



Welcome

Amazon Aurora DSQL



API Version 2018-05-10

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Amazon Aurora DSQL: Welcome

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Welcome

This is an interface reference for Amazon Aurora DSQL. It contains documentation for one of the programming or command line interfaces you can use to manage Amazon Aurora DSQL.

Amazon Aurora DSQL is a serverless, distributed SQL database suitable for workloads of any size. is available in both single-Region and multi-Region configurations, so your clusters and databases are always available even if an Availability Zone or an AWS Region are unavailable. lets you focus on using your data to acquire new insights for your business and customers.

This document was last published on September 21, 2026.

Actions

The following actions are supported:

- [CreateCluster](#)
- [CreateStream](#)
- [DeleteCluster](#)
- [DeleteClusterPolicy](#)
- [DeleteStream](#)
- [GetCluster](#)
- [GetClusterPolicy](#)
- [GetStream](#)
- [GetVpcEndpointServiceName](#)
- [ListClusters](#)
- [ListStreams](#)
- [ListTagsForResource](#)
- [PutClusterPolicy](#)
- [TagResource](#)
- [UntagResource](#)
- [UpdateCluster](#)

CreateCluster

The CreateCluster API allows you to create both single-Region clusters and multi-Region clusters. With the addition of the *multiRegionProperties* parameter, you can create a cluster with witness Region support and establish peer relationships with clusters in other Regions during creation.

Note

Creating multi-Region clusters requires additional IAM permissions beyond those needed for single-Region clusters, as detailed in the **Required permissions** section below.

Required permissions

dsql:CreateCluster

Required to create a cluster.

Resources: `arn:aws:dsql:region:account-id:cluster/*`

dsql:TagResource

Permission to add tags to a resource.

Resources: `arn:aws:dsql:region:account-id:cluster/*`

dsql:PutMultiRegionProperties

Permission to configure multi-Region properties for a cluster.

Resources: `arn:aws:dsql:region:account-id:cluster/*`

dsql:AddPeerCluster

When specifying `multiRegionProperties.clusters`, permission to add peer clusters.

Resources:

- Local cluster: `arn:aws:dsql:region:account-id:cluster/*`
- Each peer cluster: exact ARN of each specified peer cluster

dsql:PutWitnessRegion

When specifying `multiRegionProperties.witnessRegion`, permission to set a witness Region. This permission is checked both in the cluster Region and in the witness Region.

Resources: `arn:aws:dsql:region:account-id:cluster/*`

Condition Keys: `dsql:WitnessRegion` (matching the specified witness region)

Important

- The witness Region specified in `multiRegionProperties.witnessRegion` cannot be the same as the cluster's Region.

Request Syntax

```
POST /cluster HTTP/1.1
Content-type: application/json

{
  "bypassPolicyLockoutSafetyCheck": boolean,
  "clientToken": "string",
  "deletionProtectionEnabled": boolean,
  "kmsEncryptionKey": "string",
  "multiRegionProperties": {
    "clusters": [ "string" ],
    "witnessRegion": "string"
  },
  "policy": "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.

bypassPolicyLockoutSafetyCheck

An optional field that controls whether to bypass the lockout prevention check. When set to true, this parameter allows you to apply a policy that might lock you out of the cluster. Use with caution.

Type: Boolean

Required: No

clientToken

A unique, case-sensitive identifier that you provide to ensure the idempotency of the request. Idempotency ensures that an API request completes only once. With an idempotent request, if the original request completes successfully, the subsequent retries with the same client token return the result from the original successful request and they have no additional effect.

If you don't specify a client token, the AWS SDK automatically generates one.

Type: String

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

Pattern: [!-~]+

Required: No

deletionProtectionEnabled

If enabled, you can't delete your cluster. You must first disable this property before you can delete your cluster.

Type: Boolean

Required: No

kmsEncryptionKey

The AWS KMS key that encrypts and protects the data on your cluster. You can specify the ARN, ID, or alias of an existing key or have AWS create a default key for you.

Type: String

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

Pattern: [a-zA-Z0-9:/_-]+

Required: No

multiRegionProperties

The configuration settings when creating a multi-Region cluster, including the witness region and linked cluster properties.

Type: [MultiRegionProperties](#) object

Required: No

policy

An optional resource-based policy document in JSON format that defines access permissions for the cluster.

Type: String

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

Required: No

tags

A map of key and value pairs to use to tag your cluster.

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.

Key Pattern: [a-zA-Z0-9_./=+\-@]*

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

Value Pattern: [a-zA-Z0-9_./=+\-@]*

Required: No

Response Syntax

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

```
{
  "arn": "string",
  "creationTime": number,
  "deletionProtectionEnabled": boolean,
  "encryptionDetails": {
    "encryptionStatus": "string",
    "encryptionType": "string",
    "kmsKeyArn": "string"
  },
  "endpoint": "string",
  "identifier": "string",
  "multiRegionProperties": {
    "clusters": [ "string" ],
    "witnessRegion": "string"
  },
  "status": "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.

arn

The ARN of the created cluster.

Type: String

Pattern: `arn:aws(-[^\:]+)?:dsq1:[a-z0-9-]{1,20}:[0-9]{12}:cluster/[a-z0-9]{26}`

creationTime

The time of when created the cluster.

Type: Timestamp

deletionProtectionEnabled

Whether deletion protection is enabled on this cluster.

Type: Boolean

encryptionDetails

The encryption configuration for the cluster that was specified during the creation process, including the AWS KMS key identifier and encryption state.

Type: [EncryptionDetails](#) object

endpoint

The connection endpoint for the created cluster.

Type: String

Pattern: [a-zA-Z0-9.-]+

identifier

The ID of the created cluster.

Type: String

Pattern: [a-z0-9]{26}

multiRegionProperties

The multi-Region cluster configuration details that were set during cluster creation

Type: [MultiRegionProperties](#) object

status

The status of the created cluster.

Type: String

Valid Values: CREATING | ACTIVE | IDLE | INACTIVE | UPDATING | DELETING | DELETED | FAILED | PENDING_SETUP | PENDING_DELETE

Errors

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

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 403

ConflictException

The submitted action has conflicts.

resourceId

Resource Id

resourceType

Resource Type

HTTP Status Code: 409

InternalServerErrorException

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

retryAfterSeconds

Retry after seconds.

HTTP Status Code: 500

ServiceQuotaExceededException

The service limit was exceeded.

message

The service exception for exceeding a quota.

quotaCode

The service exceeds a quota.

resourceId

The resource ID exceeds a quota.

resourceType

The resource type exceeds a quota.

serviceCode

The request exceeds a service quota.

HTTP Status Code: 402

ThrottlingException

The request was denied due to request throttling.

message

The message that the request was denied due to request throttling.

quotaCode

The request exceeds a request rate quota.

retryAfterSeconds

The request exceeds a request rate quota. Retry after seconds.

serviceCode

The request exceeds a service quota.

HTTP Status Code: 429

ValidationException

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

fieldList

A list of fields that didn't validate.

reason

The reason for the validation exception.

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 V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)

- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python \(Boto3\)](#)
- [AWS SDK for Ruby V3](#)

CreateStream

Creates a new change data capture (CDC) stream for a cluster. The stream captures database changes and delivers them to the specified target destination.

Required permissions

dsql:CreateStream

Permission to create a new stream.

Resources: `arn:aws:dsql:region:account-id:cluster/cluster-id`

iam:PassRole

Permission to pass the IAM role specified in the target definition to the service.

Resources: ARN of the IAM role specified in `targetDefinition.kinesis.roleArn`

kms:Decrypt

Required when the cluster uses a customer managed AWS KMS key (CMK). Permission to decrypt data using the cluster's CMK.

Resources: ARN of the AWS KMS key used by the cluster

Request Syntax

```
POST /stream/clusterIdentifier HTTP/1.1
```

```
Content-type: application/json
```

```
{
  "clientToken": "string",
  "format": "string",
  "ordering": "string",
  "tags": {
    "string" : "string"
  },
  "targetDefinition": { ... }
}
```

URI Request Parameters

The request uses the following URI parameters.

clusterIdentifier

The ID of the cluster for which to create the stream.

Pattern: `[a-z0-9]{26}`

Required: Yes

Request Body

The request accepts the following data in JSON format.

clientToken

A unique, case-sensitive identifier that you provide to ensure the idempotency of the request. Idempotency ensures that an API request completes only once. With an idempotent request, if the original request completes successfully, the subsequent retries with the same client token return the result from the original successful request and they have no additional effect.

If you don't specify a client token, the AWS SDK automatically generates one.

Type: String

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

Pattern: `[!-~]+`

Required: No

format

The format of the stream records.

Type: String

Valid Values: JSON

Required: Yes

ordering

The ordering mode for the stream. Determines how change events are ordered when delivered to the target.

Type: String

Valid Values: UNORDERED

Required: Yes

tags

A map of key and value pairs to use to tag your stream.

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.

Key Pattern: [a-zA-Z0-9_ . : / = + \ - @] *

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

Value Pattern: [a-zA-Z0-9_ . : / = + \ - @] *

Required: No

targetDefinition

The target destination configuration for the stream. Contains Kinesis stream configuration including stream ARN and IAM role ARN.

Type: [TargetDefinition](#) object

Note: This object is a Union. Only one member of this object can be specified or returned.

Required: Yes

Response Syntax

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

```
{
  "arn": "string",
  "clusterIdentifier": "string",
  "creationTime": number,
  "format": "string",
  "ordering": "string",
  "status": "string",
  "streamIdentifier": "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.

arn

The ARN of the created stream.

Type: String

Pattern: `arn:aws(-[^\:]+)?:dsq1:[a-z0-9-]{1,20}:[0-9]{12}:cluster/[a-z0-9]{26}/stream/[a-z0-9]{26}`

clusterIdentifier

The ID of the cluster for the created stream.

Type: String

Pattern: `[a-z0-9]{26}`

creationTime

The time when created the stream.

Type: Timestamp

format

The format of the created stream records.

Type: String

Valid Values: JSON

ordering

The ordering mode of the created stream.

Type: String

Valid Values: UNORDERED

status

The status of the created stream.

Type: String

Valid Values: CREATING | ACTIVE | DELETING | DELETED | FAILED | IMPAIRED

streamIdentifier

The ID of the created stream.

Type: String

Pattern: [a-z0-9]{26}

Errors

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

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 403

ConflictException

The submitted action has conflicts.

resourceId

Resource Id

resourceType

Resource Type

HTTP Status Code: 409

InternalServerErrorException

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

retryAfterSeconds

Retry after seconds.

HTTP Status Code: 500

ResourceNotFoundException

The resource could not be found.

resourceId

The resource ID could not be found.

resourceType

The resource type could not be found.

HTTP Status Code: 404

ServiceQuotaExceededException

The service limit was exceeded.

message

The service exception for exceeding a quota.

quotaCode

The service exceeds a quota.

resourceId

The resource ID exceeds a quota.

resourceType

The resource type exceeds a quota.

serviceCode

The request exceeds a service quota.

HTTP Status Code: 402

ThrottlingException

The request was denied due to request throttling.

message

The message that the request was denied due to request throttling.

quotaCode

The request exceeds a request rate quota.

retryAfterSeconds

The request exceeds a request rate quota. Retry after seconds.

serviceCode

The request exceeds a service quota.

HTTP Status Code: 429

ValidationException

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

fieldList

A list of fields that didn't validate.

reason

The reason for the validation exception.

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 V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)

- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python \(Boto3\)](#)
- [AWS SDK for Ruby V3](#)

DeleteCluster

Deletes a cluster in Amazon Aurora DSQL.

Request Syntax

```
DELETE /cluster/identifier?client-token=clientToken HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

clientToken

A unique, case-sensitive identifier that you provide to ensure the idempotency of the request. Idempotency ensures that an API request completes only once. With an idempotent request, if the original request completes successfully. The subsequent retries with the same client token return the result from the original successful request and they have no additional effect.

If you don't specify a client token, the AWS SDK automatically generates one.

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

Pattern: `[!-~]+`

identifier

The ID of the cluster to delete.

Pattern: `[a-z0-9]{26}`

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

```
{
  "arn": "string",
  "creationTime": number,
  "identifier": "string",
  "status": "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.

arn

The ARN of the deleted cluster.

Type: String

Pattern: `arn:aws(-[^:]+)?:dsq1:[a-z0-9-]{1,20}:[0-9]{12}:cluster/[a-z0-9]{26}`

creationTime

The time of when the cluster was created.

Type: Timestamp

identifier

The ID of the deleted cluster.

Type: String

Pattern: `[a-z0-9]{26}`

status

The status of the cluster.

Type: String

Valid Values: CREATING | ACTIVE | IDLE | INACTIVE | UPDATING | DELETING | DELETED | FAILED | PENDING_SETUP | PENDING_DELETE

Errors

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

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 403

ConflictException

The submitted action has conflicts.

resourceId

Resource Id

resourceType

Resource Type

HTTP Status Code: 409

InternalServerError

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

retryAfterSeconds

Retry after seconds.

HTTP Status Code: 500

ResourceNotFoundException

The resource could not be found.

resourceId

The resource ID could not be found.

resourceType

The resource type could not be found.

HTTP Status Code: 404

ThrottlingException

The request was denied due to request throttling.

message

The message that the request was denied due to request throttling.

quotaCode

The request exceeds a request rate quota.

retryAfterSeconds

The request exceeds a request rate quota. Retry after seconds.

serviceCode

The request exceeds a service quota.

HTTP Status Code: 429

ValidationException

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

fieldList

A list of fields that didn't validate.

reason

The reason for the validation exception.

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 V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
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- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python \(Boto3\)](#)
- [AWS SDK for Ruby V3](#)

DeleteClusterPolicy

Deletes the resource-based policy attached to a cluster. This removes all access permissions defined by the policy, reverting to default access controls.

Request Syntax

```
DELETE /cluster/identifier/policy?client-token=clientToken&expected-policy-version=expectedPolicyVersion HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

clientToken

Idempotency token so a request is only processed once.

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

Pattern: `[!-~]+`

expectedPolicyVersion

The expected version of the policy to delete. This parameter ensures that you're deleting the correct version of the policy and helps prevent accidental deletions.

identifier

The ID of the cluster.

Pattern: `[a-z0-9]{26}`

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

```
HTTP/1.1 200
```

```
Content-type: application/json

{
  "policyVersion": "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.

policyVersion

The version of the policy that was deleted.

Type: String

Errors

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

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 403

ConflictException

The submitted action has conflicts.

resourceId

Resource Id

resourceType

Resource Type

HTTP Status Code: 409

InternalServerError

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

retryAfterSeconds

Retry after seconds.

HTTP Status Code: 500

ResourceNotFoundException

The resource could not be found.

resourceId

The resource ID could not be found.

resourceType

The resource type could not be found.

HTTP Status Code: 404

ThrottlingException

The request was denied due to request throttling.

message

The message that the request was denied due to request throttling.

quotaCode

The request exceeds a request rate quota.

retryAfterSeconds

The request exceeds a request rate quota. Retry after seconds.

serviceCode

The request exceeds a service quota.

HTTP Status Code: 429

ValidationException

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

fieldList

A list of fields that didn't validate.

reason

The reason for the validation exception.

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 .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python \(Boto3\)](#)
- [AWS SDK for Ruby V3](#)

DeleteStream

Deletes a stream from a cluster.

Request Syntax

```
DELETE /stream/clusterIdentifier/streamIdentifier?client-token=clientToken HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

clientToken

A unique, case-sensitive identifier that you provide to ensure the idempotency of the request. Idempotency ensures that an API request completes only once. With an idempotent request, if the original request completes successfully, the subsequent retries with the same client token return the result from the original successful request and they have no additional effect.

If you don't specify a client token, the AWS SDK automatically generates one.

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

Pattern: `[!-~]+`

clusterIdentifier

The ID of the cluster containing the stream to delete.

Pattern: `[a-z0-9]{26}`

Required: Yes

streamIdentifier

The ID of the stream to delete.

Pattern: `[a-z0-9]{26}`

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
  "arn": "string",
  "clusterIdentifier": "string",
  "creationTime": number,
  "status": "string",
  "streamIdentifier": "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.

[arn](#)

The ARN of the deleted stream.

Type: String

Pattern: `arn:aws(-[^\:]+)?:dsq1:[a-z0-9-]{1,20}:[0-9]{12}:cluster/[a-z0-9]{26}/stream/[a-z0-9]{26}`

[clusterIdentifier](#)

The ID of the cluster for the deleted stream.

Type: String

Pattern: `[a-z0-9]{26}`

[creationTime](#)

The time when the stream was created.

Type: Timestamp

status

The status of the stream.

Type: String

Valid Values: CREATING | ACTIVE | DELETING | DELETED | FAILED | IMPAIRED

streamIdentifier

The ID of the deleted stream.

Type: String

Pattern: [a-z0-9]{26}

Errors

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

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 403

ConflictException

The submitted action has conflicts.

resourceId

Resource Id

resourceType

Resource Type

HTTP Status Code: 409

InternalServerError

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

retryAfterSeconds

Retry after seconds.

HTTP Status Code: 500

ResourceNotFoundException

The resource could not be found.

resourceId

The resource ID could not be found.

resourceType

The resource type could not be found.

HTTP Status Code: 404

ThrottlingException

The request was denied due to request throttling.

message

The message that the request was denied due to request throttling.

quotaCode

The request exceeds a request rate quota.

retryAfterSeconds

The request exceeds a request rate quota. Retry after seconds.

serviceCode

The request exceeds a service quota.

HTTP Status Code: 429

ValidationException

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

fieldList

A list of fields that didn't validate.

reason

The reason for the validation exception.

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 V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python \(Boto3\)](#)
- [AWS SDK for Ruby V3](#)

GetCluster

Retrieves information about a cluster.

Request Syntax

```
GET /cluster/identifier HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

identifier

The ID of the cluster to retrieve.

Pattern: [a-z0-9]{26}

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
  "arn": "string",
  "creationTime": number,
  "deletionProtectionEnabled": boolean,
  "encryptionDetails": {
    "encryptionStatus": "string",
    "encryptionType": "string",
    "kmsKeyArn": "string"
  },
  "endpoint": "string",
  "identifier": "string",
  "multiRegionProperties": {
```

```
    "clusters": [ "string" ],
    "witnessRegion": "string"
  },
  "status": "string",
  "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.

arn

The ARN of the retrieved cluster.

Type: String

Pattern: `arn:aws(-[^\:]+)?:dsq1:[a-z0-9-]{1,20}:[0-9]{12}:cluster/[a-z0-9]{26}`

creationTime

The time of when the cluster was created.

Type: Timestamp

deletionProtectionEnabled

Whether deletion protection is enabled in this cluster.

Type: Boolean

encryptionDetails

The current encryption configuration details for the cluster.

Type: [EncryptionDetails](#) object

endpoint

The connection endpoint for the cluster.

Type: String

Pattern: [a-zA-Z0-9.-]+

identifier

The ID of the retrieved cluster.

Type: String

Pattern: [a-z0-9]{26}

multiRegionProperties

Returns the current multi-Region cluster configuration, including witness region and linked cluster information.

Type: [MultiRegionProperties](#) object

status

The status of the retrieved cluster.

Type: String

Valid Values: CREATING | ACTIVE | IDLE | INACTIVE | UPDATING | DELETING | DELETED | FAILED | PENDING_SETUP | PENDING_DELETE

tags

Map of tags.

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.

Key Pattern: [a-zA-Z0-9_.: /+=\ -@]*

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

Value Pattern: [a-zA-Z0-9_.: /+=\ -@]*

Errors

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

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 403

InternalServerError

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

retryAfterSeconds

Retry after seconds.

HTTP Status Code: 500

ResourceNotFoundException

The resource could not be found.

resourceId

The resource ID could not be found.

resourceType

The resource type could not be found.

HTTP Status Code: 404

ThrottlingException

The request was denied due to request throttling.

message

The message that the request was denied due to request throttling.

quotaCode

The request exceeds a request rate quota.

retryAfterSeconds

The request exceeds a request rate quota. Retry after seconds.

serviceCode

The request exceeds a service quota.

HTTP Status Code: 429

ValidationException

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

fieldList

A list of fields that didn't validate.

reason

The reason for the validation exception.

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 V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python \(Boto3\)](#)
- [AWS SDK for Ruby V3](#)

GetClusterPolicy

Retrieves the resource-based policy document attached to a cluster. This policy defines the access permissions and conditions for the cluster.

Request Syntax

```
GET /cluster/identifier/policy HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

identifier

The ID of the cluster to retrieve the policy from.

Pattern: `[a-z0-9]{26}`

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
  "policy": "string",
  "policyVersion": "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.

policy

The resource-based policy document attached to the cluster, returned as a JSON string.

Type: String

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

policyVersion

The version of the policy document. This version number is incremented each time the policy is updated.

Type: String

Errors

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

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 403

InternalServerError

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

retryAfterSeconds

Retry after seconds.

HTTP Status Code: 500

ResourceNotFoundException

The resource could not be found.

resourceId

The resource ID could not be found.

resourceType

The resource type could not be found.

HTTP Status Code: 404

ThrottlingException

The request was denied due to request throttling.

message

The message that the request was denied due to request throttling.

quotaCode

The request exceeds a request rate quota.

retryAfterSeconds

The request exceeds a request rate quota. Retry after seconds.

serviceCode

The request exceeds a service quota.

HTTP Status Code: 429

ValidationException

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

fieldList

A list of fields that didn't validate.

reason

The reason for the validation exception.

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 V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)

- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python \(Boto3\)](#)
- [AWS SDK for Ruby V3](#)

GetStream

Retrieves information about a stream.

Request Syntax

```
GET /stream/clusterIdentifier/streamIdentifier HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

clusterIdentifier

The ID of the cluster containing the stream to retrieve.

Pattern: [a-z0-9]{26}

Required: Yes

streamIdentifier

The ID of the stream to retrieve.

Pattern: [a-z0-9]{26}

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
  "arn": "string",
  "clusterIdentifier": "string",
  "creationTime": number,
  "format": "string",
```

```
"ordering": "string",
"status": "string",
"statusReason": {
  "error": "string",
  "updatedAt": number
},
"streamIdentifier": "string",
"tags": {
  "string" : "string"
},
"targetDefinition": { ... }
}
```

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.

arn

The ARN of the retrieved stream.

Type: String

Pattern: `arn:aws(-[^\:]+)?:dsq1:[a-z0-9-]{1,20}:[0-9]{12}:cluster/[a-z0-9]{26}/stream/[a-z0-9]{26}`

clusterIdentifier

The ID of the cluster for the retrieved stream.

Type: String

Pattern: `[a-z0-9]{26}`

creationTime

The time when the stream was created.

Type: Timestamp

format

The format of the stream records.

Type: String

Valid Values: JSON

ordering

The ordering mode of the stream.

Type: String

Valid Values: UNORDERED

status

The current status of the retrieved stream.

Type: String

Valid Values: CREATING | ACTIVE | DELETING | DELETED | FAILED | IMPAIRED

statusReason

Stream status reason with error code and timestamp (if applicable).

Type: [StatusReason](#) object

streamIdentifier

The ID of the retrieved stream.

Type: String

Pattern: [a-z0-9]{26}

tags

A map of tags associated with the stream.

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.

Key Pattern: [a-zA-Z0-9_ . : / = + \ - @] *

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

Value Pattern: [a-zA-Z0-9_./=\-@]*

targetDefinition

The target definition for the stream destination.

Type: [TargetDefinition](#) object

Note: This object is a Union. Only one member of this object can be specified or returned.

Errors

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

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 403

InternalServerError

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

retryAfterSeconds

Retry after seconds.

HTTP Status Code: 500

ResourceNotFoundException

The resource could not be found.

resourceId

The resource ID could not be found.

resourceType

The resource type could not be found.

HTTP Status Code: 404

ThrottlingException

The request was denied due to request throttling.

message

The message that the request was denied due to request throttling.

quotaCode

The request exceeds a request rate quota.

retryAfterSeconds

The request exceeds a request rate quota. Retry after seconds.

serviceCode

The request exceeds a service quota.

HTTP Status Code: 429

ValidationException

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

fieldList

A list of fields that didn't validate.

reason

The reason for the validation exception.

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 V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)

- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python \(Boto3\)](#)
- [AWS SDK for Ruby V3](#)

GetVpcEndpointServiceName

Retrieves the VPC endpoint service name.

Request Syntax

```
GET /clusters/identifier/vpc-endpoint-service-name HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

identifier

The ID of the cluster to retrieve.

Pattern: `[a-z0-9]{26}`

Required: Yes

Request Body

The request does not have a request body.

Response Syntax

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

{
  "clusterVpcEndpoint": "string",
  "serviceName": "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.

clusterVpcEndpoint

The VPC connection endpoint for the cluster.

Type: String

Pattern: [a-zA-Z0-9.-]+

serviceName

The VPC endpoint service name.

Type: String

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

Pattern: com\.amazonaws\.[a-z0-9-]+\\.dsql[a-z0-9-]*

Errors

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

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 403

InternalServerError

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

retryAfterSeconds

Retry after seconds.

HTTP Status Code: 500

ResourceNotFoundException

The resource could not be found.

resourceId

The resource ID could not be found.

resourceType

The resource type could not be found.

HTTP Status Code: 404

ThrottlingException

The request was denied due to request throttling.

message

The message that the request was denied due to request throttling.

quotaCode

The request exceeds a request rate quota.

retryAfterSeconds

The request exceeds a request rate quota. Retry after seconds.

serviceCode

The request exceeds a service quota.

HTTP Status Code: 429

ValidationException

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

fieldList

A list of fields that didn't validate.

reason

The reason for the validation exception.

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 V2](#)

- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python \(Boto3\)](#)
- [AWS SDK for Ruby V3](#)

ListClusters

Retrieves information about a list of clusters.

Request Syntax

```
GET /cluster?max-results=maxResults&next-token=nextToken HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

[maxResults](#)

An optional parameter that specifies the maximum number of results to return. You can use `nextToken` to display the next page of results.

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

[nextToken](#)

If your initial `ListClusters` operation returns a `nextToken`, you can include the returned `nextToken` in following `ListClusters` operations, which returns results in the next page.

Request Body

The request does not have a request body.

Response Syntax

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

{
  "clusters": [
    {
      "arn": "string",
      "identifier": "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.

clusters

An array of the returned clusters.

Type: Array of [ClusterSummary](#) objects

nextToken

If nextToken is returned, there are more results available. The value of nextToken is a unique pagination token for each page. To retrieve the next page, make the call again using the returned token.

Type: String

Errors

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

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 403

InternalServerError

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

retryAfterSeconds

Retry after seconds.

HTTP Status Code: 500

ResourceNotFoundException

The resource could not be found.

resourceId

The resource ID could not be found.

resourceType

The resource type could not be found.

HTTP Status Code: 404

ThrottlingException

The request was denied due to request throttling.

message

The message that the request was denied due to request throttling.

quotaCode

The request exceeds a request rate quota.

retryAfterSeconds

The request exceeds a request rate quota. Retry after seconds.

serviceCode

The request exceeds a service quota.

HTTP Status Code: 429

ValidationException

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

fieldList

A list of fields that didn't validate.

reason

The reason for the validation exception.

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 V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python \(Boto3\)](#)
- [AWS SDK for Ruby V3](#)

ListStreams

Retrieves information about a list of streams for a cluster.

Request Syntax

```
GET /stream/clusterIdentifier?max-results=maxResults&next-token=nextToken HTTP/1.1
```

URI Request Parameters

The request uses the following URI parameters.

clusterIdentifier

The ID of the cluster for which to list streams.

Pattern: [a-z0-9]{26}

Required: Yes

maxResults

An optional parameter that specifies the maximum number of results to return. You can use `nextToken` to display the next page of results. Default: 10.

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

nextToken

If your initial `ListStreams` operation returns a `nextToken`, you can include the returned `nextToken` in following `ListStreams` operations, which returns results in the next page.

Request Body

The request does not have a request body.

Response Syntax

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

```
{
  "nextToken": "string",
  "streams": [
    {
      "arn": "string",
      "clusterIdentifier": "string",
      "creationTime": number,
      "status": "string",
      "streamIdentifier": "string"
    }
  ]
}
```

Response Elements

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

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

nextToken

If nextToken is returned, there are more results available. The value of nextToken is a unique pagination token for each page. To retrieve the next page, make the call again using the returned token.

Type: String

streams

An array of the returned streams.

Type: Array of [StreamSummary](#) objects

Errors

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

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 403

InternalServerError

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

retryAfterSeconds

Retry after seconds.

HTTP Status Code: 500

ResourceNotFoundException

The resource could not be found.

resourceId

The resource ID could not be found.

resourceType

The resource type could not be found.

HTTP Status Code: 404

ThrottlingException

The request was denied due to request throttling.

message

The message that the request was denied due to request throttling.

quotaCode

The request exceeds a request rate quota.

retryAfterSeconds

The request exceeds a request rate quota. Retry after seconds.

serviceCode

The request exceeds a service quota.

HTTP Status Code: 429

ValidationException

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

fieldList

A list of fields that didn't validate.

reason

The reason for the validation exception.

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 V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python \(Boto3\)](#)
- [AWS SDK for Ruby V3](#)

ListTagsForResource

Lists all of the tags for a resource.

Request Syntax

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

URI Request Parameters

The request uses the following URI parameters.

resourceArn

The ARN of the resource for which you want to list the tags.

Length Constraints: Minimum length of 1. Maximum length of 1011.

Pattern: arn: . +

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

A map of key and value pairs that you used to tag your 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.

Key Pattern: [a-zA-Z0-9_ . : / = + \ - @] *

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

Value Pattern: [a-zA-Z0-9_ . : / = + \ - @] *

Errors

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

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 403

InternalServerErrorException

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

retryAfterSeconds

Retry after seconds.

HTTP Status Code: 500

ResourceNotFoundException

The resource could not be found.

resourceId

The resource ID could not be found.

resourceType

The resource type could not be found.

HTTP Status Code: 404

ThrottlingException

The request was denied due to request throttling.

message

The message that the request was denied due to request throttling.

quotaCode

The request exceeds a request rate quota.

retryAfterSeconds

The request exceeds a request rate quota. Retry after seconds.

serviceCode

The request exceeds a service quota.

HTTP Status Code: 429

ValidationException

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

fieldList

A list of fields that didn't validate.

reason

The reason for the validation exception.

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 V2](#)

- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python \(Boto3\)](#)
- [AWS SDK for Ruby V3](#)

PutClusterPolicy

Attaches a resource-based policy to a cluster. This policy defines access permissions and conditions for the cluster, allowing you to control which principals can perform actions on the cluster.

Request Syntax

```
POST /cluster/identifier/policy HTTP/1.1
Content-type: application/json

{
  "bypassPolicyLockoutSafetyCheck": boolean,
  "clientToken": "string",
  "expectedPolicyVersion": "string",
  "policy": "string"
}
```

URI Request Parameters

The request uses the following URI parameters.

identifier

The ID of the cluster.

Pattern: `[a-z0-9]{26}`

Required: Yes

Request Body

The request accepts the following data in JSON format.

bypassPolicyLockoutSafetyCheck

A flag that allows you to bypass the policy lockout safety check. When set to true, this parameter allows you to apply a policy that might lock you out of the cluster. Use with caution.

Type: Boolean

Required: No

clientToken

Idempotency token so a request is only processed once.

Type: String

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

Pattern: [!-~]+

Required: No

expectedPolicyVersion

The expected version of the current policy. This parameter ensures that you're updating the correct version of the policy and helps prevent concurrent modification conflicts.

Type: String

Required: No

policy

The resource-based policy document to attach to the cluster. This should be a valid JSON policy document that defines permissions and conditions.

Type: String

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

Required: Yes

Response Syntax

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

{
  "policyVersion": "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.

policyVersion

The version of the policy after it has been updated or created.

Type: String

Errors

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

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 403

ConflictException

The submitted action has conflicts.

resourceId

Resource Id

resourceType

Resource Type

HTTP Status Code: 409

InternalServerError

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

retryAfterSeconds

Retry after seconds.

HTTP Status Code: 500

ResourceNotFoundException

The resource could not be found.

resourceId

The resource ID could not be found.

resourceType

The resource type could not be found.

HTTP Status Code: 404

ThrottlingException

The request was denied due to request throttling.

message

The message that the request was denied due to request throttling.

quotaCode

The request exceeds a request rate quota.

retryAfterSeconds

The request exceeds a request rate quota. Retry after seconds.

serviceCode

The request exceeds a service quota.

HTTP Status Code: 429

ValidationException

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

fieldList

A list of fields that didn't validate.

reason

The reason for the validation exception.

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 V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python \(Boto3\)](#)
- [AWS SDK for Ruby V3](#)

TagResource

Tags a resource with a map of key and value pairs.

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 ARN of the resource that you want to tag.

Length Constraints: Minimum length of 1. Maximum length of 1011.

Pattern: `arn: . +`

Required: Yes

Request Body

The request accepts the following data in JSON format.

tags

A map of key and value pairs to use to tag your 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.

Key Pattern: [a-zA-Z0-9_./=\-@]*

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

Value Pattern: [a-zA-Z0-9_./=\-@]*

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 Error Types](#).

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 403

InternalServerError

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

retryAfterSeconds

Retry after seconds.

HTTP Status Code: 500

ResourceNotFoundException

The resource could not be found.

resourceId

The resource ID could not be found.

resourceType

The resource type could not be found.

HTTP Status Code: 404

ServiceQuotaExceededException

The service limit was exceeded.

message

The service exception for exceeding a quota.

quotaCode

The service exceeds a quota.

resourceId

The resource ID exceeds a quota.

resourceType

The resource type exceeds a quota.

serviceCode

The request exceeds a service quota.

HTTP Status Code: 402

ThrottlingException

The request was denied due to request throttling.

message

The message that the request was denied due to request throttling.

quotaCode

The request exceeds a request rate quota.

retryAfterSeconds

The request exceeds a request rate quota. Retry after seconds.

serviceCode

The request exceeds a service quota.

HTTP Status Code: 429

ValidationException

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

fieldList

A list of fields that didn't validate.

reason

The reason for the validation exception.

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 V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python \(Boto3\)](#)
- [AWS SDK for Ruby V3](#)

UntagResource

Removes a tag from a resource.

Request Syntax

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

URI Request Parameters

The request uses the following URI parameters.

resourceArn

The ARN of the resource from which to remove tags.

Length Constraints: Minimum length of 1. Maximum length of 1011.

Pattern: `arn:.*+`

Required: Yes

tagKeys

The array of keys of the 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.

Pattern: `[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 Error Types](#).

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 403

InternalServerError

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

retryAfterSeconds

Retry after seconds.

HTTP Status Code: 500

ResourceNotFoundException

The resource could not be found.

resourceId

The resource ID could not be found.

resourceType

The resource type could not be found.

HTTP Status Code: 404

ThrottlingException

The request was denied due to request throttling.

message

The message that the request was denied due to request throttling.

quotaCode

The request exceeds a request rate quota.

retryAfterSeconds

The request exceeds a request rate quota. Retry after seconds.

serviceCode

The request exceeds a service quota.

HTTP Status Code: 429

ValidationException

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

fieldList

A list of fields that didn't validate.

reason

The reason for the validation exception.

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 V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
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- [AWS SDK for Python \(Boto3\)](#)
- [AWS SDK for Ruby V3](#)

UpdateCluster

The *UpdateCluster* API allows you to modify both single-Region and multi-Region cluster configurations. With the *multiRegionProperties* parameter, you can add or modify witness Region support and manage peer relationships with clusters in other Regions.

Note

Note that updating multi-Region clusters requires additional IAM permissions beyond those needed for standard cluster updates, as detailed in the Permissions section.

Required permissions

dsql:UpdateCluster

Permission to update a DSQL cluster.

Resources: `arn:aws:dsql:region:account-id:cluster/cluster-id`

dsql:PutMultiRegionProperties

Permission to configure multi-Region properties for a cluster.

Resources: `arn:aws:dsql:region:account-id:cluster/cluster-id`

dsql:GetCluster

Permission to retrieve cluster information.

Resources: `arn:aws:dsql:region:account-id:cluster/cluster-id`

dsql:AddPeerCluster

Permission to add peer clusters.

Resources:

- Local cluster: `arn:aws:dsql:region:account-id:cluster/cluster-id`
- Each peer cluster: exact ARN of each specified peer cluster

dsql:RemovePeerCluster

Permission to remove peer clusters. When you list peer clusters in `multiRegionProperties.clusters`, you need this permission for each current peer cluster that your list omits.

Resources:

- Each removed peer cluster: exact ARN of each removed peer cluster, in its own Region

dsql:PutWitnessRegion

Permission to set a witness Region.

Resources: `arn:aws:dsql:region:account-id:cluster/cluster-id`

Condition Keys: `dsql:WitnessRegion` (matching the specified witness Region)

This permission is checked both in the cluster Region and in the witness Region.

Important

- The witness Region specified in `multiRegionProperties.witnessRegion` cannot be the same as the cluster's Region.
- When you list peer clusters in `multiRegionProperties.clusters`, you need `dsql:AddPeerCluster` for every peer cluster in your request. You need `dsql:RemovePeerCluster` only for the peer clusters that the update removes.

Request Syntax

```
POST /cluster/identifier HTTP/1.1
Content-type: application/json

{
  "clientToken": "string",
  "deletionProtectionEnabled": boolean,
  "kmsEncryptionKey": "string",
  "multiRegionProperties": {
```

```
"clusters": [ "string" ],  
"witnessRegion": "string"  
}  
}
```

URI Request Parameters

The request uses the following URI parameters.

identifier

The ID of the cluster you want to update.

Pattern: `[a-z0-9]{26}`

Required: Yes

Request Body

The request accepts the following data in JSON format.

clientToken

A unique, case-sensitive identifier that you provide to ensure the idempotency of the request. Idempotency ensures that an API request completes only once. With an idempotent request, if the original request completes successfully. The subsequent retries with the same client token return the result from the original successful request and they have no additional effect.

If you don't specify a client token, the AWS SDK automatically generates one.

Type: String

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

Pattern: `[!-~]+`

Required: No

deletionProtectionEnabled

Specifies whether to enable deletion protection in your cluster.

Type: Boolean

Required: No

[kmsEncryptionKey](#)

The AWS KMS key that encrypts and protects the data on your cluster. You can specify the ARN, ID, or alias of an existing key or have AWS create a default key for you.

To switch to the key owned by AWS, specify the reserved value `AWS_OWNED_KMS_KEY`.

Type: String

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

Pattern: `[a-zA-Z0-9:/_ - ]+`

Required: No

[multiRegionProperties](#)

The new multi-Region cluster configuration settings to be applied during an update operation.

Type: [MultiRegionProperties](#) object

Required: No

Response Syntax

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

{
  "arn": "string",
  "creationTime": number,
  "identifier": "string",
  "status": "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.

arn

The ARN of the updated cluster.

Type: String

Pattern: `arn:aws(-[^\:]+)?:dsq1:[a-z0-9-]{1,20}:[0-9]{12}:cluster/[a-z0-9]{26}`

creationTime

The time of when the cluster was created.

Type: Timestamp

identifier

The ID of the cluster to update.

Type: String

Pattern: `[a-z0-9]{26}`

status

The status of the updated cluster.

Type: String

Valid Values: CREATING | ACTIVE | IDLE | INACTIVE | UPDATING | DELETING | DELETED | FAILED | PENDING_SETUP | PENDING_DELETE

Errors

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

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 403

ConflictException

The submitted action has conflicts.

resourceId

Resource Id

resourceType

Resource Type

HTTP Status Code: 409

InternalServerErrorException

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

retryAfterSeconds

Retry after seconds.

HTTP Status Code: 500

ResourceNotFoundException

The resource could not be found.

resourceId

The resource ID could not be found.

resourceType

The resource type could not be found.

HTTP Status Code: 404

ThrottlingException

The request was denied due to request throttling.

message

The message that the request was denied due to request throttling.

quotaCode

The request exceeds a request rate quota.

retryAfterSeconds

The request exceeds a request rate quota. Retry after seconds.

serviceCode

The request exceeds a service quota.

HTTP Status Code: 429

ValidationException

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

fieldList

A list of fields that didn't validate.

reason

The reason for the validation exception.

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 V2](#)
- [AWS SDK for .NET V4](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for Kotlin](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python \(Boto3\)](#)
- [AWS SDK for Ruby V3](#)

Data Types

The Amazon Aurora DSQL 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:

- [ClusterSummary](#)
- [EncryptionDetails](#)
- [KinesisTargetDefinition](#)
- [MultiRegionProperties](#)
- [StatusReason](#)
- [StreamSummary](#)
- [TargetDefinition](#)
- [ValidationExceptionField](#)

ClusterSummary

A summary of the properties of a cluster.

Contents

arn

The ARN of the cluster.

Type: String

Pattern: `arn:aws(-[^\:]+)?:dsq1:[a-z0-9-]{1,20}:[0-9]{12}:cluster/[a-z0-9]{26}`

Required: Yes

identifier

The ID of the cluster.

Type: String

Pattern: `[a-z0-9]{26}`

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](#)

EncryptionDetails

Configuration details about encryption for the cluster including the AWS KMS key ARN, encryption type, and encryption status.

Contents

encryptionStatus

The status of encryption for the cluster.

Type: String

Valid Values: ENABLED | UPDATING | KMS_KEY_INACCESSIBLE | ENABLING

Required: Yes

encryptionType

The type of encryption that protects the data on your cluster.

Type: String

Valid Values: AWS_OWNED_KMS_KEY | CUSTOMER_MANAGED_KMS_KEY

Required: Yes

kmsKeyArn

The ARN of the AWS KMS key that encrypts data in the cluster.

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](#)

KinesisTargetDefinition

Kinesis stream target configuration.

Contents

roleArn

The ARN of the IAM role that grants permission to write to the Kinesis stream. This can be a standard role (`arn:aws:iam::account-id:role/role-name`) or a role with a path prefix (`arn:aws:iam::account-id:role/service-role/role-name`), such as roles auto-created by the console.

Type: String

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

Pattern: `arn:aws(-[^\:]+)?:iam::[0-9]{12}:role(/[a-zA-Z0-9+=,.\@_-]+)+`

Required: Yes

streamArn

The ARN of the Kinesis stream.

Type: String

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

Pattern: `arn:aws[a-zA-Z-]*:kinesis:[a-z0-9-]*:[0-9]{12}:stream/[a-zA-Z0-9+=,.\@_/\-]+`

Required: Yes

See Also

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

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)

- [AWS SDK for Ruby V3](#)

MultiRegionProperties

Defines the structure for multi-Region cluster configurations, containing the witness region and linked cluster settings.

Contents

clusters

The set of peered clusters that form the multi-Region cluster configuration. Each peered cluster represents a database instance in a different Region.

Type: Array of strings

Pattern: `arn:aws(-[^\:]+)?:dsq1:[a-z0-9-]{1,20}:[0-9]{12}:cluster/[a-z0-9]{26}`

Required: No

witnessRegion

The Region that serves as the witness region for a multi-Region cluster. The witness Region helps maintain cluster consistency and quorum.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 50.

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](#)

StatusReason

Stream status reason with error and timestamp.

Contents

error

The error code for the stream failure.

Type: String

Valid Values: KINESIS_THROUGHPUT_EXCEEDED | KINESIS_STREAM_NOT_FOUND |
ROLE_ACCESS_DENIED | KINESIS_ACCESS_DENIED | KINESIS_KMS_ACCESS_DENIED |
KINESIS_OVERSIZE_RECORD | CLUSTER_CMK_INACCESSIBLE | INTERNAL_ERROR

Required: Yes

updatedAt

The timestamp when the status was updated.

Type: Timestamp

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](#)

StreamSummary

Summary information about a stream.

Contents

arn

The ARN of the stream.

Type: String

Pattern: `arn:aws(-[^:]+)?:dsq1:[a-z0-9-]{1,20}:[0-9]{12}:cluster/[a-z0-9]{26}/stream/[a-z0-9]{26}`

Required: Yes

clusterIdentifier

The ID of the cluster.

Type: String

Pattern: `[a-z0-9]{26}`

Required: Yes

creationTime

The timestamp when the stream was created.

Type: Timestamp

Required: Yes

status

The current status of the stream.

Type: String

Valid Values: CREATING | ACTIVE | DELETING | DELETED | FAILED | IMPAIRED

Required: Yes

streamIdentifier

The ID of the stream.

Type: String

Pattern: [a-z0-9]{26}

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](#)

TargetDefinition

Target definition for stream destination.

Contents

Important

This data type is a UNION, so only one of the following members can be specified when used or returned.

kinesis

Kinesis stream target configuration.

Type: [KinesisTargetDefinition](#) 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](#)

ValidationExceptionField

Stores information about a field passed inside a request that resulted in an validation error.

Contents

message

A message describing why this field failed validation.

Type: String

Required: Yes

name

The name of the field.

Type: String

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](#)

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*.

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 Error Types

This section lists common error types that this AWS service may return. Not all services return all error types listed here. For errors specific to an API action for this service, see the topic for that API action.

AccessDeniedException

You don't have permission to perform this action. Verify that your IAM policy includes the required permissions.

HTTP Status Code: 403

ExpiredTokenException

The security token included in the request has expired. Request a new security token and try again.

HTTP Status Code: 403

IncompleteSignature

The request signature doesn't conform to AWS standards. Verify that you're using valid AWS credentials and that your request is properly formatted. If you're using an SDK, ensure it's up to date.

HTTP Status Code: 403

InternalFailure

The request can't be processed right now because of an internal server issue. Try again later. If the problem persists, contact AWS Support.

HTTP Status Code: 500

MalformedHttpRequestException

The request body can't be processed. This typically happens when the request body can't be decompressed using the specified content encoding algorithm. Verify that the content encoding header matches the compression format used.

HTTP Status Code: 400

NotAuthorized

You don't have permissions to perform this action. Verify that your IAM policy includes the required permissions.

HTTP Status Code: 401

OptInRequired

Your AWS account needs a subscription for this service. Verify that you've enabled the service in your account.

HTTP Status Code: 403

RequestAbortedException

The request was aborted before a response could be returned. This typically happens when the client closes the connection.

HTTP Status Code: 400

RequestEntityTooLargeException

The request entity is too large. Reduce the size of the request body and try again.

HTTP Status Code: 413

RequestTimeoutException

The request timed out. The server didn't receive the complete request within the expected time frame. Try again.

HTTP Status Code: 408

ServiceUnavailable

The service is temporarily unavailable. Try again later.

HTTP Status Code: 503

ThrottlingException

Your request rate is too high. The AWS SDKs automatically retry requests that receive this exception. Reduce the frequency of requests.

HTTP Status Code: 400

UnknownOperationException

The action or operation isn't recognized. Verify that the action name is spelled correctly and that it's supported by the API version you're using.

HTTP Status Code: 404

UnrecognizedClientException

The X.509 certificate or AWS access key ID you provided doesn't exist in our records. Verify that you're using valid credentials and that they haven't expired.

HTTP Status Code: 403

ValidationError

The input doesn't meet the required format or constraints. Check that all required parameters are included and that values are valid.

HTTP Status Code: 400