aws

API Reference

AWS Clean Rooms ML

API Version 2023-09-06

AWS Clean Rooms ML: API Reference

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Welcome

Welcome to the *AWS Clean Rooms ML API Reference*.

AWS Clean Rooms ML provides a privacy-enhancing method for two parties to identify similar users in their data without the need to share their data with each other. The first party brings the training data to AWS Clean Rooms so that they can create and configure an audience model (lookalike model) and associate it with a collaboration. The second party then brings their seed data to AWS Clean Rooms and generates an audience (lookalike segment) that resembles the training data.

To learn more about AWS Clean Rooms ML concepts, procedures, and best practices, see the [AWS Clean Rooms User Guide](#).

To learn more about SQL commands, functions, and conditions supported in AWS Clean Rooms, see the [AWS Clean Rooms SQL Reference](#).

This document was last published on September 7, 2024.

Actions

The following actions are supported:

- CreateAudienceModel
- CreateConfiguredAudienceModel
- CreateTrainingDataset
- DeleteAudienceGenerationJob
- DeleteAudienceModel
- DeleteConfiguredAudienceModel
- DeleteConfiguredAudienceModelPolicy
- DeleteTrainingDataset
- GetAudienceGenerationJob
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- ListAudienceGenerationJobs
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- ListTrainingDatasets
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- StartAudienceExportJob
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- UntagResource
- UpdateConfiguredAudienceModel

CreateAudienceModel

Defines the information necessary to create an audience model. An audience model is a machine learning model that Clean Rooms ML trains to measure similarity between users. Clean Rooms ML manages training and storing the audience model. The audience model can be used in multiple calls to the StartAudienceGenerationJob API.

Request Syntax

```
POST /audience-model HTTP/1.1
Content-type: application/json

{
   "description": "string",
   "kmsKeyArn": "string",
   "name": "string",
   "tags": {
      "string" : "string"
   },
   "trainingDataEndTime": "string",
   "trainingDatasetArn": "string",
   "trainingDataStartTime": "string"
}
```

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

description

The description of the audience model.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 255.

Pattern: [\u0020-\uD7FF\uE000-\uFFFD\uD800\uDBFF-\uDC00\uDFFF\t\r\n]*

Required: No

kmsKeyArn

The Amazon Resource Name (ARN) of the AWS KMS key. This key is used to encrypt and decrypt customer-owned data in the trained ML model and the associated data.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 2048.

Pattern: `arn:aws[-a-z]*:kms:[-a-z0-9]+:[0-9]{12}:key/.+`

Required: No

name

The name of the audience model resource.

Type: String

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

Pattern: `(?!\s*$)[\u0020-\uD7FF\uE000-\uFFFD\uD800\uDBFF-\uDC00\uDFFF\t]*`

Required: Yes

tags

The optional metadata that you apply to the resource to help you categorize and organize them. Each tag consists of a key and an optional value, both of which you define.

The following basic restrictions apply to tags:

- Maximum number of tags per resource - 50.

- For each resource, each tag key must be unique, and each tag key can have only one value.

- Maximum key length - 128 Unicode characters in UTF-8.

- Maximum value length - 256 Unicode characters in UTF-8.

- If your tagging schema is used across multiple services and resources, remember that other services may have restrictions on allowed characters. Generally allowed characters are: letters, numbers, and spaces representable in UTF-8, and the following characters: + - = . _ : / @.

- Tag keys and values are case sensitive.

- Do not use aws:, AWS:, or any upper or lowercase combination of such as a prefix for keys as it is reserved for AWS use. You cannot edit or delete tag keys with this prefix. Values can have this prefix. If a tag value has aws as its prefix but the key does not, then Clean Rooms ML considers it to be a user tag and will count against the limit of 50 tags. Tags with only the key prefix of aws do not count against your tags per resource limit.

Type: String to string map

Map Entries: Minimum number of 0 items. Maximum number of 200 items.

Key Length Constraints: Minimum length of 1. Maximum length of 128.

Value Length Constraints: Minimum length of 0. Maximum length of 256.

Required: No

trainingDataEndTime

The end date and time of the training window.

Type: Timestamp

Required: No

trainingDatasetArn

The Amazon Resource Name (ARN) of the training dataset for this audience model.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 2048.

Pattern: `arn:aws[-a-z]*:cleanrooms-ml:[-a-z0-9]+:[0-9]{12}:training-dataset/[-a-zA-Z0-9_/.]+`

Required: Yes

trainingDataStartTime

The start date and time of the training window.

Type: Timestamp

Required: No

Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
    "audienceModelArn": "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.

audienceModelArn

The Amazon Resource Name (ARN) of the audience model.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 2048.

Pattern: `arn:aws[-a-z]*:cleanrooms-ml:[-a-z0-9]+:[0-9]{12}:audience-model/`
`[-a-zA-Z0-9_/.]+`

Errors

For information about the errors that are common to all actions, see Common Errors.

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 403

ConflictException

You can't complete this action because another resource depends on this resource.

HTTP Status Code: 409

ResourceNotFoundException

The resource you are requesting does not exist.

HTTP Status Code: 404

ServiceQuotaExceededException

You have exceeded your service quota.

HTTP Status Code: 402

ValidationException

The request parameters for this request are incorrect.

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](#)

CreateConfiguredAudienceModel

Defines the information necessary to create a configured audience model.

Request Syntax

```
POST /configured-audience-model HTTP/1.1
Content-type: application/json

{
   "audienceModelArn": "string",
   "audienceSizeConfig": {
      "audienceSizeBins": [ number ],
      "audienceSizeType": "string"
   },
   "childResourceTagOnCreatePolicy": "string",
   "description": "string",
   "minMatchingSeedSize": number,
   "name": "string",
   "outputConfig": {
      "destination": {
         "s3Destination": {
            "s3Uri": "string"
         }
      },
      "roleArn": "string"
   },
   "sharedAudienceMetrics": [ "string" ],
   "tags": {
      "string" : "string"
   }
}
```

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

audienceModelArn

The Amazon Resource Name (ARN) of the audience model to use for the configured audience model.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 2048.

Pattern: `arn:aws[-a-z]*:cleanrooms-ml:[-a-z0-9]+:[0-9]{12}:audience-model/[-a-zA-Z0-9_/.]+`

Required: Yes

audienceSizeConfig

Configure the list of output sizes of audiences that can be created using this configured audience model. A request to StartAudienceGenerationJob that uses this configured audience model must have an `audienceSize` selected from this list. You can use the `ABSOLUTE` AudienceSize to configure out audience sizes using the count of identifiers in the output. You can use the `Percentage` AudienceSize to configure sizes in the range 1-100 percent.

Type: AudienceSizeConfig object

Required: No

childResourceTagOnCreatePolicy

Configure how the service tags audience generation jobs created using this configured audience model. If you specify `NONE`, the tags from the StartAudienceGenerationJob request determine the tags of the audience generation job. If you specify `FROM_PARENT_RESOURCE`, the audience generation job inherits the tags from the configured audience model, by default. Tags in the StartAudienceGenerationJob will override the default.

When the client is in a different account than the configured audience model, the tags from the client are never applied to a resource in the caller's account.

Type: String

Valid Values: `FROM_PARENT_RESOURCE | NONE`

Required: No

description

The description of the configured audience model.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 255.

Pattern: [\u0020-\uD7FF\uE000-\uFFFD\uD800\uDBFF-\uDC00\uDFFF\t\r\n]*

Required: No

minMatchingSeedSize

The minimum number of users from the seed audience that must match with users in the training data of the audience model. The default value is 500.

Type: Integer

Valid Range: Minimum value of 25. Maximum value of 500000.

Required: No

name

The name of the configured audience model.

Type: String

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

Pattern: (?!\s*$)[\u0020-\uD7FF\uE000-\uFFFD\uD800\uDBFF-\uDC00\uDFFF\t]*

Required: Yes

outputConfig

Configure the Amazon S3 location and IAM Role for audiences created using this configured audience model. Each audience will have a unique location. The IAM Role must have `s3:PutObject` permission on the destination Amazon S3 location. If the destination is protected with Amazon S3 KMS-SSE, then the Role must also have the required AWS KMS permissions.

Type: ConfiguredAudienceModelOutputConfig object

Required: Yes

sharedAudienceMetrics

Whether audience metrics are shared.

Type: Array of strings

Array Members: Fixed number of 1 item.

Valid Values: ALL | NONE

Required: Yes

tags

The optional metadata that you apply to the resource to help you categorize and organize them. Each tag consists of a key and an optional value, both of which you define.

The following basic restrictions apply to tags:

- Maximum number of tags per resource - 50.

- For each resource, each tag key must be unique, and each tag key can have only one value.

- Maximum key length - 128 Unicode characters in UTF-8.

- Maximum value length - 256 Unicode characters in UTF-8.

- If your tagging schema is used across multiple services and resources, remember that other services may have restrictions on allowed characters. Generally allowed characters are: letters, numbers, and spaces representable in UTF-8, and the following characters: + - = . _ : / @.

- Tag keys and values are case sensitive.

- Do not use aws:, AWS:, or any upper or lowercase combination of such as a prefix for keys as it is reserved for AWS use. You cannot edit or delete tag keys with this prefix. Values can have this prefix. If a tag value has aws as its prefix but the key does not, then Clean Rooms ML considers it to be a user tag and will count against the limit of 50 tags. Tags with only the key prefix of aws do not count against your tags per resource limit.

Type: String to string map

Map Entries: Minimum number of 0 items. Maximum number of 200 items.

Key Length Constraints: Minimum length of 1. Maximum length of 128.

Value Length Constraints: Minimum length of 0. Maximum length of 256.

Required: No

Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
    "configuredAudienceModelArn": "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.

configuredAudienceModelArn

The Amazon Resource Name (ARN) of the configured audience model.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 2048.

Pattern: `arn:aws[-a-z]*:cleanrooms-ml:[-a-z0-9]+:[0-9]{12}:configured-audience-model/[-a-zA-Z0-9_/.]+`

Errors

For information about the errors that are common to all actions, see Common Errors.

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 403

ConflictException

You can't complete this action because another resource depends on this resource.

HTTP Status Code: 409

ResourceNotFoundException

The resource you are requesting does not exist.

HTTP Status Code: 404

ServiceQuotaExceededException

You have exceeded your service quota.

HTTP Status Code: 402

ValidationException

The request parameters for this request are incorrect.

HTTP Status Code: 400

See Also

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

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- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
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CreateTrainingDataset

Defines the information necessary to create a training dataset. In Clean Rooms ML, the `TrainingDataset` is metadata that points to a Glue table, which is read only during `AudienceModel` creation.

Request Syntax

```
POST /training-dataset HTTP/1.1
Content-type: application/json

{
   "description": "string",
   "name": "string",
   "roleArn": "string",
   "tags": {
      "string" : "string"
   },
   "trainingData": [
      {
         "inputConfig": {
            "dataSource": {
               "glueDataSource": {
                  "catalogId": "string",
                  "databaseName": "string",
                  "tableName": "string"
               }
            },
            "schema": [
               {
                  "columnName": "string",
                  "columnTypes": [ "string" ]
               }
            ]
         },
         "type": "string"
      }
   ]
}
```

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

description

The description of the training dataset.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 255.

Pattern: [\u0020-\uD7FF\uE000-\uFFFD\uD800\uDBFF-\uDC00\uDFFF\t\r\n]*

Required: No

name

The name of the training dataset. This name must be unique in your account and region.

Type: String

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

Pattern: (?!\s*$)[\u0020-\uD7FF\uE000-\uFFFD\uD800\uDBFF-\uDC00\uDFFF\t]*

Required: Yes

roleArn

The ARN of the IAM role that Clean Rooms ML can assume to read the data referred to in the `dataSource` field of each dataset.

Passing a role across AWS accounts is not allowed. If you pass a role that isn't in your account, you get an `AccessDeniedException` error.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 2048.

Pattern: arn:aws[-a-z]*:iam::[0-9]{12}:role/.+

Required: Yes

tags

The optional metadata that you apply to the resource to help you categorize and organize them. Each tag consists of a key and an optional value, both of which you define.

The following basic restrictions apply to tags:

- Maximum number of tags per resource - 50.

- For each resource, each tag key must be unique, and each tag key can have only one value.

- Maximum key length - 128 Unicode characters in UTF-8.

- Maximum value length - 256 Unicode characters in UTF-8.

- If your tagging schema is used across multiple services and resources, remember that other services may have restrictions on allowed characters. Generally allowed characters are: letters, numbers, and spaces representable in UTF-8, and the following characters: + - = . _ : / @.

- Tag keys and values are case sensitive.

- Do not use aws:, AWS:, or any upper or lowercase combination of such as a prefix for keys as it is reserved for AWS use. You cannot edit or delete tag keys with this prefix. Values can have this prefix. If a tag value has aws as its prefix but the key does not, then Clean Rooms ML considers it to be a user tag and will count against the limit of 50 tags. Tags with only the key prefix of aws do not count against your tags per resource limit.

Type: String to string map

Map Entries: Minimum number of 0 items. Maximum number of 200 items.

Key Length Constraints: Minimum length of 1. Maximum length of 128.

Value Length Constraints: Minimum length of 0. Maximum length of 256.

Required: No

trainingData

An array of information that lists the Dataset objects, which specifies the dataset type and details on its location and schema. You must provide a role that has read access to these tables.

Type: Array of Dataset objects

Array Members: Fixed number of 1 item.

Required: Yes

Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
    "trainingDatasetArn": "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.

trainingDatasetArn

The Amazon Resource Name (ARN) of the training dataset resource.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 2048.

Pattern: `arn:aws[-a-z]*:cleanrooms-ml:[-a-z0-9]+:[0-9]{12}:training-dataset/[-a-zA-Z0-9_/.]+`

Errors

For information about the errors that are common to all actions, see Common Errors.

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 403

ConflictException

You can't complete this action because another resource depends on this resource.

HTTP Status Code: 409

ValidationException

The request parameters for this request are incorrect.

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](#)

DeleteAudienceGenerationJob

Deletes the specified audience generation job, and removes all data associated with the job.

Request Syntax

```
DELETE /audience-generation-job/audienceGenerationJobArn HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

audienceGenerationJobArn

The Amazon Resource Name (ARN) of the audience generation job that you want to delete.

Length Constraints: Minimum length of 20. Maximum length of 2048.

Pattern: `arn:aws[-a-z]*:cleanrooms-ml:[-a-z0-9]+:[0-9]{12}:audience-generation-job/[-a-zA-Z0-9_/.]+`

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 200
```

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

You do not have sufficient access to perform this action.

HTTP Status Code: 403

ConflictException

You can't complete this action because another resource depends on this resource.

HTTP Status Code: 409

ResourceNotFoundException

The resource you are requesting does not exist.

HTTP Status Code: 404

ValidationException

The request parameters for this request are incorrect.

HTTP Status Code: 400

See Also

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

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

DeleteAudienceModel

Specifies an audience model that you want to delete. You can't delete an audience model if there are any configured audience models that depend on the audience model.

Request Syntax

```
DELETE /audience-model/audienceModelArn HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

audienceModelArn

The Amazon Resource Name (ARN) of the audience model that you want to delete.

Length Constraints: Minimum length of 20. Maximum length of 2048.

Pattern: `arn:aws[-a-z]*:cleanrooms-ml:[-a-z0-9]+:[0-9]{12}:audience-model/[-a-zA-Z0-9_/.]+`

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 200
```

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

You do not have sufficient access to perform this action.

HTTP Status Code: 403

ConflictException

You can't complete this action because another resource depends on this resource.

HTTP Status Code: 409

ResourceNotFoundException

The resource you are requesting does not exist.

HTTP Status Code: 404

ValidationException

The request parameters for this request are incorrect.

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](#)

DeleteConfiguredAudienceModel

Deletes the specified configured audience model. You can't delete a configured audience model if there are any lookalike models that use the configured audience model. If you delete a configured audience model, it will be removed from any collaborations that it is associated to.

Request Syntax

```
DELETE /configured-audience-model/configuredAudienceModelArn HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

configuredAudienceModelArn

The Amazon Resource Name (ARN) of the configured audience model that you want to delete.

Length Constraints: Minimum length of 20. Maximum length of 2048.

Pattern: `arn:aws[-a-z]*:cleanrooms-ml:[-a-z0-9]+:[0-9]{12}:configured-audience-model/[-a-zA-Z0-9_/.]+`

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 200
```

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

You do not have sufficient access to perform this action.

HTTP Status Code: 403

ConflictException

You can't complete this action because another resource depends on this resource.

HTTP Status Code: 409

ResourceNotFoundException

The resource you are requesting does not exist.

HTTP Status Code: 404

ValidationException

The request parameters for this request are incorrect.

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

DeleteConfiguredAudienceModelPolicy

Deletes the specified configured audience model policy.

Request Syntax

```
DELETE /configured-audience-model/configuredAudienceModelArn/policy HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

configuredAudienceModelArn

The Amazon Resource Name (ARN) of the configured audience model policy that you want to delete.

Length Constraints: Minimum length of 20. Maximum length of 2048.

Pattern: `arn:aws[-a-z]*:cleanrooms-ml:[-a-z0-9]+:[0-9]{12}:configured-audience-model/[-a-zA-Z0-9_/.]+`

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 200
```

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

You do not have sufficient access to perform this action.

HTTP Status Code: 403

ResourceNotFoundException

The resource you are requesting does not exist.

HTTP Status Code: 404

ValidationException

The request parameters for this request are incorrect.

HTTP Status Code: 400

See Also

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

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

DeleteTrainingDataset

Specifies a training dataset that you want to delete. You can't delete a training dataset if there are any audience models that depend on the training dataset. In Clean Rooms ML, the `TrainingDataset` is metadata that points to a Glue table, which is read only during `AudienceModel` creation. This action deletes the metadata.

Request Syntax

```
DELETE /training-dataset/trainingDatasetArn HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

trainingDatasetArn

The Amazon Resource Name (ARN) of the training dataset that you want to delete.

Length Constraints: Minimum length of 20. Maximum length of 2048.

Pattern: `arn:aws[-a-z]*:cleanrooms-ml:[-a-z0-9]+:[0-9]{12}:training-dataset/[-a-zA-Z0-9_/.]+`

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 200
```

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

You do not have sufficient access to perform this action.

HTTP Status Code: 403

ConflictException

You can't complete this action because another resource depends on this resource.

HTTP Status Code: 409

ResourceNotFoundException

The resource you are requesting does not exist.

HTTP Status Code: 404

ValidationException

The request parameters for this request are incorrect.

HTTP Status Code: 400

See Also

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

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- AWS SDK for Java V2
- AWS SDK for JavaScript V3
- AWS SDK for PHP V3
- AWS SDK for Python

- AWS SDK for Ruby V3

GetAudienceGenerationJob

Returns information about an audience generation job.

Request Syntax

```
GET /audience-generation-job/audienceGenerationJobArn HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

audienceGenerationJobArn

The Amazon Resource Name (ARN) of the audience generation job that you are interested in.

Length Constraints: Minimum length of 20. Maximum length of 2048.

Pattern: `arn:aws[-a-z]*:cleanrooms-ml:[-a-z0-9]+:[0-9]{12}:audience-generation-job/[-a-zA-Z0-9_/.]+`

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
   "audienceGenerationJobArn": "string",
   "collaborationId": "string",
   "configuredAudienceModelArn": "string",
   "createTime": "string",
   "description": "string",
   "includeSeedInOutput": boolean,
   "metrics": {
```

```
        "recallMetric": number,
        "relevanceMetrics": [
            {
                "audienceSize": {
                    "type": "string",
                    "value": number
                },
                "score": number
            }
        ]
    },
    "name": "string",
    "protectedQueryIdentifier": "string",
    "seedAudience": {
        "dataSource": {
            "s3Uri": "string"
        },
        "roleArn": "string",
        "sqlParameters": {
            "analysisTemplateArn": "string",
            "parameters": {
                "string" : "string"
            },
            "queryString": "string"
        }
    },
    "startedBy": "string",
    "status": "string",
    "statusDetails": {
        "message": "string",
        "statusCode": "string"
    },
    "tags": {
        "string" : "string"
    },
    "updateTime": "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.

audienceGenerationJobArn

The Amazon Resource Name (ARN) of the audience generation job.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 2048.

Pattern: `arn:aws[-a-z]*:cleanrooms-ml:[-a-z0-9]+:[0-9]{12}:audience-generation-job/[-a-zA-Z0-9_/.]+`

collaborationId

The identifier of the collaboration that this audience generation job is associated with.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}`

configuredAudienceModelArn

The Amazon Resource Name (ARN) of the configured audience model used for this audience generation job.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 2048.

Pattern: `arn:aws[-a-z]*:cleanrooms-ml:[-a-z0-9]+:[0-9]{12}:configured-audience-model/[-a-zA-Z0-9_/.]+`

createTime

The time at which the audience generation job was created.

Type: Timestamp

description

The description of the audience generation job.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 255.

Pattern: `[\u0020-\uD7FF\uE000-\uFFFD\uD800\uDBFF-\uDC00\uDFFF\t\r\n]*`

includeSeedInOutput

Configure whether the seed users are included in the output audience. By default, Clean Rooms ML removes seed users from the output audience. If you specify TRUE, the seed users will appear first in the output. Clean Rooms ML does not explicitly reveal whether a user was in the seed, but the recipient of the audience will know that the first `minimumSeedSize` count of users are from the seed.

Type: Boolean

metrics

The relevance scores for different audience sizes and the recall score of the generated audience.

Type: AudienceQualityMetrics object

name

The name of the audience generation job.

Type: String

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

Pattern: `(?!\s*$)[\u0020-\uD7FF\uE000-\uFFFD\uD800\uDBFF-\uDC00\uDFFF\t]*`

protectedQueryIdentifier

The unique identifier of the protected query for this audience generation job.

Type: String

seedAudience

The seed audience that was used for this audience generation job. This field will be null if the account calling the API is the account that started this audience generation job.

Type: AudienceGenerationJobDataSource object

startedBy

The AWS account that started this audience generation job.

Type: String

Length Constraints: Fixed length of 12.

Pattern: [0-9]{12}

status

The status of the audience generation job.

Type: String

Valid Values: CREATE_PENDING | CREATE_IN_PROGRESS | CREATE_FAILED | ACTIVE |
DELETE_PENDING | DELETE_IN_PROGRESS | DELETE_FAILED

statusDetails

Details about the status of the audience generation job.

Type: StatusDetails object

tags

The tags that are associated to this audience generation job.

Type: String to string map

Map Entries: Minimum number of 0 items. Maximum number of 200 items.

Key Length Constraints: Minimum length of 1. Maximum length of 128.

Value Length Constraints: Minimum length of 0. Maximum length of 256.

updateTime

The most recent time at which the audience generation job was updated.

Type: Timestamp

Errors

For information about the errors that are common to all actions, see Common Errors.

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 403

ResourceNotFoundException

The resource you are requesting does not exist.

HTTP Status Code: 404

ValidationException

The request parameters for this request are incorrect.

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](#)

GetAudienceModel

Returns information about an audience model

Request Syntax

```
GET /audience-model/audienceModelArn HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

audienceModelArn

The Amazon Resource Name (ARN) of the audience model that you are interested in.

Length Constraints: Minimum length of 20. Maximum length of 2048.

Pattern: `arn:aws[-a-z]*:cleanrooms-ml:[-a-z0-9]+:[0-9]{12}:audience-model/[-a-zA-Z0-9_/.]+`

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
    "audienceModelArn": "string",
    "createTime": "string",
    "description": "string",
    "kmsKeyArn": "string",
    "name": "string",
    "status": "string",
    "statusDetails": {
```

```
      "message": "string",
      "statusCode": "string"
   },
   "tags": {
      "string" : "string"
   },
   "trainingDataEndTime": "string",
   "trainingDatasetArn": "string",
   "trainingDataStartTime": "string",
   "updateTime": "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.

audienceModelArn

The Amazon Resource Name (ARN) of the audience model.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 2048.

Pattern: `arn:aws[-a-z]*:cleanrooms-ml:[-a-z0-9]+:[0-9]{12}:audience-model/`
`[-a-zA-Z0-9_/.]+`

createTime

The time at which the audience model was created.

Type: Timestamp

description

The description of the audience model.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 255.

Pattern: `[\u0020-\uD7FF\uE000-\uFFFD\uD800\uDBFF-\uDC00\uDFFF\t\r\n]*`

kmsKeyArn

The KMS key ARN used for the audience model.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 2048.

Pattern: `arn:aws[-a-z]*:kms:[-a-z0-9]+:[0-9]{12}:key/.+`

name

The name of the audience model.

Type: String

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

Pattern: `(?!\s*$)[\u0020-\uD7FF\uE000-\uFFFD\uD800\uDBFF-\uDC00\uDFFF\t]*`

status

The status of the audience model.

Type: String

Valid Values: `CREATE_PENDING | CREATE_IN_PROGRESS | CREATE_FAILED | ACTIVE | DELETE_PENDING | DELETE_IN_PROGRESS | DELETE_FAILED`

statusDetails

Details about the status of the audience model.

Type: StatusDetails object

tags

The tags that are assigned to the audience model.

Type: String to string map

Map Entries: Minimum number of 0 items. Maximum number of 200 items.

Key Length Constraints: Minimum length of 1. Maximum length of 128.

Value Length Constraints: Minimum length of 0. Maximum length of 256.

trainingDataEndTime

The end date specified for the training window.

Type: Timestamp

trainingDatasetArn

The Amazon Resource Name (ARN) of the training dataset that was used for this audience model.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 2048.

Pattern: `arn:aws[-a-z]*:cleanrooms-ml:[-a-z0-9]+:[0-9]{12}:training-dataset/[-a-zA-Z0-9_/.]+`

trainingDataStartTime

The start date specified for the training window.

Type: Timestamp

updateTime

The most recent time at which the audience model was updated.

Type: Timestamp

Errors

For information about the errors that are common to all actions, see Common Errors.

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 403

ResourceNotFoundException

The resource you are requesting does not exist.

HTTP Status Code: 404

ValidationException

The request parameters for this request are incorrect.

HTTP Status Code: 400

See Also

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

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- [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](#)

GetConfiguredAudienceModel

Returns information about a specified configured audience model.

Request Syntax

```
GET /configured-audience-model/configuredAudienceModelArn HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

configuredAudienceModelArn

The Amazon Resource Name (ARN) of the configured audience model that you are interested in.

Length Constraints: Minimum length of 20. Maximum length of 2048.

Pattern: `arn:aws[-a-z]*:cleanrooms-ml:[-a-z0-9]+:[0-9]{12}:configured-audience-model/[-a-zA-Z0-9_/.]+`

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
   "audienceModelArn": "string",
   "audienceSizeConfig": {
      "audienceSizeBins": [ number ],
      "audienceSizeType": "string"
   },
   "childResourceTagOnCreatePolicy": "string",
   "configuredAudienceModelArn": "string",
```

```
        "createTime": "string",
        "description": "string",
        "minMatchingSeedSize": number,
        "name": "string",
        "outputConfig": {
            "destination": {
                "s3Destination": {
                    "s3Uri": "string"
                }
            },
            "roleArn": "string"
        },
        "sharedAudienceMetrics": [ "string" ],
        "status": "string",
        "tags": {
            "string" : "string"
        },
        "updateTime": "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.

audienceModelArn

The Amazon Resource Name (ARN) of the audience model used for this configured audience model.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 2048.

Pattern: `arn:aws[-a-z]*:cleanrooms-ml:[-a-z0-9]+:[0-9]{12}:audience-model/[-a-zA-Z0-9_/.]+`

audienceSizeConfig

The list of output sizes of audiences that can be created using this configured audience model. A request to StartAudienceGenerationJob that uses this configured audience model must have an `audienceSize` selected from this list. You can use the ABSOLUTE AudienceSize to configure

out audience sizes using the count of identifiers in the output. You can use the `Percentage` `AudienceSize` to configure sizes in the range 1-100 percent.

Type: AudienceSizeConfig object

childResourceTagOnCreatePolicy

Provides the `childResourceTagOnCreatePolicy` that was used for this configured audience model.

Type: String

Valid Values: `FROM_PARENT_RESOURCE | NONE`

configuredAudienceModelArn

The Amazon Resource Name (ARN) of the configured audience model.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 2048.

Pattern: `arn:aws[-a-z]*:cleanrooms-ml:[-a-z0-9]+:[0-9]{12}:configured-audience-model/[-a-zA-Z0-9_/.]+`

createTime

The time at which the configured audience model was created.

Type: Timestamp

description

The description of the configured audience model.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 255.

Pattern: `[\u0020-\uD7FF\uE000-\uFFFD\uD800\uDBFF-\uDC00\uDFFF\t\r\n]*`

minMatchingSeedSize

The minimum number of users from the seed audience that must match with users in the training data of the audience model.

Type: Integer

Valid Range: Minimum value of 25. Maximum value of 500000.

name

The name of the configured audience model.

Type: String

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

Pattern: `(?!\s*$)[\u0020-\uD7FF\uE000-\uFFFD\uD800\uDBFF-\uDC00\uDFFF\t]*`

outputConfig

The output configuration of the configured audience model

Type: ConfiguredAudienceModelOutputConfig object

sharedAudienceMetrics

Whether audience metrics are shared.

Type: Array of strings

Array Members: Fixed number of 1 item.

Valid Values: `ALL | NONE`

status

The status of the configured audience model.

Type: String

Valid Values: `ACTIVE`

tags

The tags that are associated to this configured audience model.

Type: String to string map

Map Entries: Minimum number of 0 items. Maximum number of 200 items.

Key Length Constraints: Minimum length of 1. Maximum length of 128.

Value Length Constraints: Minimum length of 0. Maximum length of 256.

updateTime

The most recent time at which the configured audience model was updated.

Type: Timestamp

Errors

For information about the errors that are common to all actions, see Common Errors.

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 403

ResourceNotFoundException

The resource you are requesting does not exist.

HTTP Status Code: 404

ValidationException

The request parameters for this request are incorrect.

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](#)

GetConfiguredAudienceModelPolicy

Returns information about a configured audience model policy.

Request Syntax

```
GET /configured-audience-model/configuredAudienceModelArn/policy HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

configuredAudienceModelArn

The Amazon Resource Name (ARN) of the configured audience model that you are interested in.

Length Constraints: Minimum length of 20. Maximum length of 2048.

Pattern: `arn:aws[-a-z]*:cleanrooms-ml:[-a-z0-9]+:[0-9]{12}:configured-audience-model/[-a-zA-Z0-9_/.]+`

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
    "configuredAudienceModelArn": "string",
    "configuredAudienceModelPolicy": "string",
    "policyHash": "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.

configuredAudienceModelArn

The Amazon Resource Name (ARN) of the configured audience model.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 2048.

Pattern: `arn:aws[-a-z]*:cleanrooms-ml:[-a-z0-9]+:[0-9]{12}:configured-audience-model/[-a-zA-Z0-9_/.]+`

configuredAudienceModelPolicy

The configured audience model policy. This is a JSON IAM resource policy.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 20480.

policyHash

A cryptographic hash of the contents of the policy used to prevent unexpected concurrent modification of the policy.

Type: String

Length Constraints: Minimum length of 64. Maximum length of 128.

Pattern: `[0-9a-f]+`

Errors

For information about the errors that are common to all actions, see Common Errors.

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 403

ResourceNotFoundException

The resource you are requesting does not exist.

HTTP Status Code: 404

ValidationException

The request parameters for this request are incorrect.

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](#)

GetTrainingDataset

Returns information about a training dataset.

Request Syntax

```
GET /training-dataset/trainingDatasetArn HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

trainingDatasetArn

The Amazon Resource Name (ARN) of the training dataset that you are interested in.

Length Constraints: Minimum length of 20. Maximum length of 2048.

Pattern: `arn:aws[-a-z]*:cleanrooms-ml:[-a-z0-9]+:[0-9]{12}:training-dataset/[-a-zA-Z0-9_/.]+`

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
   "createTime": "string",
   "description": "string",
   "name": "string",
   "roleArn": "string",
   "status": "string",
   "tags": {
      "string" : "string"
```

```
      },
      "trainingData": [
         {
            "inputConfig": {
               "dataSource": {
                  "glueDataSource": {
                     "catalogId": "string",
                     "databaseName": "string",
                     "tableName": "string"
                  }
               },
               "schema": [
                  {
                     "columnName": "string",
                     "columnTypes": [ "string" ]
                  }
               ]
            },
            "type": "string"
         }
      ],
      "trainingDatasetArn": "string",
      "updateTime": "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.

createTime

The time at which the training dataset was created.

Type: Timestamp

description

The description of the training dataset.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 255.

Pattern: [\u0020-\uD7FF\uE000-\uFFFD\uD800\uDBFF-\uDC00\uDFFF\t\r\n]*

name

The name of the training dataset.

Type: String

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

Pattern: (?!\s*$)[\u0020-\uD7FF\uE000-\uFFFD\uD800\uDBFF-\uDC00\uDFFF\t]*

roleArn

The IAM role used to read the training data.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 2048.

Pattern: arn:aws[-a-z]*:iam::[0-9]{12}:role/.+

status

The status of the training dataset.

Type: String

Valid Values: ACTIVE

tags

The tags that are assigned to this training dataset.

Type: String to string map

Map Entries: Minimum number of 0 items. Maximum number of 200 items.

Key Length Constraints: Minimum length of 1. Maximum length of 128.

Value Length Constraints: Minimum length of 0. Maximum length of 256.

trainingData

Metadata about the requested training data.

Type: Array of Dataset objects

trainingDatasetArn

The Amazon Resource Name (ARN) of the training dataset.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 2048.

Pattern: `arn:aws[-a-z]*:cleanrooms-ml:[-a-z0-9]+:[0-9]{12}:training-dataset/[-a-zA-Z0-9_/.]+`

updateTime

The most recent time at which the training dataset was updated.

Type: Timestamp

Errors

For information about the errors that are common to all actions, see Common Errors.

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 403

ResourceNotFoundException

The resource you are requesting does not exist.

HTTP Status Code: 404

ValidationException

The request parameters for this request are incorrect.

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](#)

ListAudienceExportJobs

Returns a list of the audience export jobs.

Request Syntax

```
GET /audience-export-job?
audienceGenerationJobArn=audienceGenerationJobArn&maxResults=maxResults&nextToken=nextToken
 HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

audienceGenerationJobArn

The Amazon Resource Name (ARN) of the audience generation job that you are interested in.

Length Constraints: Minimum length of 20. Maximum length of 2048.

Pattern: `arn:aws[-a-z]*:cleanrooms-ml:[-a-z0-9]+:[0-9]{12}:audience-generation-job/[-a-zA-Z0-9_/.]+`

maxResults

The maximum size of the results that is returned per call.

Valid Range: Minimum value of 1. Maximum value of 100.

nextToken

The token value retrieved from a previous call to access the next page of results.

Length Constraints: Minimum length of 1. Maximum length of 10240.

Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 200
```

```
Content-type: application/json

{
   "audienceExportJobs": [
      {
         "audienceGenerationJobArn": "string",
         "audienceSize": {
            "type": "string",
            "value": number
         },
         "createTime": "string",
         "description": "string",
         "name": "string",
         "outputLocation": "string",
         "status": "string",
         "statusDetails": {
            "message": "string",
            "statusCode": "string"
         },
         "updateTime": "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.

audienceExportJobs

The audience export jobs that match the request.

Type: Array of AudienceExportJobSummary objects

nextToken

The token value retrieved from a previous call to access the next page of results.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 10240.

Errors

For information about the errors that are common to all actions, see Common Errors.

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 403

ValidationException

The request parameters for this request are incorrect.

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

ListAudienceGenerationJobs

Returns a list of audience generation jobs.

Request Syntax

```
GET /audience-generation-job?
collaborationId=collaborationId&configuredAudienceModelArn=configuredAudienceModelArn&maxResult
 HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

collaborationId

The identifier of the collaboration that contains the audience generation jobs that you are interested in.

Length Constraints: Fixed length of 36.

Pattern: `[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}`

configuredAudienceModelArn

The Amazon Resource Name (ARN) of the configured audience model that was used for the audience generation jobs that you are interested in.

Length Constraints: Minimum length of 20. Maximum length of 2048.

Pattern: `arn:aws[-a-z]*:cleanrooms-ml:[-a-z0-9]+:[0-9]{12}:configured-audience-model/[-a-zA-Z0-9_/.]+`

maxResults

The maximum size of the results that is returned per call.

Valid Range: Minimum value of 1. Maximum value of 100.

nextToken

The token value retrieved from a previous call to access the next page of results.

Length Constraints: Minimum length of 1. Maximum length of 10240.

Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
   "audienceGenerationJobs": [
      {
         "audienceGenerationJobArn": "string",
         "collaborationId": "string",
         "configuredAudienceModelArn": "string",
         "createTime": "string",
         "description": "string",
         "name": "string",
         "startedBy": "string",
         "status": "string",
         "updateTime": "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.

audienceGenerationJobs

The audience generation jobs that match the request.

Type: Array of AudienceGenerationJobSummary objects

nextToken

The token value retrieved from a previous call to access the next page of results.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 10240.

Errors

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

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 403

ValidationException

The request parameters for this request are incorrect.

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](#)
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- [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](#)

ListAudienceModels

Returns a list of audience models.

Request Syntax

```
GET /audience-model?maxResults=maxResults&nextToken=nextToken HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

maxResults

The maximum size of the results that is returned per call.

Valid Range: Minimum value of 1. Maximum value of 100.

nextToken

The token value retrieved from a previous call to access the next page of results.

Length Constraints: Minimum length of 1. Maximum length of 10240.

Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
   "audienceModels": [
      {
         "audienceModelArn": "string",
         "createTime": "string",
         "description": "string",
         "name": "string",
```

```
            "status": "string",
            "trainingDatasetArn": "string",
            "updateTime": "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.

audienceModels

The audience models that match the request.

Type: Array of AudienceModelSummary objects

nextToken

The token value retrieved from a previous call to access the next page of results.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 10240.

Errors

For information about the errors that are common to all actions, see Common Errors.

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 403

ValidationException

The request parameters for this request are incorrect.

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](#)

ListConfiguredAudienceModels

Returns a list of the configured audience models.

Request Syntax

```
GET /configured-audience-model?maxResults=maxResults&nextToken=nextToken HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

maxResults

The maximum size of the results that is returned per call.

Valid Range: Minimum value of 1. Maximum value of 100.

nextToken

The token value retrieved from a previous call to access the next page of results.

Length Constraints: Minimum length of 1. Maximum length of 10240.

Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
   "configuredAudienceModels": [
      {
         "audienceModelArn": "string",
         "configuredAudienceModelArn": "string",
         "createTime": "string",
         "description": "string",
```

```
            "name": "string",
            "outputConfig": {
                "destination": {
                    "s3Destination": {
                        "s3Uri": "string"
                    }
                },
                "roleArn": "string"
            },
            "status": "string",
            "updateTime": "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.

configuredAudienceModels

The configured audience models.

Type: Array of ConfiguredAudienceModelSummary objects

nextToken

The token value retrieved from a previous call to access the next page of results.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 10240.

Errors

For information about the errors that are common to all actions, see Common Errors.

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 403

ValidationException

The request parameters for this request are incorrect.

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](#)

ListTagsForResource

Returns a list of tags for a provided resource.

Request Syntax

```
GET /tags/resourceArn HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

resourceArn

The Amazon Resource Name (ARN) of the resource that you are interested in.

Length Constraints: Minimum length of 20. Maximum length of 2048.

Pattern: `arn:aws[-a-z]*:cleanrooms-ml:[-a-z0-9]+:[0-9]{12}:(training-dataset|audience-model|configured-audience-model|audience-generation-job)/[-a-zA-Z0-9_/.]+`

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
   "tags": {
      "string" : "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.

tags

The tags that are associated with the resource.

Type: String to string map

Map Entries: Minimum number of 0 items. Maximum number of 200 items.

Key Length Constraints: Minimum length of 1. Maximum length of 128.

Value Length Constraints: Minimum length of 0. Maximum length of 256.

Errors

For information about the errors that are common to all actions, see Common Errors.

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 403

ResourceNotFoundException

The resource you are requesting does not exist.

HTTP Status Code: 404

ValidationException

The request parameters for this request are incorrect.

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](#)

ListTrainingDatasets

Returns a list of training datasets.

Request Syntax

```
GET /training-dataset?maxResults=maxResults&nextToken=nextToken HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

maxResults

The maximum size of the results that is returned per call.

Valid Range: Minimum value of 1. Maximum value of 100.

nextToken

The token value retrieved from a previous call to access the next page of results.

Length Constraints: Minimum length of 1. Maximum length of 10240.

Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
   "nextToken": "string",
   "trainingDatasets": [
      {
         "createTime": "string",
         "description": "string",
         "name": "string",
```

```
            "status": "string",
            "trainingDatasetArn": "string",
            "updateTime": "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 value retrieved from a previous call to access the next page of results.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 10240.

trainingDatasets

The training datasets that match the request.

Type: Array of TrainingDatasetSummary objects

Errors

For information about the errors that are common to all actions, see Common Errors.

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 403

ValidationException

The request parameters for this request are incorrect.

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](#)

PutConfiguredAudienceModelPolicy

Create or update the resource policy for a configured audience model.

Request Syntax

```
PUT /configured-audience-model/configuredAudienceModelArn/policy HTTP/1.1
Content-type: application/json

{
    "configuredAudienceModelPolicy": "string",
    "policyExistenceCondition": "string",
    "previousPolicyHash": "string"
}
```

URI Request Parameters

The request uses the following URI parameters.

configuredAudienceModelArn

The Amazon Resource Name (ARN) of the configured audience model that the resource policy will govern.

Length Constraints: Minimum length of 20. Maximum length of 2048.

Pattern: `arn:aws[-a-z]*:cleanrooms-ml:[-a-z0-9]+:[0-9]{12}:configured-audience-model/[-a-zA-Z0-9_/.]+`

Required: Yes

Request Body

The request accepts the following data in JSON format.

configuredAudienceModelPolicy

The IAM resource policy.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 20480.

Required: Yes

policyExistenceCondition

Use this to prevent unexpected concurrent modification of the policy.

Type: String

Valid Values: `POLICY_MUST_EXIST | POLICY_MUST_NOT_EXIST`

Required: No

previousPolicyHash

A cryptographic hash of the contents of the policy used to prevent unexpected concurrent modification of the policy.

Type: String

Length Constraints: Minimum length of 64. Maximum length of 128.

Pattern: `[0-9a-f]+`

Required: No

Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
    "configuredAudienceModelPolicy": "string",
    "policyHash": "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.

configuredAudienceModelPolicy

The IAM resource policy.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 20480.

policyHash

A cryptographic hash of the contents of the policy used to prevent unexpected concurrent modification of the policy.

Type: String

Length Constraints: Minimum length of 64. Maximum length of 128.

Pattern: `[0-9a-f]+`

Errors

For information about the errors that are common to all actions, see Common Errors.

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 403

ResourceNotFoundException

The resource you are requesting does not exist.

HTTP Status Code: 404

ValidationException

The request parameters for this request are incorrect.

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](#)

StartAudienceExportJob

Export an audience of a specified size after you have generated an audience.

Request Syntax

```
POST /audience-export-job HTTP/1.1
Content-type: application/json

{
   "audienceGenerationJobArn": "string",
   "audienceSize": {
      "type": "string",
      "value": number
   },
   "description": "string",
   "name": "string"
}
```

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

audienceGenerationJobArn

> The Amazon Resource Name (ARN) of the audience generation job that you want to export.
>
> Type: String
>
> Length Constraints: Minimum length of 20. Maximum length of 2048.
>
> Pattern: `arn:aws[-a-z]*:cleanrooms-ml:[-a-z0-9]+:[0-9]{12}:audience-generation-job/[-a-zA-Z0-9_/.]+`
>
> Required: Yes

audienceSize

The size of the generated audience. Must match one of the sizes in the configured audience model.

Type: AudienceSize object

Required: Yes

description

The description of the audience export job.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 255.

Pattern: `[\u0020-\uD7FF\uE000-\uFFFD\uD800\uDBFF-\uDC00\uDFFF\t\r\n]*`

Required: No

name

The name of the audience export job.

Type: String

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

Pattern: `(?!\s*$)[\u0020-\uD7FF\uE000-\uFFFD\uD800\uDBFF-\uDC00\uDFFF\t]*`

Required: Yes

Response Syntax

```
HTTP/1.1 200
```

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

You do not have sufficient access to perform this action.

HTTP Status Code: 403

ConflictException

You can't complete this action because another resource depends on this resource.

HTTP Status Code: 409

ResourceNotFoundException

The resource you are requesting does not exist.

HTTP Status Code: 404

ServiceQuotaExceededException

You have exceeded your service quota.

HTTP Status Code: 402

ValidationException

The request parameters for this request are incorrect.

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](#)

StartAudienceGenerationJob

Information necessary to start the audience generation job.

Request Syntax

```
POST /audience-generation-job HTTP/1.1
Content-type: application/json

{
   "collaborationId": "string",
   "configuredAudienceModelArn": "string",
   "description": "string",
   "includeSeedInOutput": boolean,
   "name": "string",
   "seedAudience": {
      "dataSource": {
         "s3Uri": "string"
      },
      "roleArn": "string",
      "sqlParameters": {
         "analysisTemplateArn": "string",
         "parameters": {
            "string" : "string"
         },
         "queryString": "string"
      }
   },
   "tags": {
      "string" : "string"
   }
}
```

URI Request Parameters

The request does not use any URI parameters.

Request Body

The request accepts the following data in JSON format.

collaborationId

The identifier of the collaboration that contains the audience generation job.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}`

Required: No

configuredAudienceModelArn

The Amazon Resource Name (ARN) of the configured audience model that is used for this audience generation job.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 2048.

Pattern: `arn:aws[-a-z]*:cleanrooms-ml:[-a-z0-9]+:[0-9]{12}:configured-audience-model/[-a-zA-Z0-9_/.]+`

Required: Yes

description

The description of the audience generation job.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 255.

Pattern: `[\u0020-\uD7FF\uE000-\uFFFD\uD800\uDBFF-\uDC00\uDFFF\t\r\n]*`

Required: No

includeSeedInOutput

Whether the seed audience is included in the audience generation output.

Type: Boolean

Required: No

name

The name of the audience generation job.

Type: String

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

Pattern: `(?!\s*$)[\u0020-\uD7FF\uE000-\uFFFD\uD800\uDBFF-\uDC00\uDFFF\t]*`

Required: Yes

seedAudience

The seed audience that is used to generate the audience.

Type: AudienceGenerationJobDataSource object

Required: Yes

tags

The optional metadata that you apply to the resource to help you categorize and organize them. Each tag consists of a key and an optional value, both of which you define.

The following basic restrictions apply to tags:

- Maximum number of tags per resource - 50.
- For each resource, each tag key must be unique, and each tag key can have only one value.
- Maximum key length - 128 Unicode characters in UTF-8.
- Maximum value length - 256 Unicode characters in UTF-8.
- If your tagging schema is used across multiple services and resources, remember that other services may have restrictions on allowed characters. Generally allowed characters are: letters, numbers, and spaces representable in UTF-8, and the following characters: + - = . _ : / @.
- Tag keys and values are case sensitive.
- Do not use aws:, AWS:, or any upper or lowercase combination of such as a prefix for keys as it is reserved for AWS use. You cannot edit or delete tag keys with this prefix. Values can have this prefix. If a tag value has aws as its prefix but the key does not, then Clean Rooms ML considers it to be a user tag and will count against the limit of 50 tags. Tags with only the key prefix of aws do not count against your tags per resource limit.

Type: String to string map

Map Entries: Minimum number of 0 items. Maximum number of 200 items.

Key Length Constraints: Minimum length of 1. Maximum length of 128.

Value Length Constraints: Minimum length of 0. Maximum length of 256.

Required: No

Response Syntax

```
HTTP/1.1 200
Content-type: application/json


{
    "audienceGenerationJobArn": "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.

audienceGenerationJobArn

The Amazon Resource Name (ARN) of the audience generation job.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 2048.

Pattern: `arn:aws[-a-z]*:cleanrooms-ml:[-a-z0-9]+:[0-9]{12}:audience-generation-job/[-a-zA-Z0-9_/.]+`

Errors

For information about the errors that are common to all actions, see Common Errors.

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 403

ConflictException

You can't complete this action because another resource depends on this resource.

HTTP Status Code: 409

ResourceNotFoundException

The resource you are requesting does not exist.

HTTP Status Code: 404

ServiceQuotaExceededException

You have exceeded your service quota.

HTTP Status Code: 402

ValidationException

The request parameters for this request are incorrect.

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](#)

TagResource

Adds metadata tags to a specified resource.

Request Syntax

```
POST /tags/resourceArn HTTP/1.1
Content-type: application/json

{
   "tags": {
      "string" : "string"
   }
}
```

URI Request Parameters

The request uses the following URI parameters.

resourceArn

   The Amazon Resource Name (ARN) of the resource that you want to assign tags.

   Length Constraints: Minimum length of 20. Maximum length of 2048.

   Pattern: `arn:aws[-a-z]*:cleanrooms-ml:[-a-z0-9]+:[0-9]{12}:(training-dataset|audience-model|configured-audience-model|audience-generation-job)/[-a-zA-Z0-9_/.]+`

   Required: Yes

Request Body

The request accepts the following data in JSON format.

tags

   The optional metadata that you apply to the resource to help you categorize and organize them. Each tag consists of a key and an optional value, both of which you define.

The following basic restrictions apply to tags:

- Maximum number of tags per resource - 50.

- For each resource, each tag key must be unique, and each tag key can have only one value.

- Maximum key length - 128 Unicode characters in UTF-8.

- Maximum value length - 256 Unicode characters in UTF-8.

- If your tagging schema is used across multiple services and resources, remember that other services may have restrictions on allowed characters. Generally allowed characters are: letters, numbers, and spaces representable in UTF-8, and the following characters: + - = . _ : / @.

- Tag keys and values are case sensitive.

- Do not use aws:, AWS:, or any upper or lowercase combination of such as a prefix for keys as it is reserved for AWS use. You cannot edit or delete tag keys with this prefix. Values can have this prefix. If a tag value has aws as its prefix but the key does not, then Clean Rooms considers it to be a user tag and will count against the limit of 50 tags. Tags with only the key prefix of aws do not count against your tags per resource limit.

Type: String to string map

Map Entries: Minimum number of 0 items. Maximum number of 200 items.

Key Length Constraints: Minimum length of 1. Maximum length of 128.

Value Length Constraints: Minimum length of 0. Maximum length of 256.

Required: Yes

Response Syntax

```
HTTP/1.1 200
```

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

You do not have sufficient access to perform this action.

HTTP Status Code: 403

ResourceNotFoundException

The resource you are requesting does not exist.

HTTP Status Code: 404

ValidationException

The request parameters for this request are incorrect.

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](#)

UntagResource

Removes metadata tags from a specified resource.

Request Syntax

```
DELETE /tags/resourceArn?tagKeys=tagKeys HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

resourceArn

The Amazon Resource Name (ARN) of the resource that you want to remove tags from.

Length Constraints: Minimum length of 20. Maximum length of 2048.

Pattern: `arn:aws[-a-z]*:cleanrooms-ml:[-a-z0-9]+:[0-9]{12}:(training-dataset|audience-model|configured-audience-model|audience-generation-job)/[-a-zA-Z0-9_/.]+`

Required: Yes

tagKeys

The key values of tags that you want to remove.

Array Members: Minimum number of 0 items. Maximum number of 200 items.

Length Constraints: Minimum length of 1. Maximum length of 128.

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 200
```

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

You do not have sufficient access to perform this action.

HTTP Status Code: 403

ResourceNotFoundException

The resource you are requesting does not exist.

HTTP Status Code: 404

ValidationException

The request parameters for this request are incorrect.

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

UpdateConfiguredAudienceModel

Provides the information necessary to update a configured audience model. Updates that impact audience generation jobs take effect when a new job starts, but do not impact currently running jobs.

Request Syntax

```
PATCH /configured-audience-model/configuredAudienceModelArn HTTP/1.1
Content-type: application/json

{
   "audienceModelArn": "string",
   "audienceSizeConfig": {
      "audienceSizeBins": [ number ],
      "audienceSizeType": "string"
   },
   "description": "string",
   "minMatchingSeedSize": number,
   "outputConfig": {
      "destination": {
         "s3Destination": {
            "s3Uri": "string"
         }
      },
      "roleArn": "string"
   },
   "sharedAudienceMetrics": [ "string" ]
}
```

URI Request Parameters

The request uses the following URI parameters.

configuredAudienceModelArn

The Amazon Resource Name (ARN) of the configured audience model that you want to update.

Length Constraints: Minimum length of 20. Maximum length of 2048.

Pattern: `arn:aws[-a-z]*:cleanrooms-ml:[-a-z0-9]+:[0-9]{12}:configured-audience-model/[-a-zA-Z0-9_/.]+`

Required: Yes

Request Body

The request accepts the following data in JSON format.

audienceModelArn

The Amazon Resource Name (ARN) of the new audience model that you want to use.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 2048.

Pattern: `arn:aws[-a-z]*:cleanrooms-ml:[-a-z0-9]+:[0-9]{12}:audience-model/`
`[-a-zA-Z0-9_/.]+`

Required: No

audienceSizeConfig

The new audience size configuration.

Type: AudienceSizeConfig object

Required: No

description

The new description of the configured audience model.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 255.

Pattern: `[\u0020-\uD7FF\uE000-\uFFFD\uD800\uDBFF-\uDC00\uDFFF\t\r\n]*`

Required: No

minMatchingSeedSize

The minimum number of users from the seed audience that must match with users in the training data of the audience model.

Type: Integer

Valid Range: Minimum value of 25. Maximum value of 500000.

Required: No

outputConfig

The new output configuration.

Type: ConfiguredAudienceModelOutputConfig object

Required: No

sharedAudienceMetrics

The new value for whether to share audience metrics.

Type: Array of strings

Array Members: Fixed number of 1 item.

Valid Values: ALL | NONE

Required: No

Response Syntax

```
HTTP/1.1 200
Content-type: application/json

{
    "configuredAudienceModelArn": "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.

configuredAudienceModelArn

The Amazon Resource Name (ARN) of the configured audience model that was updated.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 2048.

Pattern: `arn:aws[-a-z]*:cleanrooms-ml:[-a-z0-9]+:[0-9]{12}:configured-audience-model/[-a-zA-Z0-9_/.]+`

Errors

For information about the errors that are common to all actions, see Common Errors.

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 403

ConflictException

You can't complete this action because another resource depends on this resource.

HTTP Status Code: 409

ResourceNotFoundException

The resource you are requesting does not exist.

HTTP Status Code: 404

ValidationException

The request parameters for this request are incorrect.

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 AWS Clean Rooms ML 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:

- AudienceDestination
- AudienceExportJobSummary
- AudienceGenerationJobDataSource
- AudienceGenerationJobSummary
- AudienceModelSummary
- AudienceQualityMetrics
- AudienceSize
- AudienceSizeConfig
- ColumnSchema
- ConfiguredAudienceModelOutputConfig
- ConfiguredAudienceModelSummary
- Dataset
- DatasetInputConfig
- DataSource
- GlueDataSource
- ProtectedQuerySQLParameters
- RelevanceMetric
- S3ConfigMap
- StatusDetails
- TrainingDatasetSummary

AudienceDestination

Defines the Amazon S3 bucket where the configured audience is stored.

Contents

s3Destination

The Amazon S3 bucket and path for the configured audience.

Type: S3ConfigMap object

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

AudienceExportJobSummary

Provides information about the audience export job.

Contents

audienceGenerationJobArn

The Amazon Resource Name (ARN) of the audience generation job that was exported.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 2048.

Pattern: `arn:aws[-a-z]*:cleanrooms-ml:[-a-z0-9]+:[0-9]{12}:audience-generation-job/[-a-zA-Z0-9_/.]+`

Required: Yes

audienceSize

The size of the generated audience. Must match one of the sizes in the configured audience model.

Type: [AudienceSize](#) object

Required: Yes

createTime

The time at which the audience export job was created.

Type: Timestamp

Required: Yes

name

The name of the audience export job.

Type: String

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

Pattern: `(?!\s*$)[\u0020-\uD7FF\uE000-\uFFFD\uD800\uDBFF-\uDC00\uDFFF\t]*`

Required: Yes

status

The status of the audience export job.

Type: String

Valid Values: `CREATE_PENDING` | `CREATE_IN_PROGRESS` | `CREATE_FAILED` | `ACTIVE`

Required: Yes

updateTime

The most recent time at which the audience export job was updated.

Type: Timestamp

Required: Yes

description

The description of the audience export job.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 255.

Pattern: `[\u0020-\uD7FF\uE000-\uFFFD\uD800\uDBFF-\uDC00\uDFFF\t\r\n]*`

Required: No

outputLocation

The Amazon S3 bucket where the audience export is stored.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1285.

Pattern: `s3://.+`

Required: No

statusDetails

Details about the status of a resource.

Type: StatusDetails 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

AudienceGenerationJobDataSource

Defines the Amazon S3 bucket where the seed audience for the generating audience is stored.

Contents

roleArn

The ARN of the IAM role that can read the Amazon S3 bucket where the seed audience is stored.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 2048.

Pattern: `arn:aws[-a-z]*:iam::[0-9]{12}:role/.+`

Required: Yes

dataSource

Defines the Amazon S3 bucket where the seed audience for the generating audience is stored. A valid data source is a JSON line file in the following format:

`{"user_id": "111111"}`

`{"user_id": "222222"}`

`...`

Type: S3ConfigMap object

Required: No

sqlParameters

The protected SQL query parameters.

Type: ProtectedQuerySQLParameters 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](#)

AudienceGenerationJobSummary

Provides information about the configured audience generation job.

Contents

audienceGenerationJobArn

The Amazon Resource Name (ARN) of the audience generation job.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 2048.

Pattern: `arn:aws[-a-z]*:cleanrooms-ml:[-a-z0-9]+:[0-9]{12}:audience-generation-job/[-a-zA-Z0-9_/.]+`

Required: Yes

configuredAudienceModelArn

The Amazon Resource Name (ARN) of the configured audience model that was used for this audience generation job.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 2048.

Pattern: `arn:aws[-a-z]*:cleanrooms-ml:[-a-z0-9]+:[0-9]{12}:configured-audience-model/[-a-zA-Z0-9_/.]+`

Required: Yes

createTime

The time at which the audience generation job was created.

Type: Timestamp

Required: Yes

name

The name of the audience generation job.

Type: String

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

Pattern: `(?!\s*$)[\u0020-\uD7FF\uE000-\uFFFD\uD800\uDBFF-\uDC00\uDFFF\t]*`

Required: Yes

status

The status of the audience generation job.

Type: String

Valid Values: `CREATE_PENDING | CREATE_IN_PROGRESS | CREATE_FAILED | ACTIVE | DELETE_PENDING | DELETE_IN_PROGRESS | DELETE_FAILED`

Required: Yes

updateTime

The most recent time at which the audience generation job was updated.

Type: Timestamp

Required: Yes

collaborationId

The identifier of the collaboration that contains this audience generation job.

Type: String

Length Constraints: Fixed length of 36.

Pattern: `[0-9a-f]{8}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{4}-[0-9a-f]{12}`

Required: No

description

The description of the audience generation job.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 255.

Pattern: `[\u0020-\uD7FF\uE000-\uFFFD\uD800\uDBFF-\uDC00\uDFFF\t\r\n]*`

Required: No

startedBy

The AWS Account that submitted the job.

Type: String

Length Constraints: Fixed length of 12.

Pattern: `[0-9]{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](#)

AudienceModelSummary

Information about the audience model.

Contents

audienceModelArn

The Amazon Resource Name (ARN) of the audience model.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 2048.

Pattern: `arn:aws[-a-z]*:cleanrooms-ml:[-a-z0-9]+:[0-9]{12}:audience-model/[-a-zA-Z0-9_/.]+`

Required: Yes

createTime

The time at which the audience model was created.

Type: Timestamp

Required: Yes

name

The name of the audience model.

Type: String

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

Pattern: `(?!\s*$)[\u0020-\uD7FF\uE000-\uFFFD\uD800\uDBFF-\uDC00\uDFFF\t]*`

Required: Yes

status

The status of the audience model.

Type: String

Valid Values: CREATE_PENDING | CREATE_IN_PROGRESS | CREATE_FAILED | ACTIVE |
DELETE_PENDING | DELETE_IN_PROGRESS | DELETE_FAILED

Required: Yes

trainingDatasetArn

The Amazon Resource Name (ARN) of the training dataset that was used for the audience
model.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 2048.

Pattern: `arn:aws[-a-z]*:cleanrooms-ml:[-a-z0-9]+:[0-9]{12}:training-`
`dataset/[-a-zA-Z0-9_/.]+`

Required: Yes

updateTime

The most recent time at which the audience model was updated.

Type: Timestamp

Required: Yes

description

The description of the audience model.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 255.

Pattern: `[\u0020-\uD7FF\uE000-\uFFFD\uD800\uDBFF-\uDC00\uDFFF\t\r\n]*`

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](#)

AudienceQualityMetrics

Metrics that describe the quality of the generated audience.

Contents

relevanceMetrics

The relevance scores of the generated audience.

Type: Array of [RelevanceMetric](#) objects

Required: Yes

recallMetric

The recall score of the generated audience. Recall is the percentage of the most similar users (by default, the most similar 20%) from a sample of the training data that are included in the seed audience by the audience generation job. Values range from 0-1, larger values indicate a better audience. A recall value approximately equal to the maximum bin size indicates that the audience model is equivalent to random selection.

Type: Double

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](#)

AudienceSize

The size of the generated audience. Must match one of the sizes in the configured audience model.

Contents

type

Whether the audience size is defined in absolute terms or as a percentage. You can use the ABSOLUTE AudienceSize to configure out audience sizes using the count of identifiers in the output. You can use the `Percentage` AudienceSize to configure sizes in the range 1-100 percent.

Type: String

Valid Values: `ABSOLUTE | PERCENTAGE`

Required: Yes

value

Specify an audience size value.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 20000000.

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

AudienceSizeConfig

Returns the relevance scores at these audience sizes when used in the [GetAudienceGenerationJob](#) for a specified audience generation job and configured audience model.

Specifies the list of allowed `audienceSize` values when used in the [StartAudienceExportJob](#) for an audience generation job. You can use the ABSOLUTE [AudienceSize](#) to configure out audience sizes using the count of identifiers in the output. You can use the `Percentage` [AudienceSize](#) to configure sizes in the range 1-100 percent.

Contents

audienceSizeBins

An array of the different audience output sizes.

Type: Array of integers

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

Valid Range: Minimum value of 1. Maximum value of 20000000.

Required: Yes

audienceSizeType

Whether the audience output sizes are defined as an absolute number or a percentage.

Type: String

Valid Values: ABSOLUTE | PERCENTAGE

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](#)

ColumnSchema

Metadata for a column.

Contents

columnName

The name of a column.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[a-zA-Z0-9_](([a-zA-Z0-9_ ]+-)*([a-zA-Z0-9_ ]+))?`

Required: Yes

columnTypes

The data type of column.

Type: Array of strings

Array Members: Fixed number of 1 item.

Valid Values: `USER_ID | ITEM_ID | TIMESTAMP | CATEGORICAL_FEATURE | NUMERICAL_FEATURE`

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

ConfiguredAudienceModelOutputConfig

Configuration information necessary for the configure audience model output.

Contents

destination

Defines the Amazon S3 bucket where the configured audience is stored.

Type: [AudienceDestination](#) object

Required: Yes

roleArn

The ARN of the IAM role that can write the Amazon S3 bucket.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 2048.

Pattern: `arn:aws[-a-z]*:iam::[0-9]{12}:role/.+`

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](#)

ConfiguredAudienceModelSummary

Information about the configured audience model.

Contents

audienceModelArn

The Amazon Resource Name (ARN) of the audience model that was used to create the configured audience model.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 2048.

Pattern: `arn:aws[-a-z]*:cleanrooms-ml:[-a-z0-9]+:[0-9]{12}:audience-model/[-a-zA-Z0-9_/.]+`

Required: Yes

configuredAudienceModelArn

The Amazon Resource Name (ARN) of the configured audience model that you are interested in.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 2048.

Pattern: `arn:aws[-a-z]*:cleanrooms-ml:[-a-z0-9]+:[0-9]{12}:configured-audience-model/[-a-zA-Z0-9_/.]+`

Required: Yes

createTime

The time at which the configured audience model was created.

Type: Timestamp

Required: Yes

name

The name of the configured audience model.

Type: String

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

Pattern: (?!\s*$)[\u0020-\uD7FF\uE000-\uFFFD\uD800\uDBFF-\uDC00\uDFFF\t]*

Required: Yes

outputConfig

The output configuration of the configured audience model.

Type: [ConfiguredAudienceModelOutputConfig](#) object

Required: Yes

status

The status of the configured audience model.

Type: String

Valid Values: ACTIVE

Required: Yes

updateTime

The most recent time at which the configured audience model was updated.

Type: Timestamp

Required: Yes

description

The description of the configured audience model.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 255.

Pattern: [\u0020-\uD7FF\uE000-\uFFFD\uD800\uDBFF-\uDC00\uDFFF\t\r\n]*

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](#)

Dataset

Defines where the training dataset is located, what type of data it contains, and how to access the data.

Contents

inputConfig

A DatasetInputConfig object that defines the data source and schema mapping.

Type: DatasetInputConfig object

Required: Yes

type

What type of information is found in the dataset.

Type: String

Valid Values: INTERACTIONS

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

DatasetInputConfig

Defines the Glue data source and schema mapping information.

Contents

dataSource

A DataSource object that specifies the Glue data source for the training data.

Type: [DataSource](#) object

Required: Yes

schema

The schema information for the training data.

Type: Array of [ColumnSchema](#) objects

Array Members: Minimum number of 1 item. Maximum number of 100 items.

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](#)

DataSource

Defines information about the Glue data source that contains the training data.

Contents

glueDataSource

A GlueDataSource object that defines the catalog ID, database name, and table name for the training data.

Type: [GlueDataSource](#) object

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](#)

GlueDataSource

Defines the Glue data source that contains the training data.

Contents

databaseName

The Glue database that contains the training data.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[a-zA-Z0-9_](([a-zA-Z0-9_]+-)*([a-zA-Z0-9_]+))?`

Required: Yes

tableName

The Glue table that contains the training data.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `[a-zA-Z0-9_](([a-zA-Z0-9_ ]+-)*([a-zA-Z0-9_ ]+))?`

Required: Yes

catalogId

The Glue catalog that contains the training data.

Type: String

Length Constraints: Fixed length of 12.

Pattern: `[0-9]{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](#)

ProtectedQuerySQLParameters

The parameters for the SQL type Protected Query.

Contents

analysisTemplateArn

The Amazon Resource Name (ARN) associated with the analysis template within a collaboration.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 200.

Pattern: `arn:aws[-a-z]*:cleanrooms:[\w]{2}-[\w]{4,9}-[\d]:[\d]{12}:membership/[\d\w-]+/analysistemplate/[\d\w-]+`

Required: No

parameters

The protected query SQL parameters.

Type: String to string map

Key Length Constraints: Minimum length of 1. Maximum length of 100.

Key Pattern: `[0-9a-zA-Z_]+`

Value Length Constraints: Minimum length of 0. Maximum length of 250.

Required: No

queryString

The query string to be submitted.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 90000.

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](#)

RelevanceMetric

The relevance score of a generated audience.

Contents

audienceSize

The size of the generated audience. Must match one of the sizes in the configured audience model.

Type: [AudienceSize](#) object

Required: Yes

score

The relevance score of the generated audience.

Type: Double

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](#)

S3ConfigMap

Provides information about an Amazon S3 bucket and path.

Contents

s3Uri

The Amazon S3 location URI.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1285.

Pattern: `s3://.+`

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](#)

StatusDetails

Details about the status of a resource.

Contents

message

The error message that was returned. The message is intended for human consumption and can change at any time. Use the `statusCode` for programmatic error handling.

Type: String

Required: No

statusCode

The status code that was returned. The status code is intended for programmatic error handling. Clean Rooms ML will not change the status code for existing error conditions.

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](#)

TrainingDatasetSummary

Provides information about the training dataset.

Contents

createTime

The time at which the training dataset was created.

Type: Timestamp

Required: Yes

name

The name of the training dataset.

Type: String

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

Pattern: `(?!\s*$)[\u0020-\uD7FF\uE000-\uFFFD\uD800\uDBFF-\uDC00\uDFFF\t]*`

Required: Yes

status

The status of the training dataset.

Type: String

Valid Values: `ACTIVE`

Required: Yes

trainingDatasetArn

The Amazon Resource Name (ARN) of the training dataset.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 2048.

Pattern: `arn:aws[-a-z]*:cleanrooms-ml:[-a-z0-9]+:[0-9]{12}:training-dataset/[-a-zA-Z0-9_/.]+`

Required: Yes

updateTime

The most recent time at which the training dataset was updated.

Type: Timestamp

Required: Yes

description

The description of the training dataset.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 255.

Pattern: [\u0020-\uD7FF\uE000-\uFFFD\uD800\uDBFF-\uDC00\uDFFF\t\r\n]*

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 Parameters

The following list contains the parameters that all actions use for signing Signature Version 4 requests with a query string. Any action-specific parameters are listed in the topic for that action. For more information about Signature Version 4, see [Signing AWS API requests](#) in the *IAM User Guide*.

Action

The action to be performed.

Type: string

Required: Yes

Version

The API version that the request is written for, expressed in the format YYYY-MM-DD.

Type: string

Required: Yes

X-Amz-Algorithm

The hash algorithm that you used to create the request signature.

Condition: Specify this parameter when you include authentication information in a query string instead of in the HTTP authorization header.

Type: string

Valid Values: `AWS4-HMAC-SHA256`

Required: Conditional

X-Amz-Credential

The credential scope value, which is a string that includes your access key, the date, the region you are targeting, the service you are requesting, and a termination string ("aws4_request"). The value is expressed in the following format: *access_key*/*YYYYMMDD*/*region*/*service*/ aws4_request.

For more information, see [Create a signed AWS API request](#) in the *IAM User Guide*.

Condition: Specify this parameter when you include authentication information in a query string instead of in the HTTP authorization header.

Type: string

Required: Conditional

X-Amz-Date

The date that is used to create the signature. The format must be ISO 8601 basic format (YYYYMMDD'T'HHMMSS'Z'). For example, the following date time is a valid X-Amz-Date value: 20120325T120000Z.

Condition: X-Amz-Date is optional for all requests; it can be used to override the date used for signing requests. If the Date header is specified in the ISO 8601 basic format, X-Amz-Date is not required. When X-Amz-Date is used, it always overrides the value of the Date header. For more information, see [Elements of an AWS API request signature](#) in the *IAM User Guide*.

Type: string

Required: Conditional

X-Amz-Security-Token

The temporary security token that was obtained through a call to AWS Security Token Service (AWS STS). For a list of services that support temporary security credentials from AWS STS, see [AWS services that work with IAM](#) in the *IAM User Guide*.

Condition: If you're using temporary security credentials from AWS STS, you must include the security token.

Type: string

Required: Conditional

X-Amz-Signature

Specifies the hex-encoded signature that was calculated from the string to sign and the derived signing key.

Condition: Specify this parameter when you include authentication information in a query string instead of in the HTTP authorization header.

Type: string

Required: Conditional

X-Amz-SignedHeaders

Specifies all the HTTP headers that were included as part of the canonical request. For more information about specifying signed headers, see Create a signed AWS API request in the *IAM User Guide*.

Condition: Specify this parameter when you include authentication information in a query string instead of in the HTTP authorization header.

Type: string

Required: Conditional

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: 403

ExpiredTokenException

The security token included in the request is expired

HTTP Status Code: 403

IncompleteSignature

The request signature does not conform to AWS standards.

HTTP Status Code: 403

InternalFailure

The request processing has failed because of an unknown error, exception or failure.

HTTP Status Code: 500

MalformedHttpRequestException

Problems with the request at the HTTP level, e.g. we can't decompress the body according to the decompression algorithm specified by the content-encoding.

HTTP Status Code: 400

NotAuthorized

You do not have permission to perform this action.

HTTP Status Code: 401

OptInRequired

The AWS access key ID needs a subscription for the service.

HTTP Status Code: 403

RequestAbortedException

Convenient exception that can be used when a request is aborted before a reply is sent back (e.g. client closed connection).

HTTP Status Code: 400

RequestEntityTooLargeException

Problems with the request at the HTTP level. The request entity is too large.

HTTP Status Code: 413

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

RequestTimeoutException

Problems with the request at the HTTP level. Reading the Request timed out.

HTTP Status Code: 408

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

UnrecognizedClientException

The X.509 certificate or AWS access key ID provided does not exist in our records.

HTTP Status Code: 403

UnknownOperationException

The action or operation requested is invalid. Verify that the action is typed correctly.

HTTP Status Code: 404

ValidationError

The input fails to satisfy the constraints specified by an AWS service.

HTTP Status Code: 400