ";directory_id",
      "state" : "state",
      "workspaceId" : "workspace_id",
      "subnetId" : "subnet_id"
    }
  ]
},
"requestID" : "request_id",
"eventID" : "event_id",
"eventType" : "AwsApiCall",
"recipientAccountId" : "account_id"
}
]
```