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Welcome

AWS Database Migration Service (AWS DMS) can migrate your data to and from the most widely used commercial and open-source databases such as Oracle, PostgreSQL, Microsoft SQL Server, Amazon Redshift, MariaDB, Amazon Aurora, MySQL, and SAP Adaptive Server Enterprise (ASE). The service supports homogeneous migrations such as Oracle to Oracle, as well as heterogeneous migrations between different database platforms, such as Oracle to MySQL or SQL Server to PostgreSQL.

For more information about AWS DMS, see the AWS DMS user guide at What Is AWS Database Migration Service?

This document was last published on August 17, 2018.
Actions

The following actions are supported:

- AddTagsToResource (p. 4)
- CreateEndpoint (p. 6)
- CreateEventSubscription (p. 14)
- CreateReplicationInstance (p. 18)
- CreateReplicationSubnetGroup (p. 25)
- CreateReplicationTask (p. 29)
- DeleteCertificate (p. 35)
- DeleteEndpoint (p. 37)
- DeleteEventSubscription (p. 41)
- DeleteReplicationInstance (p. 43)
- DeleteReplicationSubnetGroup (p. 47)
- DeleteReplicationTask (p. 49)
- DescribeAccountAttributes (p. 51)
- DescribeCertificates (p. 54)
- DescribeConnections (p. 57)
- DescribeEndpoints (p. 61)
- DescribeEndpointTypes (p. 65)
- DescribeEventCategories (p. 69)
- DescribeEvents (p. 71)
- DescribeEventSubscriptions (p. 74)
- DescribeOrderableReplicationInstances (p. 77)
- DescribeRefreshSchemasStatus (p. 83)
- DescribeReplicationInstances (p. 86)
- DescribeReplicationInstanceTaskLogs (p. 91)
- DescribeReplicationSubnetGroups (p. 95)
- DescribeReplicationTaskAssessmentResults (p. 99)
- DescribeReplicationTasks (p. 102)
- DescribeSchemas (p. 106)
- DescribeTableStatistics (p. 109)
- ImportCertificate (p. 113)
- ListTagsForResource (p. 116)
- ModifyEndpoint (p. 119)
- ModifyEventSubscription (p. 126)
- ModifyReplicationInstance (p. 129)
- ModifyReplicationSubnetGroup (p. 135)
- ModifyReplicationTask (p. 139)
- RebootReplicationInstance (p. 143)
- RefreshSchemas (p. 146)
- ReloadTables (p. 148)
- RemoveTagsFromResource (p. 150)
• StartReplicationTask (p. 152)
• StartReplicationTaskAssessment (p. 157)
• StopReplicationTask (p. 159)
• TestConnection (p. 163)
AddTagsToResource

Adds metadata tags to an AWS DMS resource, including replication instance, endpoint, security group, and migration task. These tags can also be used with cost allocation reporting to track cost associated with DMS resources, or used in a Condition statement in an IAM policy for DMS.

Request Syntax

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

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 215).

The request accepts the following data in JSON format.

**ResourceArn (p. 4)**

The Amazon Resource Name (ARN) of the AWS DMS resource the tag is to be added to. AWS DMS resources include a replication instance, endpoint, and a replication task.

Type: String

Required: Yes

**Tags (p. 4)**

The tag to be assigned to the DMS resource.

Type: Array of Tag (p. 213) objects

Required: Yes

Response Elements

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

Errors

For information about the errors that are common to all actions, see Common Errors (p. 217).

**ResourceNotFoundException**

The resource could not be found.

HTTP Status Code: 400
Example

Sample Request

```plaintext
POST / HTTP/1.1
Host: dms.<region>.<domain>
X-amz-Date: <Date>
Authorization: AWS4-HMAC-SHA256 Credential=<Credential>,
SignedHeaders=contenttype;date;host;user-agent;x-amz-date;x-amz-target;x-amzn-requestid,Signature=<Signature>
User-Agent: <UserAgentString>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Connection: Keep-Alive
X-Amz-Target: AmazonDMSv20160101.AddTagsToResource
{
  "Tags":[
    {
      "Key":"CostCenter",
      "Value":"1234"
    }
  ]
}
```

Sample Response

```
Empty
```

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

Creates an endpoint using the provided settings.

Request Syntax

```json
{
  "CertificateArn": "string",
  "DatabaseName": "string",
  "DmsTransferSettings": {
    "BucketName": "string",
    "ServiceAccessRoleArn": "string"
  },
  "DynamoDbSettings": {
    "ServiceAccessRoleArn": "string"
  },
  "EndpointIdentifier": "string",
  "EndpointType": "string",
  "EngineName": "string",
  "ExternalTableDefinition": "string",
  "ExtraConnectionAttributes": "string",
  "KmsKeyId": "string",
  "MongoDbSettings": {
    "AuthMechanism": "string",
    "AuthSource": "string",
    "AuthType": "string",
    "DatabaseName": "string",
    "DocsToInvestigate": "string",
    "ExtractDocId": "string",
    "KmsKeyId": "string",
    "NestingLevel": "string",
    "Password": "string",
    "Port": number,
    "ServerName": "string",
    "Username": "string"
  },
  "Password": "string",
  "Port": number,
  "S3Settings": {
    "BucketFolder": "string",
    "BucketName": "string",
    "CompressionType": "string",
    "CsvDelimiter": "string",
    "CsvRowDelimiter": "string",
    "ExternalTableDefinition": "string",
    "ServiceAccessRoleArn": "string"
  },
  "ServerName": "string",
  "ServiceAccessRoleArn": "string",
  "SslMode": "string",
  "Tags": [{
    "Key": "string",
    "Value": "string"
  }],
  "Username": "string"
}
```
Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 215).

The request accepts the following data in JSON format.

CertificateArn (p. 6)

The Amazon Resource Name (ARN) for the certificate.

Type: String
Required: No

DatabaseName (p. 6)

The name of the endpoint database.

Type: String
Required: No

DmsTransferSettings (p. 6)

The settings in JSON format for the DMS Transfer type source endpoint.

Attributes include:
- serviceAccessRoleArn - The IAM role that has permission to access the Amazon S3 bucket.
- bucketName - The name of the S3 bucket to use.
- compressionType - An optional parameter to use GZIP to compress the target files. Set to NONE (the default) or do not use to leave the files uncompressed.

Shorthand syntax: ServiceAccessRoleArn=string,BucketName=string,CompressionType=string

JSON syntax:
{
  "ServiceAccessRoleArn": "string", "BucketName": "string", "CompressionType": "none" | "gzip" 
}

Type: DmsTransferSettings (p. 173) object
Required: No

DynamoDbSettings (p. 6)

Settings in JSON format for the target Amazon DynamoDB endpoint. For more information about the available settings, see the Using Object Mapping to Migrate Data to DynamoDB section at Using an Amazon DynamoDB Database as a Target for AWS Database Migration Service.

Type: DynamoDbSettings (p. 174) object
Required: No

EndpointIdentifier (p. 6)

The database endpoint identifier. Identifiers must begin with a letter; must contain only ASCII letters, digits, and hyphens; and must not end with a hyphen or contain two consecutive hyphens.

Type: String
Required: Yes
EndpointType (p. 6)
The type of endpoint.
Type: String
Valid Values: source | target
Required: Yes

EngineName (p. 6)
The type of engine for the endpoint. Valid values, depending on the EndPointType, include mysql, oracle, postgres, mariadb, aurora, aurora-postgresql, redshift, s3, db2, azuredb, sybase, dynamodb, mongodb, and sqlserver.
Type: String
Required: Yes

ExternalTableDefinition (p. 6)
The external table definition.
Type: String
Required: No

ExtraConnectionAttributes (p. 6)
Additional attributes associated with the connection.
Type: String
Required: No

KmsKeyId (p. 6)
The KMS key identifier that will be used to encrypt the connection parameters. If you do not specify a value for the KmsKeyId parameter, then AWS DMS will use your default encryption key. AWS KMS creates the default encryption key for your AWS account. Your AWS account has a different default encryption key for each AWS region.
Type: String
Required: No

MongoDbSettings (p. 6)
Settings in JSON format for the source MongoDB endpoint. For more information about the available settings, see the Configuration Properties When Using MongoDB as a Source for AWS Database Migration Service section at Using MongoDB as a Target for AWS Database Migration Service.
Type: MongoDbSettings (p. 185) object
Required: No

Password (p. 6)
The password to be used to login to the endpoint database.
Type: String
Required: No

**Port (p. 6)**

The port used by the endpoint database.

Type: Integer

Required: No

**S3Settings (p. 6)**

Settings in JSON format for the target Amazon S3 endpoint. For more information about the available settings, see the *Extra Connection Attributes* section at [Using Amazon S3 as a Target for AWS Database Migration Service](#).

Type: `S3Settings (p. 205)` object

Required: No

**ServerName (p. 6)**

The name of the server where the endpoint database resides.

Type: String

Required: No

**ServiceAccessRoleArn (p. 6)**

The Amazon Resource Name (ARN) for the service access role you want to use to create the endpoint.

Type: String

Required: No

**SslMode (p. 6)**

The SSL mode to use for the SSL connection.

SSL mode can be one of four values: none, require, verify-ca, verify-full.

The default value is none.

Type: String

Valid Values: none | require | verify-ca | verify-full

Required: No

**Tags (p. 6)**

Tags to be added to the endpoint.

Type: Array of `Tag (p. 213)` objects

Required: No

**Username (p. 6)**

The user name to be used to login to the endpoint database.

Type: String
Required: No

Response Syntax

```json
{
   "Endpoint": {
      "CertificateArn": "string",
      "DatabaseName": "string",
      "DmsTransferSettings": {
         "BucketName": "string",
         "ServiceAccessRoleArn": "string"
      },
      "DynamoDbSettings": {
         "ServiceAccessRoleArn": "string"
      },
      "EndpointArn": "string",
      "EndpointIdentifier": "string",
      "EndpointType": "string",
      "EngineDisplayName": "string",
      "EngineName": "string",
      "ExternalId": "string",
      "ExternalTableDefinition": "string",
      "ExtraConnectionAttributes": "string",
      "KmsKeyId": "string",
      "MongoDbSettings": {
         "AuthMechanism": "string",
         "AuthSource": "string",
         "AuthType": "string",
         "DatabaseName": "string",
         "DocsToInvestigate": "string",
         "ExtractDocId": "string",
         "KmsKeyId": "string",
         "NestingLevel": "string",
         "Password": "string",
         "Port": number,
         "ServerName": "string",
         "Username": "string"
      },
      "Port": number,
      "S3Settings": {
         "BucketFolder": "string",
         "BucketName": "string",
         "CompressionType": "string",
         "CsvDelimiter": "string",
         "CsvRowDelimiter": "string",
         "ExternalTableDefinition": "string",
         "ServiceAccessRoleArn": "string"
      },
      "ServerName": "string",
      "ServiceAccessRoleArn": "string",
      "SslMode": "string",
      "Status": "string",
      "Username": "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.
Errors

For information about the errors that are common to all actions, see Common Errors (p. 217).

AccessDeniedFault

AWS DMS was denied access to the endpoint.

HTTP Status Code: 400

InvalidResourceStateFault

The resource is in a state that prevents it from being used for database migration.

HTTP Status Code: 400

KMSKeyNotAccessibleFault

AWS DMS cannot access the KMS key.

HTTP Status Code: 400

ResourceAlreadyExistsFault

The resource you are attempting to create already exists.

HTTP Status Code: 400

ResourceNotFoundFault

The resource could not be found.

HTTP Status Code: 400

ResourceQuotaExceededFault

The quota for this resource quota has been exceeded.

HTTP Status Code: 400

Example

Sample Request

```
POST / HTTP/1.1
Host: dms.<region>.<domain>
x-amz-Date: <Date>
Authorization: AWS4-HMAC-SHA256 Credential=<Credential>,
SignedHeaders=contenttype;date;host;user-agent;x-amz-date;x-amz-target;x-amzn-requestid,Signature=<Signature>
User-Agent: <UserAgentString>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Connection: Keep-Alive
```
X-Amz-Target: AmazonDMSv20160101.CreateEndpoint
{
    "EndpointIdentifier":"test-endpoint-1",
    "EndpointType":"source",
    "EngineName":"mysql",
    "Username":"username",
    "Password":"password",
    "ServerName":"test-source.cxln7iyxx1lo.us-west-2.rds.amazonaws.com",
    "Port":3306,
    "DatabaseName":"
    "ExtraConnectionAttributes":"
    "KmsKeyId":"
    "Tags":{
        "Key":",
        "Value":"
    }
}
}

Sample Response

HTTP/1.1 200 OK
x-amzn-RequestId: <RequestId>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Date: <Date>
{
    "Endpoint":{
        "Username":"username",
        "Status":"active",
        "ServerName":"test-source.cxln7iyxx1lo.us-west-2.rds.amazonaws.com",
        "EndpointType":"SOURCE",
        "KmsKeyId":"arn:aws:kms:us-east-1:123456789012:key/4dc17316-5543-4ded-b1e3-d53a7cfeb411d",
        "EngineName":"mysql",
        "EndpointIdentifier":"test-endpoint-1",
        "Port":3306
    }
}

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

Creates an AWS DMS event notification subscription.

You can specify the type of source (SourceType) you want to be notified of, provide a list of AWS DMS source IDs (SourceIds) that triggers the events, and provide a list of event categories (EventCategories) for events you want to be notified of. If you specify both the SourceType and SourceIds, such as SourceType = replication-instance and SourceIdentifier = my-replinstance, you will be notified of all the replication instance events for the specified source. If you specify a SourceType but don't specify a SourceIdentifier, you receive notice of the events for that source type for all your AWS DMS sources. If you don't specify either SourceType nor SourceIdentifier, you will be notified of events generated from all AWS DMS sources belonging to your customer account.

For more information about AWS DMS events, see Working with Events and Notifications in the AWS Database Migration Service User Guide.

Request Syntax

```json
{
   "Enabled": boolean,
   "EventCategories": [ "string" ],
   "SnsTopicArn": "string",
   "SourceIds": [ "string" ],
   "SourceType": "string",
   "SubscriptionName": "string",
   "Tags": [
      {
         "Key": "string",
         "Value": "string"
      }
   ]
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 215).

The request accepts the following data in JSON format.

**Enabled (p. 14)**

A Boolean value; set to **true** to activate the subscription, or set to **false** to create the subscription but not activate it.

Type: Boolean

Required: No

**EventCategories (p. 14)**

A list of event categories for a source type that you want to subscribe to. You can see a list of the categories for a given source type by calling the DescribeEventCategories action or in the topic Working with Events and Notifications in the AWS Database Migration Service User Guide.

Type: Array of strings

Required: No
**SnsTopicArn (p. 14)**

The Amazon Resource Name (ARN) of the Amazon SNS topic created for event notification. The ARN is created by Amazon SNS when you create a topic and subscribe to it.

Type: String

Required: Yes

**SourceIds (p. 14)**

The list of identifiers of the event sources for which events will be returned. If not specified, then all sources are included in the response. An identifier must begin with a letter and must contain only ASCII letters, digits, and hyphens; it cannot end with a hyphen or contain two consecutive hyphens.

Type: Array of strings

Required: No

**SourceType (p. 14)**

The type of AWS DMS resource that generates the events. For example, if you want to be notified of events generated by a replication instance, you set this parameter to `replication-instance`. If this value is not specified, all events are returned.

Valid values: `replication-instance | migration-task`

Type: String

Required: No

**SubscriptionName (p. 14)**

The name of the AWS DMS event notification subscription.

Constraints: The name must be less than 255 characters.

Type: String

Required: Yes

**Tags (p. 14)**

A tag to be attached to the event subscription.

Type: Array of [Tag (p. 213)] objects

Required: No

**Response Syntax**

```json
{
    "EventSubscription": {
        "CustomerAwsId": "string",
        "CustSubscriptionId": "string",
        "Enabled": boolean,
        "EventCategoriesList": [ "string" ],
        "SnsTopicArn": "string",
        "SourceIdsList": [ "string" ],
        "SourceType": "string",
        "Status": "string",
        "SubscriptionCreationTime": "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.

**EventSubscription (p. 15)**

The event subscription that was created.

Type: EventSubscription (p. 182) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 217).

**ResourceAlreadyExistsFault**

The resource you are attempting to create already exists.

HTTP Status Code: 400

**ResourceNotFoundException**

The resource could not be found.

HTTP Status Code: 400

**ResourceQuotaExceededFault**

The quota for this resource quota has been exceeded.

HTTP Status Code: 400

**SNSInvalidTopicFault**

The SNS topic is invalid.

HTTP Status Code: 400

**SNSNoAuthorizationFault**

You are not authorized for the SNS subscription.

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
- AWS SDK for Java
- AWS SDK for JavaScript
• AWS SDK for PHP V3
• AWS SDK for Python
• AWS SDK for Ruby V2
CreateReplicationInstance

Creates the replication instance using the specified parameters.

Request Syntax

```
{
    "AllocatedStorage": number,
    "AutoMinorVersionUpgrade": boolean,
    "EngineVersion": "string",
    "KmsKeyId": "string",
    "MultiAZ": boolean,
    "PreferredMaintenanceWindow": "string",
    "PubliclyAccessible": boolean,
    "ReplicationInstanceClass": "string",
    "ReplicationInstanceIdentifier": "string",
    "ReplicationSubnetGroupIdentifier": "string",
    "Tags": [
        {
            "Key": "string",
            "Value": "string"
        }
    ],
    "VpcSecurityGroupIds": [ "string" ]
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 215).

The request accepts the following data in JSON format.

AllocatedStorage (p. 18)

The amount of storage (in gigabytes) to be initially allocated for the replication instance.

Type: Integer

Required: No

AutoMinorVersionUpgrade (p. 18)

Indicates that minor engine upgrades will be applied automatically to the replication instance during the maintenance window.

Default: true

Type: Boolean

Required: No

AvailabilityZone (p. 18)

The EC2 Availability Zone that the replication instance will be created in.

Default: A random, system-chosen Availability Zone in the endpoint's region.

Example: us-east-1d
Type: String
Required: No

**EngineVersion (p. 18)**

The engine version number of the replication instance.

Type: String
Required: No

**KmsKeyId (p. 18)**

The KMS key identifier that will be used to encrypt the content on the replication instance. If you do not specify a value for the KmsKeyId parameter, then AWS DMS will use your default encryption key. AWS KMS creates the default encryption key for your AWS account. Your AWS account has a different default encryption key for each AWS region.

Type: String
Required: No

**MultiAZ (p. 18)**

Specifies if the replication instance is a Multi-AZ deployment. You cannot set the AvailabilityZone parameter if the Multi-AZ parameter is set to true.

Type: Boolean
Required: No

**PreferredMaintenanceWindow (p. 18)**

The weekly time range during which system maintenance can occur, in Universal Coordinated Time (UTC).


Default: A 30-minute window selected at random from an 8-hour block of time per region, occurring on a random day of the week.

Valid Days: Mon, Tue, Wed, Thu, Fri, Sat, Sun
Constraints: Minimum 30-minute window.

Type: String
Required: No

**PubliclyAccessible (p. 18)**

Specifies the accessibility options for the replication instance. A value of true represents an instance with a public IP address. A value of false represents an instance with a private IP address. The default value is true.

Type: Boolean
Required: No

**ReplicationInstanceClass (p. 18)**

The compute and memory capacity of the replication instance as specified by the replication instance class.
Valid Values: dms.t2.micro | dms.t2.small | dms.t2.medium | dms.t2.large | dms.c4.large | dms.c4.xlarge | dms.c4.2xlarge | dms.c4.4xlarge

Type: String
Required: Yes

**ReplicationInstanceIdentifier (p. 18)**

The replication instance identifier. This parameter is stored as a lowercase string.

Constraints:
- Must contain from 1 to 63 alphanumeric characters or hyphens.
- First character must be a letter.
- Cannot end with a hyphen or contain two consecutive hyphens.

Example: myrepinstance

Type: String
Required: Yes

**ReplicationSubnetGroupIdentifier (p. 18)**

A subnet group to associate with the replication instance.

Type: String
Required: No

**Tags (p. 18)**

Tags to be associated with the replication instance.

Type: Array of Tag (p. 213) objects
Required: No

**VpcSecurityGroupIds (p. 18)**

Specifies the VPC security group to be used with the replication instance. The VPC security group must work with the VPC containing the replication instance.

Type: Array of strings
Required: No

**Response Syntax**

```
{
  "ReplicationInstance": {
    "AllocatedStorage": number,
    "AutoMinorVersionUpgrade": boolean,
    "AvailabilityZone": "string",
    "EngineVersion": "string",
    "FreeUntil": number,
    "InstanceCreateTime": number,
    "KmsKeyId": "string",
    "MultiAZ": boolean,
    "PendingModifiedValues": {
      "AllocatedStorage": number,
      "EngineVersion": "string",
      "MultiAZ": boolean,
    }
  }
}
```
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.

ReplicationInstance (p. 20)

The replication instance that was created.

Type: ReplicationInstance (p. 191) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 217).

AccessDeniedFault

AWS DMS was denied access to the endpoint.

HTTP Status Code: 400

InsufficientResourceCapacityFault

There are not enough resources allocated to the database migration.
HTTP Status Code: 400
**InvalidResourceStateFault**

The resource is in a state that prevents it from being used for database migration.

HTTP Status Code: 400
**InvalidSubnet**

The subnet provided is invalid.

HTTP Status Code: 400
**KMSKeyNotAccessibleFault**

AWS DMS cannot access the KMS key.

HTTP Status Code: 400
**ReplicationSubnetGroupDoesNotCoverEnoughAZs**

The replication subnet group does not cover enough Availability Zones (AZs). Edit the replication subnet group and add more AZs.

HTTP Status Code: 400
**ResourceAlreadyExistsFault**

The resource you are attempting to create already exists.

HTTP Status Code: 400
**ResourceNotFoundFault**

The resource could not be found.

HTTP Status Code: 400
**ResourceQuotaExceededFault**

The quota for this resource quota has been exceeded.

HTTP Status Code: 400
**StorageQuotaExceededFault**

The storage quota has been exceeded.

HTTP Status Code: 400

**Example**

**Sample Request**

POST / HTTP/1.1
Host: dms.<region>.<domain>
x-amz-Date: <Date>
Authorization: AWS4-HMAC-SHA256 Credential=<Credential>,
SignedHeaders=contenttype;date;host;user-agent;x-amz-date;x-amz-target;x-amzn-requestid;Signature=<Signature>
User-Agent: <UserAgentString>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Connection: Keep-Alive
X-Amz-Target: AmazonDMSv20160101.CreateReplicationInstance
{
    "ReplicationInstanceIdentifier":"test-rep-1",
    "AllocatedStorage":5,
    "ReplicationInstanceClass":"dms.t2.micro",
    "AvailabilityZone":"
    "ReplicationSubnetGroupIdentifier":"default",
    "PreferredMaintenanceWindow":"
    "EngineVersion":"1.5.0",
    "AutoMinorVersionUpgrade":true,
    "Tags":[
        {
            "Key":"
            "Value":"
        }
    ],
    "KmsKeyId":"
    "PubliclyAccessible":true
}

Sample Response

HTTP/1.1 200 OK
x-amzn-RequestId: <RequestId>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Date: <Date>
{
    "ReplicationInstance":{
        "PubliclyAccessible":true,
        "ReplicationInstanceClass":"dms.t2.micro",
        "ReplicationSubnetGroup":{
            "ReplicationSubnetGroupDescription":"default",
            "Subnets":[
                {
                    "SubnetStatus":"Active",
                    "SubnetIdentifier":"subnet-f6dd91af",
                    "SubnetAvailabilityZone":{
                        "Name":"us-east-1d"
                    }
                },
                {
                    "SubnetStatus":"Active",
                    "SubnetIdentifier":"subnet-3605751d",
                    "SubnetAvailabilityZone":{
                        "Name":"us-east-1b"
                    }
                },
                {
                    "SubnetStatus":"Active",
                    "SubnetIdentifier":"subnet-c2daefb5",
                    "SubnetAvailabilityZone":{
                        "Name":"us-east-1c"
                    }
                },
                {
                    "SubnetStatus":"Active",
                    "SubnetIdentifier":"subnet-f6dd91af",
                    "SubnetAvailabilityZone":{
                        "Name":"us-east-1d"
                    }
                }
            ]
        }
    }
}
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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
CreateReplicationSubnetGroup

Creates a replication subnet group given a list of the subnet IDs in a VPC.

Request Syntax

```json
{
  "ReplicationSubnetGroupDescription": "string",
  "ReplicationSubnetGroupIdentifier": "string",
  "SubnetIds": [ "string" ],
  "Tags": [
    {
      "Key": "string",
      "Value": "string"
    }
  ]
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 215).

The request accepts the following data in JSON format.

**ReplicationSubnetGroupDescription (p. 25)**

The description for the subnet group.

Type: String

Required: Yes

**ReplicationSubnetGroupIdentifier (p. 25)**

The name for the replication subnet group. This value is stored as a lowercase string.

Constraints: Must contain no more than 255 alphanumeric characters, periods, spaces, underscores, or hyphens. Must not be “default”.

Example: mySubnetgroup

Type: String

Required: Yes

**SubnetIds (p. 25)**

The EC2 subnet IDs for the subnet group.

Type: Array of strings

Required: Yes

**Tags (p. 25)**

The tag to be assigned to the subnet group.

Type: Array of Tag (p. 213) objects

Required: No
Response Syntax

```json
{
    "ReplicationSubnetGroup": {
        "ReplicationSubnetGroupDescription": "string",
        "ReplicationSubnetGroupIdentifier": "string",
        "SubnetGroupStatus": "string",
        "Subnets": [
            {
                "SubnetAvailabilityZone": {
                    "Name": "string"
                },
                "SubnetIdentifier": "string",
                "SubnetStatus": "string"
            }
        ],
        "VpcId": "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.

**ReplicationSubnetGroup (p. 26)**

The replication subnet group that was created.

Type: `ReplicationSubnetGroup (p. 197)` object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 217).

**AccessDeniedFault**

AWS DMS was denied access to the endpoint.

HTTP Status Code: 400

**InvalidSubnet**

The subnet provided is invalid.

HTTP Status Code: 400

**ReplicationSubnetGroupDoesNotCoverEnoughAZs**

The replication subnet group does not cover enough Availability Zones (AZs). Edit the replication subnet group and add more AZs.

HTTP Status Code: 400

**ResourceAlreadyExistsFault**

The resource you are attempting to create already exists.

HTTP Status Code: 400
ResourceNotFoundFault

The resource could not be found.

HTTP Status Code: 400

ResourceQuotaExceededFault

The quota for this resource quota has been exceeded.

HTTP Status Code: 400

Example

Sample Request

```
POST / HTTP/1.1
Host: dms.<region>.<domain>
x-amz-Date: <Date>
Authorization: AWS4-HMAC-SHA256 Credential=<Credential>,
SignedHeaders=contenttype;date;host;user-agent;x-amz-date;x-amz-target;x-amzn-requestid,Signature=<Signature>
User-Agent: <UserAgentString>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Connection: Keep-Alive
X-Amz-Target: AmazonDMSv20160101.CreateReplicationSubnetGroup
{
    "ReplicationSubnetGroupIdentifier":"test-subnet-group",
    "ReplicationSubnetGroupDescription":"dms testing",
    "SubnetIds":[
        "subnet-f6dd91af",
        "subnet-3605751d",
        "subnet-c2daefb5"
    ],
    "Tags": [
        { "Key": "", "Value": ""
    }]
}
```

Sample Response

```
HTTP/1.1 200 OK
x-amzn-Request-Id: <RequestId>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Date: <Date>
{
    "ReplicationSubnetGroup":{
        "ReplicationSubnetGroupDescription":"dms testing",
        "Subnets":{
            "SubnetStatus":"Active",
```
"SubnetIdentifier":"subnet-f6dd91af",
"SubnetAvailabilityZone":{
   "Name":"us-east-1d"
 },
",
   "SubnetStatus":"Active",
   "SubnetIdentifier":"subnet-3605751d",
   "SubnetAvailabilityZone":{
      "Name":"us-east-1b"
 },
",
   "SubnetStatus":"Active",
   "SubnetIdentifier":"subnet-c2daefb5",
   "SubnetAvailabilityZone":{
      "Name":"us-east-1c"
 }},
"VpcId":"vpc-6741a603",
"SubnetGroupStatus":"Complete",
"ReplicationSubnetGroupIdentifier":"test-subnet-group"
}
}

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

Creates a replication task using the specified parameters.

**Request Syntax**

```json
{
"CdcStartPosition": "string",
"CdcStartTime": number,
"CdcStopPosition": "string",
"MigrationType": "string",
"ReplicationInstanceArn": "string",
"ReplicationTaskIdentifier": "string",
"ReplicationTaskSettings": "string",
"SourceEndpointArn": "string",
"TableMappings": "string",
"Tags": [
  {
    "Key": "string",
    "Value": "string"
  }
],
"TargetEndpointArn": "string"
}
```

**Request Parameters**

For information about the parameters that are common to all actions, see [Common Parameters](p. 215).

The request accepts the following data in JSON format.

**CdcStartPosition (p. 29)**

Indicates when you want a change data capture (CDC) operation to start. Use either CdcStartPosition or CdcStartTime to specify when you want a CDC operation to start. Specifying both values results in an error.

The value can be in date, checkpoint, or LSN/SCN format.

*Date Example: --cdc-start-position “2018-03-08T12:12:12”*

*Checkpoint Example: --cdc-start-position “checkpoint:V1#27#mysql-bin-changelog.157832:1975:-1:2002:67783278264080:mysql-bin-changelog.157832:1876#0#0##0#93”*

*LSN Example: --cdc-start-position “mysql-bin-changelog.000024:373”*

Type: String

Required: No

**CdcStartTime (p. 29)**

Indicates the start time for a change data capture (CDC) operation. Use either CdcStartTime or CdcStopPosition to specify when you want a CDC operation to start. Specifying both values results in an error.

*Timestamp Example: --cdc-start-time “2018-03-08T12:12:12”*

Type: Timestamp
Required: No

**CdcStopPosition (p. 29)**

Indicates when you want a change data capture (CDC) operation to stop. The value can be either server time or commit time.

Server time example: `--cdc-stop-position "server_time:2018-02-09T12:12:12"`

Commit time example: `--cdc-stop-position "commit_time: 2018-02-09T12:12:12 "`

Type: String

Required: No

**MigrationType (p. 29)**

The migration type.

Type: String

Valid Values: `full-load | cdc | full-load-and-cdc`

Required: Yes

**ReplicationInstanceArn (p. 29)**

The Amazon Resource Name (ARN) of the replication instance.

Type: String

Required: Yes

**ReplicationTaskIdentifier (p. 29)**

The replication task identifier.

Constraints:

- Must contain from 1 to 255 alphanumeric characters or hyphens.
- First character must be a letter.
- Cannot end with a hyphen or contain two consecutive hyphens.

Type: String

Required: Yes

**ReplicationTaskSettings (p. 29)**

Settings for the task, such as target metadata settings. For a complete list of task settings, see Task Settings for AWS Database Migration Service Tasks.

Type: String

Required: No

**SourceEndpointArn (p. 29)**

The Amazon Resource Name (ARN) string that uniquely identifies the endpoint.

Type: String

Required: Yes

**TableMappings (p. 29)**

When using the AWS CLI or boto3, provide the path of the JSON file that contains the table mappings. Precede the path with "file://". When working with the DMS API, provide the JSON as the parameter value.
Response Syntax

For example, --table-mappings file://mappingfile.json

Type: String
Required: Yes

**Tags (p. 29)**

Tags to be added to the replication instance.
Type: Array of Tag (p. 213) objects
Required: No

**TargetEndpointArn (p. 29)**

The Amazon Resource Name (ARN) string that uniquely identifies the endpoint.
Type: String
Required: Yes

```json
{
  "ReplicationTask": {
    "CdcStartPosition": "string",
    "CdcStopPosition": "string",
    "LastFailureMessage": "string",
    "MigrationType": "string",
    "RecoveryCheckpoint": "string",
    "ReplicationInstanceArn": "string",
    "ReplicationTaskArn": "string",
    "ReplicationTaskCreationDate": number,
    "ReplicationTaskIdentifier": "string",
    "ReplicationTaskSettings": "string",
    "ReplicationTaskStartDate": number,
    "ReplicationTaskStats": {
      "ElapsedTimeMillis": number,
      "FullLoadProgressPercent": number,
      "TablesErrored": number,
      "TablesLoaded": number,
      "TablesLoading": number,
      "TablesQueued": number
    },
    "SourceEndpointArn": "string",
    "Status": "string",
    "StopReason": "string",
    "TableMappings": "string",
    "TargetEndpointArn": "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.

**ReplicationTask (p. 31)**

The replication task that was created.
Errors

For information about the errors that are common to all actions, see Common Errors (p. 217).

AccessDeniedFault

AWS DMS was denied access to the endpoint.

HTTP Status Code: 400

InvalidResourceStateFault

The resource is in a state that prevents it from being used for database migration.

HTTP Status Code: 400

KMSKeyNotAccessibleFault

AWS DMS cannot access the KMS key.

HTTP Status Code: 400

ResourceAlreadyExistsFault

The resource you are attempting to create already exists.

HTTP Status Code: 400

ResourceNotFoundFault

The resource could not be found.

HTTP Status Code: 400

ResourceQuotaExceededFault

The quota for this resource quota has been exceeded.

HTTP Status Code: 400

Example

Sample Request

```plaintext
POST / HTTP/1.1  
Host: dms.<region>.<domain>  
x-amz-Date: <Date>  
Authorization: AWS4-HMAC-SHA256 Credential=<Credential>,  
SignedHeaders=contenttype;date;host;user-agent;x-amz-date;x-amz-target;x-amzn-requestid,Signature=<Signature>  
User-Agent: <UserAgentString>  
Content-Type: application/x-amz-json-1.1  
Content-Length: <PayloadSizeBytes>  
Connection: Keep-Alive  
X-Amz-Target: AmazonDMSv20160101.CreateReplicationTask

{
  "ReplicationTaskIdentifier":"task1",
  "SourceEndpointArn":"arn:aws:dms:us-east-1:123456789012:endpoint:RZZK4EZW5UANC7Y3P4E776WHBE",
  "TargetEndpointArn":"arn:aws:dms:us-east-1:
```
Sample Response

HTTP/1.1 200 OK
x-amzn-RequestId: <RequestId>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Date: <Date>
{
  "ReplicationTask":{
    "SourceEndpointArn":"arn:aws:dms:us-east-1:123456789012:endpoint:RZZK4EZW5UANC7Y3P4E776WHBE",
    "ReplicationTaskIdentifier":"task1",
    "TableMappings":"{"TableMappings": [{
      "Type": "Include",
      "SourceSchema": "/",
      "SourceTable": "/"
    }],
    "Status":"creating",
    "ReplicationTaskArn":"arn:aws:dms:us-east-1:123456789012:task:OEAMB3NXSTZ6LFYZFEPBBXPM",
    "ReplicationTaskCreationDate":1457658407.492,
    "MigrationType":"full-load",
    "ReplicationTaskSettings":{
      "TargetMetadata":{
        "TargetSchema": ":\"",
          "FullLoadEnabled":true,"TargetTablePrepMode":"DROP_AND_CREATE",
        "Logging":{
          "EnableLogging":false
        }
      }
    }
  }
}
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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
DeleteCertificate

Deletes the specified certificate.

Request Syntax

```json
{
   "CertificateArn": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 215).

The request accepts the following data in JSON format.

**CertificateArn (p. 35)**

The Amazon Resource Name (ARN) of the deleted certificate.

- Type: String
- Required: Yes

Response Syntax

```json
{
   "Certificate": {
      "CertificateArn": "string",
      "CertificateCreationDate": number,
      "CertificateIdentifier": "string",
      "CertificateOwner": "string",
      "CertificatePem": "string",
      "CertificateWallet": blob,
      "KeyLength": number,
      "SigningAlgorithm": "string",
      "ValidFromDate": number,
      "ValidToDate": number
   }
}
```

Response Elements

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

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

**Certificate (p. 35)**

The Secure Sockets Layer (SSL) certificate.

- Type: Certificate (p. 169) object
Errors

For information about the errors that are common to all actions, see Common Errors (p. 217).

InvalidResourceStateFault

The resource is in a state that prevents it from being used for database migration.

HTTP Status Code: 400

ResourceNotFoundFault

The resource could not be found.

HTTP Status Code: 400

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
DeleteEndpoint

Deletes the specified endpoint.

Note

All tasks associated with the endpoint must be deleted before you can delete the endpoint.

Request Syntax

```json
{
   "EndpointArn": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 215).

The request accepts the following data in JSON format.

**EndpointArn (p. 37)**

The Amazon Resource Name (ARN) string that uniquely identifies the endpoint.

Type: String

Required: Yes

Response Syntax

```json
{
   "Endpoint": {
      "CertificateArn": "string",
      "DatabaseName": "string",
      "DmsTransferSettings": {
         "BucketName": "string",
         "ServiceAccessRoleArn": "string"
      },
      "DynamoDbSettings": {
         "ServiceAccessRoleArn": "string"
      },
      "EndpointArn": "string",
      "EndpointIdentifier": "string",
      "EndpointType": "string",
      "EngineDisplayName": "string",
      "EngineName": "string",
      "ExternalId": "string",
      "ExternalTableDefinition": "string",
      "ExtraConnectionAttributes": "string",
      "KmsKeyId": "string",
      "MongoDbSettings": {
         "AuthMechanism": "string",
         "AuthSource": "string",
         "AuthType": "string",
         "DatabaseName": "string",
         "DocsToInvestigate": "string",
         "ExtractDocId": "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.

**Endpoint (p. 37)**

The endpoint that was deleted.

Type: Endpoint (p. 175) object

**Errors**

For information about the errors that are common to all actions, see Common Errors (p. 217).

**InvalidResourceStateFault**

The resource is in a state that prevents it from being used for database migration.

HTTP Status Code: 400

**ResourceNotFoundFault**

The resource could not be found.

HTTP Status Code: 400

**Example**

Sample Request
POST / HTTP/1.1
Host: dms.<region>.<domain>
x-amz-Date: <Date>
Authorization: AWS4-HMAC-SHA256 Credential=<Credential>,
  SignedHeaders=contenttype;date;host;user-agent;x-amz-date;x-amz-target;x-amzn-
  requestid,Signature=<Signature>
User-Agent: <UserAgentString>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Connection: Keep-Alive
X-Amz-Target: AmazonDMSv20160101.DeleteEndpoint
{
  "EndpointArn": "arn:aws:dms:us-east-
1:123456789012:endpoint:RAAR3R22XSH46S3PWLC3NJAWKM"
}

Sample Response

HTTP/1.1 200 OK
x-amzn-RequestId: <RequestId>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Date: <Date>
{
  "Endpoint":{
    "Username":"username",
    "Status":"deleting",
    "EndpointArn":"arn:aws:dms:us-east-
1:123456789012:endpoint:RAAR3R22XSH46S3PWLC3NJAWKM",
    "ServerName":"apurvap-source.cxln7iyxx1lo.us-west-
2.rds.amazonaws.com",
    "EndpointType":"TARGET",
    "KmsKeyId":"arn:aws:kms:us-east-1:123456789012:key/4dc17316-5543-
4ded-b1e3-d53a7c6b411d",
    "ExtraConnectionAttributes":"parallelLoadThreads=1",
    "EngineName":"mysql",
    "EndpointIdentifier":"test-endpoint-1",
    "Port":3306
  }
}

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

Deletes an AWS DMS event subscription.

Request Syntax

```json
{
   "SubscriptionName": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 215).

The request accepts the following data in JSON format.

**SubscriptionName (p. 41)**

The name of the DMS event notification subscription to be deleted.

Type: String

Required: Yes

Response Syntax

```json
{
   "EventSubscription": {
      "CustomerAwsId": "string",
      "CustSubscriptionId": "string",
      "Enabled": boolean,
      "EventCategoriesList": [ "string" ],
      "SnsTopicArn": "string",
      "SourceIdsList": [ "string" ],
      "SourceType": "string",
      "Status": "string",
      "SubscriptionCreationTime": "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.

**EventSubscription (p. 41)**

The event subscription that was deleted.

Type: EventSubscription (p. 182) object
Errors

For information about the errors that are common to all actions, see Common Errors (p. 217).

InvalidResourceStateFault

The resource is in a state that prevents it from being used for database migration.

HTTP Status Code: 400

ResourceNotFoundFault

The resource could not be found.

HTTP Status Code: 400

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
DeleteReplicationInstance

Deletes the specified replication instance.

**Note**
You must delete any migration tasks that are associated with the replication instance before you can delete it.

**Request Syntax**

```json
{
    "ReplicationInstanceArn": "string"
}
```

**Request Parameters**

For information about the parameters that are common to all actions, see Common Parameters (p. 215).

The request accepts the following data in JSON format.

**ReplicationInstanceArn (p. 43)**

The Amazon Resource Name (ARN) of the replication instance to be deleted.

Type: String
Required: Yes

**Response Syntax**

```json
{
    "ReplicationInstance": {
        "AllocatedStorage": number,
        "AutoMinorVersionUpgrade": boolean,
        "AvailabilityZone": "string",
        "EngineVersion": "string",
        "FreeUntil": number,
        "InstanceCreateTime": number,
        "KmsKeyId": "string",
        "MultiAZ": boolean,
        "PendingModifiedValues": {
            "AllocatedStorage": number,
            "EngineVersion": "string",
            "MultiAZ": boolean,
            "ReplicationInstanceClass": "string"
        },
        "PreferredMaintenanceWindow": "string",
        "PubliclyAccessible": boolean,
        "ReplicationInstanceArn": "string",
        "ReplicationInstanceClass": "string",
        "ReplicationInstanceIdentifier": "string",
        "ReplicationInstancePrivateIpAddress": "string",
        "ReplicationInstancePrivateIpAddresses": [ "string" ],
        "ReplicationInstancePublicIpAddress": "string",
        "ReplicationInstancePublicIpAddresses": [ "string" ],
        "ReplicationInstanceStatus": "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.

ReplicationInstance (p. 43)

The replication instance that was deleted.

Type: ReplicationInstance (p. 191) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 217).

InvalidResourceStateFault

The resource is in a state that prevents it from being used for database migration.

HTTP Status Code: 400

ResourceNotFoundFault

The resource could not be found.

HTTP Status Code: 400

Example

Sample Request
POST / HTTP/1.1
Host: dms.<region>.<domain>
x-amz-Date: <Date>
Authorization: AWS4-HMAC-SHA256 Credential=<Credential>,
    SignedHeaders=contenttype;date;host;user-agent;x-amz-date;x-amz-target;x-amzn-
    requestid,Signature=<Signature>
User-Agent: <UserAgentString>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Connection: Keep-Alive
X-Amz-Target: AmazonDMSv20160101.DeleteReplicationInstance
{
    "ReplicationInstanceArn": "arn:aws:dms:us-east-
    1:123456789012:rep:PWEBBEUNOLU7VEB2OHTEH4I4GQ"
}

Sample Response

HTTP/1.1 200 OK
x-amzn-RequestId: <RequestId>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Date: <Date>
{
    "ReplicationInstance":{
        "AvailabilityZone":"us-east-1c",
        "ReplicationInstancePrivateIpAddress":"172.31.15.23",
        "ReplicationInstanceArn":"arn:aws:dms:us-east-
        1:123456789012:rep:PWEBBEUNOLU7VEB2OHTEH4I4GQ",
        "ReplicationInstanceClass":"dms.t2.small",
        "ReplicationSubnetGroup":{
            "ReplicationInstanceSubnetGroupDescription":"default",
            "Subnets":[
                {
                    "SubnetStatus":"Active",
                    "SubnetIdentifier":"subnet-f6dd91af",
                    "SubnetAvailabilityZone":{
                        "Name":"us-east-1d"
                    }
                },
                {
                    "SubnetStatus":"Active",
                    "SubnetIdentifier":"subnet-3605751d",
                    "SubnetAvailabilityZone":{
                        "Name":"us-east-1b"
                    }
                },
                {
                    "SubnetStatus":"Active",
                    "SubnetIdentifier":"subnet-c2daefb5",
                    "SubnetAvailabilityZone":{
                        "Name":"us-east-1c"
                    }
                },
                {
                    "SubnetStatus":"Active",
                    "SubnetIdentifier":"subnet-85e90cb8",
                    "SubnetAvailabilityZone":{
                        "Name":"us-east-1e"
                    }
                }
            ]
        }
    }
}
"VpcId":"vpc-6741a603",
"SubnetGroupStatus":"Complete",
"ReplicationSubnetGroupIdentifier":"default"
},
"AutoMinorVersionUpgrade":true,
"ReplicationInstanceStatus":"deleting",
"KmsKeyId":"arn:aws:kms:us-east-1:123456789012:key/4dc17316-5543-4ded-b1e3-d53a7cfb411d",
"InstanceCreateTime":1457645140.38,
"ReplicationInstancePublicIpAddress":"52.87.94.254",
"AllocatedStorage":5,
"EngineVersion":"1.5.0",
"ReplicationInstanceIdentifier":"test-rep-1",
"PubliclyAccessible":true,
"PreferredMaintenanceWindow":"sun:06:00-sun:14:00",
"PendingModifiedValues":{

}
}
}

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

Deletes a subnet group.

Request Syntax

```json
{
    "ReplicationSubnetGroupIdentifier": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 215).

The request accepts the following data in JSON format.

**ReplicationSubnetGroupIdentifier (p. 47)**

The subnet group name of the replication instance.

Type: String

Required: Yes

Response Elements

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

Errors

For information about the errors that are common to all actions, see Common Errors (p. 217).

**InvalidResourceStateFault**

The resource is in a state that prevents it from being used for database migration.

HTTP Status Code: 400

**ResourceNotFoundFault**

The resource could not be found.

HTTP Status Code: 400

Example

Sample Request

```plaintext
POST / HTTP/1.1
Host: dms.<region>.<domain>
```

API Version 2016-01-01
x-amz-Date: <Date>
Authorization: AWS4-HMAC-SHA256 Credential=<Credential>,
    SignedHeaders=contenttype;date;host;user-agent;x-amz-date;x-amz-target;x-amzn-requestid,Signature=<Signature>
User-Agent: <UserAgentString>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Connection: Keep-Alive
X-Amz-Target: AmazonDMSv20160101.DeleteReplicationSubnetGroup
{
   "ReplicationSubnetGroupIdentifier": "test-subnet-group"
}

Sample Response
Empty

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

Deletes the specified replication task.

Request Syntax

```json
{
  "ReplicationTaskArn": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 215).

The request accepts the following data in JSON format.

**ReplicationTaskArn (p. 49)**

The Amazon Resource Name (ARN) of the replication task to be deleted.

- **Type:** String
- **Required:** Yes

Response Syntax

```json
{
  "ReplicationTask": {,
    "CdcStartPosition": "string",
    "CdcStopPosition": "string",
    "LastFailureMessage": "string",
    "MigrationType": "string",
    "RecoveryCheckpoint": "string",
    "ReplicationInstanceArn": "string",
    "ReplicationTaskArn": "string",
    "ReplicationTaskCreationDate": number,
    "ReplicationTaskIdentifier": "string",
    "ReplicationTaskSettings": "string",
    "ReplicationTaskStartDate": number,
    "ReplicationTaskStats": {,
      "ElapsedTimeMillis": number,
      "FullLoadProgressPercent": number,
      "TablesErrored": number,
      "TablesLoaded": number,
      "TablesLoading": number,
      "TablesQueued": number
    },
    "SourceEndpointArn": "string",
    "Status": "string",
    "StopReason": "string",
    "TableMappings": "string",
    "TargetEndpointArn": "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.

*ReplicationTask (p. 49)*

The deleted replication task.

Type: *ReplicationTask (p. 198)* object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 217).

*InvalidResourceStateFault*

The resource is in a state that prevents it from being used for database migration.

HTTP Status Code: 400

*ResourceNotFoundException*

The resource could not be found.

HTTP Status Code: 400

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
DescribeAccountAttributes

Lists all of the AWS DMS attributes for a customer account. The attributes include AWS DMS quotas for the account, such as the number of replication instances allowed. The description for a quota includes the quota name, current usage toward that quota, and the quota's maximum value.

This command does not take any parameters.

Response Syntax

```json
{
    "AccountQuotas": [
        {
            "AccountQuotaName": "string",
            "Max": number,
            "Used": number
        }
    ]
}
```

Response Elements

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

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

AccountQuotas (p. 51)

Account quota information.

Type: Array of AccountQuota (p. 167) objects

Errors

For information about the errors that are common to all actions, see Common Errors (p. 217).

Example

Sample Request

```
POST / HTTP/1.1
Host: dms.<region>.<domain>
x-amz-Date: <Date>
Authorization: AWS4-HMAC-SHA256
Credential=<Credential>,
SignedHeaders=contenttype;date;host;user-agent;x-amz-date;x-amz-target;x-amzn-requestid,Signature=<Signature>
User-Agent: <UserAgentString>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Connection: Keep-Alive
X-Amz-Target: AmazonDMSv20160101.DescribeAccountAttributes
```

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Sample Response

HTTP/1.1 200 OK
x-amzn-RequestId: <RequestId>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Date: <Date>
{
  "AccountQuotas": [
    {
      "Max": 20,
      "AccountQuotaName": "ReplicationInstances",
      "Used": 12
    },
    {
      "Max": 10000,
      "AccountQuotaName": "AllocatedStorage",
      "Used": 6339
    },
    {
      "Max": 20,
      "AccountQuotaName": "ReplicationSubnetGroups",
      "Used": 5
    },
    {
      "Max": 20,
      "AccountQuotaName": "SubnetsPerReplicationSubnetGroup",
      "Used": 4
    },
    {
      "Max": 100,
      "AccountQuotaName": "Endpoints",
      "Used": 10
    },
    {
      "Max": 200,
      "AccountQuotaName": "ReplicationTasks",
      "Used": 2
    },
    {
      "Max": 20,
      "AccountQuotaName": "EndpointsPerInstance",
      "Used": 8
    }
  ]
}

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
See Also

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

Provides a description of the certificate.

Request Syntax

```json
{
  "Filters": [
    {
      "Name": "string",
      "Values": [ "string" ]
    }
  ],
  "Marker": "string",
  "MaxRecords": number
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 215).

The request accepts the following data in JSON format.

**Filters (p. 54)**

Filters applied to the certificate described in the form of key-value pairs.

Type: Array of Filter (p. 184) objects

Required: No

**Marker (p. 54)**

An optional pagination token provided by a previous request. If this parameter is specified, the response includes only records beyond the marker, up to the value specified by MaxRecords.

Type: String

Required: No

**MaxRecords (p. 54)**

The maximum number of records to include in the response. If more records exist than the specified MaxRecords value, a pagination token called a marker is included in the response so that the remaining results can be retrieved.

Default: 10

Type: Integer

Required: No

Response Syntax

```json
{
  "Certificates": [  
```
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.

Certificates (p. 54)
The Secure Sockets Layer (SSL) certificates associated with the replication instance.

Type: Array of Certificate (p. 169) objects

Marker (p. 54)
The pagination token.

Type: String

Errors

For information about the errors that are common to all actions, see Common Errors (p. 217).

ResourceNotFoundException
The resource could not be found.

HTTP Status Code: 400

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
• AWS SDK for Ruby V2
DescribeConnections

Describes the status of the connections that have been made between the replication instance and an endpoint. Connections are created when you test an endpoint.

Request Syntax

```json
{
    "Filters": [
        {
            "Name": "string",
            "Values": [ "string" ]
        }
    ],
    "Marker": "string",
    "MaxRecords": number
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 215).

The request accepts the following data in JSON format.

Filters (p. 57)

The filters applied to the connection.

Valid filter names: endpoint-arn | replication-instance-arn

Type: Array of Filter (p. 184) objects

Required: No

Marker (p. 57)

An optional pagination token provided by a previous request. If this parameter is specified, the response includes only records beyond the marker, up to the value specified by MaxRecords.

Type: String

Required: No

MaxRecords (p. 57)

The maximum number of records to include in the response. If more records exist than the specified MaxRecords value, a pagination token called a marker is included in the response so that the remaining results can be retrieved.

Default: 100

Constraints: Minimum 20, maximum 100.

Type: Integer

Required: No
Response Syntax

```json
{
   "Connections": [
      {
         "EndpointArn": "string",
         "EndpointIdentifier": "string",
         "LastFailureMessage": "string",
         "ReplicationInstanceArn": "string",
         "ReplicationInstanceIdentifier": "string",
         "Status": "string"
      }
   ],
   "Marker": "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.

Connections (p. 58)

A description of the connections.

Type: Array of Connection (p. 171) objects

Marker (p. 58)

An optional pagination token provided by a previous request. If this parameter is specified, the response includes only records beyond the marker, up to the value specified by MaxRecords.

Type: String

Errors

For information about the errors that are common to all actions, see Common Errors (p. 217).

ResourceNotFoundFault

The resource could not be found.

HTTP Status Code: 400

Example

Sample Request

```
POST / HTTP/1.1
Host: dms.<region>.<domain>
x-amz-date: <Date>
Authorization: AWS4-HMAC-SHA256
Credential=<Credential>,
```
SignedHeaders=contenttype;date;host;user-agent;x-amz-date;x-amz-target;x-amzn-requestid,Signature=<Signature>
User-Agent: <UserAgentString>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Connection: Keep-Alive
X-Amz-Target: AmazonDMSv20160101.DescribeConnections
{
  "Filters": [
    {
      "Name": "endpoint-arn",
      "Values": [
        "arn:aws:dms:us-east-1:123456789012:endpoint:RZZK4EZW5UANC7Y3PE776WHBE"
      ]
    },
    "MaxRecords": 0,
    "Marker": ""
  ]
}

Sample Response

HTTP/1.1 200 OK
x-amzn-RequestId: <RequestId>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Date: <Date>
{
  "Connections": [
    {
      "Status": "successful",
      "ReplicationInstanceIdentifier": "akshay1",
      "EndpointArn": "arn:aws:dms:us-east-1:123456789012:endpoint:RZZK4EZW5UANC7Y3PE776WHBE",
      "EndpointIdentifier": "akssrc1",
      "ReplicationInstanceArn": "arn:aws:dms:us-east-1:123456789012:rep:6USOU366XJWATDJSBCJS5VIQ"
    }
  ]
}

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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
See Also

- AWS SDK for Ruby V2
DescribeEndpoints

Returns information about the endpoints for your account in the current region.

Request Syntax

```
{
  "Filters": [
    {
      "Name": "string",
      "Values": [ "string" ]
    }
  ],
  "Marker": "string",
  "MaxRecords": number
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 215).

The request accepts the following data in JSON format.

Filters (p. 61)

Filters applied to the describe action.

Valid filter names: endpoint-arn | endpoint-type | endpoint-id | engine-name

Type: Array of Filter (p. 184) objects

Required: No

Marker (p. 61)

An optional pagination token provided by a previous request. If this parameter is specified, the response includes only records beyond the marker, up to the value specified by MaxRecords.

Type: String

Required: No

MaxRecords (p. 61)

The maximum number of records to include in the response. If more records exist than the specified MaxRecords value, a pagination token called a marker is included in the response so that the remaining results can be retrieved.

Default: 100

Constraints: Minimum 20, maximum 100.

Type: Integer

Required: No
Response Syntax

```
{
    "Endpoints": [
        {
            "CertificateArn": "string",
            "DatabaseName": "string",
            "DmsTransferSettings": {
                "BucketName": "string",
                "ServiceAccessRoleArn": "string"
            },
            "DynamoDbSettings": {
                "ServiceAccessRoleArn": "string"
            },
            "EndpointArn": "string",
            "EndpointIdentifier": "string",
            "EndpointType": "string",
            "EngineDisplayName": "string",
            "EngineName": "string",
            "ExternalId": "string",
            "ExternalTableName": "string",
            "ExtraConnectionAttributes": "string",
            "KmsKeyId": "string",
            "MongoDbSettings": {
                "AuthMechanism": "string",
                "AuthSource": "string",
                "AuthType": "string",
                "DatabaseName": "string",
                "DocsToInvestigate": "string",
                "ExtractDocId": "string",
                "KmsKeyId": "string",
                "NestingLevel": "string",
                "Password": "string",
                "Port": number,
                "ServerName": "string",
                "Username": "string"
            },
            "Port": number,
            "S3Settings": {
                "BucketFolder": "string",
                "BucketName": "string",
                "CompressionType": "string",
                "CsvDelimiter": "string",
                "CsvRowDelimiter": "string",
                "ExternalTableName": "string",
                "ServiceAccessRoleArn": "string"
            },
            "ServerName": "string",
            "ServiceAccessRoleArn": "string",
            "SslMode": "string",
            "Status": "string",
            "Username": "string"
        }
    ],
    "Marker": "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.
Endpoints (p. 62)

Endpoint description.

Type: Array of Endpoint (p. 175) objects

Marker (p. 62)

An optional pagination token provided by a previous request. If this parameter is specified, the response includes only records beyond the marker, up to the value specified by MaxRecords.

Type: String

Errors

For information about the errors that are common to all actions, see Common Errors (p. 217).

ResourceNotFoundFault

The resource could not be found.

HTTP Status Code: 400

Example

Sample Request

```plaintext
POST / HTTP/1.1
Host: dms.<region>.<domain>
x-amz-Date: <Date>
Authorization: AWS4-HMAC-SHA256
Credential=<Credential>,
SignedHeaders=contenttype;date;host;user-agent;x-amz-date;x-amz-target;x-amzn-requestid,Signature=<Signature>
User-Agent: <UserAgentString>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Connection: Keep-Alive
X-Amz-Target: AmazonDMSv20160101.DescribeEndpoints
{
  "Filters": [
    {
      "Name":"endpoint-type",
      "Values": ["source"
    ]
  ],
  "MaxRecords": 0,
  "Marker": ""
}
```

Sample Response
HTTP/1.1 200 OK
x-amzn-RequestID: <RequestId>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Date: <Date>
{
  "Endpoints": [
    {
      "Username": "dms",
      "Status": "active",
      "EndpointArn": "arn:aws:dms:us-east-1:123456789012:endpoint:SFLP3SJHID2WOFLY20KWKVEE",
      "ServerName": "ec2-52-32-48-61.us-west-2.compute.amazonaws.com",
      "EndpointType": "SOURCE",
      "KmsKeyId": "arn:aws:kms:us-east-1:123456789012:key/945c4e7d-4ec4-44be-b58a-c8a7ad5f57dcd",
      "DatabaseName": "sbtest",
      "EngineName": "mysql",
      "EndpointIdentifier": "pri100",
      "Port": 8193
    },
    {
      "Username": "admin",
      "Status": "active",
      "ServerName": "test.oracle.com",
      "EndpointType": "SOURCE",
      "KmsKeyId": "arn:aws:kms:us-east-1:123456789012:key/24021b31-f21c-4a2d-b772-59bce32a9e43",
      "DatabaseName": "ORCL",
      "EngineName": "oracle",
      "EndpointIdentifier": "test",
      "Port": 1521
    }
  ]
}

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

Returns information about the type of endpoints available.

**Request Syntax**

```json
{
   "Filters": [
      {
         "Name": "string",
         "Values": [ "string" ]
      }
   ],
   "Marker": "string",
   "MaxRecords": number
}
```

**Request Parameters**

For information about the parameters that are common to all actions, see Common Parameters (p. 215).

The request accepts the following data in JSON format.

**Filters (p. 65)**

Filters applied to the describe action.

Valid filter names: engine-name | endpoint-type

Type: Array of Filter (p. 184) objects

Required: No

**Marker (p. 65)**

An optional pagination token provided by a previous request. If this parameter is specified, the response includes only records beyond the marker, up to the value specified by MaxRecords.

Type: String

Required: No

**MaxRecords (p. 65)**

The maximum number of records to include in the response. If more records exist than the specified MaxRecords value, a pagination token called a marker is included in the response so that the remaining results can be retrieved.

Default: 100

Constraints: Minimum 20, maximum 100.

Type: Integer

Required: No

**Response Syntax**

```json
{
}
```
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.

**Marker (p. 65)**

An optional pagination token provided by a previous request. If this parameter is specified, the response includes only records beyond the marker, up to the value specified by `MaxRecords`.

Type: String

**SupportedEndpointTypes (p. 65)**

The type of endpoints that are supported.

Type: Array of SupportedEndpointType (p. 208) objects

**Errors**

For information about the errors that are common to all actions, see Common Errors (p. 217).

**Example**

**Sample Request**

```plaintext
POST / HTTP/1.1
Host: dms.<region>.<domain>
x-amz-Date: <Date>
Authorization: AWS4-HMAC-SHA256
Credential=<Credential>,
SignedHeaders=contenttype;date;host;user-agent;x-amz-date;x-amz-target;x-amzn-requestid,Signature=<Signature>
User-Agent: <UserAgentString>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Connection: Keep-Alive
X-Amz-Target: AmazonDMSv20160101.DescribeEndpointTypes
{
  "Filters": [
    {
      "Name": "endpoint-type",
      "Values": [
        "source"
      ]
    }
  ]
}
```
Sample Response

HTTP/1.1 200 OK
x-amzn-RequestId: <RequestId>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Date: <Date>
{
  "SupportedEndpointTypes":[
    {
      "EngineName":"mysql",
      "SupportsCDC":true,
      "EndpointType":"source"
    },
    {
      "EngineName":"oracle",
      "SupportsCDC":true,
      "EndpointType":"source"
    },
    {
      "EngineName":"postgres",
      "SupportsCDC":true,
      "EndpointType":"source"
    },
    {
      "EngineName":"aurora",
      "SupportsCDC":true,
      "EndpointType":"source"
    },
    {
      "EngineName":"mariadb",
      "SupportsCDC":true,
      "EndpointType":"source"
    },
    {
      "EngineName":"sqlserver",
      "SupportsCDC":true,
      "EndpointType":"source"
    }
  ]
}

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
See Also

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

Lists categories for all event source types, or, if specified, for a specified source type. You can see a list of the event categories and source types in Working with Events and Notifications in the AWS Database Migration Service User Guide.

Request Syntax

```json
{
    "Filters": [
        {
            "Name": "string",
            "Values": [ "string" ]
        }
    ],
    "SourceType": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 215).

The request accepts the following data in JSON format.

**Filters (p. 69)**

Filters applied to the action.

- Type: Array of Filter (p. 184) objects
- Required: No

**SourceType (p. 69)**

The type of AWS DMS resource that generates events.

- Valid values: replication-instance | migration-task
- Type: String
- Required: No

Response Syntax

```json
{
    "EventCategoryGroupList": [
        {
            "EventCategories": [ "string" ],
            "SourceType": "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.

**EventCategoryGroupList (p. 69)**

A list of event categories.

Type: Array of EventCategoryGroup (p. 181) objects

## Errors

For information about the errors that are common to all actions, see Common Errors (p. 217).

## 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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
DescribeEvents

Lists events for a given source identifier and source type. You can also specify a start and end time. For more information on AWS DMS events, see Working with Events and Notifications.

Request Syntax

```json
{
    "Duration": number,
    "EndTime": number,
    "EventCategories": [ "string" ],
    "Filters": [ 
        { 
            "Name": "string",
            "Values": [ "string" ]
        } 
    ],
    "Marker": "string",
    "MaxRecords": number,
    "SourceIdentifier": "string",
    "SourceType": "string",
    "StartTime": number
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 215).

The request accepts the following data in JSON format.

**Duration (p. 71)**

The duration of the events to be listed.

Type: Integer

Required: No

**EndTime (p. 71)**

The end time for the events to be listed.

Type: Timestamp

Required: No

**EventCategories (p. 71)**

A list of event categories for a source type that you want to subscribe to.

Type: Array of strings

Required: No

**Filters (p. 71)**

Filters applied to the action.

Type: Array of Filter (p. 184) objects
Required: No

**Marker (p. 71)**

An optional pagination token provided by a previous request. If this parameter is specified, the response includes only records beyond the marker, up to the value specified by MaxRecords.

Type: String

Required: No

**MaxRecords (p. 71)**

The maximum number of records to include in the response. If more records exist than the specified MaxRecords value, a pagination token called a marker is included in the response so that the remaining results can be retrieved.

Default: 100

Constraints: Minimum 20, maximum 100.

Type: Integer

Required: No

**SourceIdentifier (p. 71)**

The identifier of the event source. An identifier must begin with a letter and must contain only ASCII letters, digits, and hyphens. It cannot end with a hyphen or contain two consecutive hyphens.

Type: String

Required: No

**SourceType (p. 71)**

The type of AWS DMS resource that generates events.

Valid values: replication-instance | migration-task

Type: String

Valid Values: replication-instance

Required: No

**StartTime (p. 71)**

The start time for the events to be listed.

Type: Timestamp

Required: No

---

**Response Syntax**

```json
{
    "Events": [
    {
        "Date": number,
        "EventCategories": [ "string" ],
        "Message": "string",
        "SourceIdentifier": "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.

Events (p. 72)

The events described.

Type: Array of Event (p. 179) objects

Marker (p. 72)

An optional pagination token provided by a previous request. If this parameter is specified, the response includes only records beyond the marker, up to the value specified by MaxRecords.

Type: String

Errors

For information about the errors that are common to all actions, see Common Errors (p. 217).

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

Lists all the event subscriptions for a customer account. The description of a subscription includes SubscriptionName, SNSTopicARN, CustomerID, SourceType, SourceID, CreationTime, and Status.

If you specify SubscriptionName, this action lists the description for that subscription.

Request Syntax

```json
{
   "Filters": [
      {
         "Name": "string",
         "Values": [ "string" ]
      },
   ],
   "Marker": "string",
   "MaxRecords": number,
   "SubscriptionName": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 215).

The request accepts the following data in JSON format.

**Filters (p. 74)**

Filters applied to the action.

Type: Array of Filter (p. 184) objects

Required: No

**Marker (p. 74)**

An optional pagination token provided by a previous request. If this parameter is specified, the response includes only records beyond the marker, up to the value specified by MaxRecords.

Type: String

Required: No

**MaxRecords (p. 74)**

The maximum number of records to include in the response. If more records exist than the specified MaxRecords value, a pagination token called a marker is included in the response so that the remaining results can be retrieved.

Default: 100

Constraints: Minimum 20, maximum 100.

Type: Integer
The name of the AWS DMS event subscription to be described.

Type: String
Required: No

Response Syntax

```json
{
  "EventSubscriptionsList": [
    {
      "CustomerAwsId": "string",
      "CustSubscriptionId": "string",
      "Enabled": boolean,
      "EventCategoriesList": [ "string" ],
      "SnsTopicArn": "string",
      "SourceIdsList": [ "string" ],
      "SourceType": "string",
      "Status": "string",
      "SubscriptionCreationTime": "string"
    }
  ],
  "Marker": "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.

**EventSubscriptionsList (p. 75)**

A list of event subscriptions.

Type: Array of [EventSubscription (p. 182)] objects

**Marker (p. 75)**

An optional pagination token provided by a previous request. If this parameter is specified, the response includes only records beyond the marker, up to the value specified by `MaxRecords`.

Type: String

Errors

For information about the errors that are common to all actions, see [Common Errors (p. 217)].

**ResourceNotFoundFault**

The resource could not be found.

HTTP Status Code: 400
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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
DescribeOrderableReplicationInstances

Returns information about the replication instance types that can be created in the specified region.

Request Syntax

```json
{
  "Marker": "string",
  "MaxRecords": number
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 215).

The request accepts the following data in JSON format.

**Marker (p. 77)**

An optional pagination token provided by a previous request. If this parameter is specified, the response includes only records beyond the marker, up to the value specified by MaxRecords.

Type: String

Required: No

**MaxRecords (p. 77)**

The maximum number of records to include in the response. If more records exist than the specified MaxRecords value, a pagination token called a marker is included in the response so that the remaining results can be retrieved.

Default: 100

Constraints: Minimum 20, maximum 100.

Type: Integer

Required: No

Response Syntax

```json
{
  "Marker": "string",
  "OrderableReplicationInstances": [
    {
      "DefaultAllocatedStorage": number,
      "EngineVersion": "string",
      "IncludedAllocatedStorage": number,
      "MaxAllocatedStorage": number,
      "MinAllocatedStorage": number,
      "ReplicationInstanceClass": "string",
      "StorageType": "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.

**Marker (p. 77)**

An optional pagination token provided by a previous request. If this parameter is specified, the response includes only records beyond the marker, up to the value specified by MaxRecords.

Type: String

**OrderableReplicationInstances (p. 77)**

The order-able replication instances available.

Type: Array of OrderableReplicationInstance (p. 188) objects

Errors

For information about the errors that are common to all actions, see Common Errors (p. 217).

Example

Sample Request

```plaintext
POST / HTTP/1.1
Host: dms.<region>.<domain>
x-amz-Date: <Date>
Authorization: AWS4-HMAC-SHA256
Credential=<Credential>,
SignedHeaders=contenttype;date;host;user-agent;x-amz-date;x-amz-target;x-amzn-requestid,Signature=<Signature>
User-Agent: <UserAgentString>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Connection: Keep-Alive
X-Amz-Target: AmazonDMSv20160101.DescribeOrderableReplicationInstances
{
  "MaxRecords": 0,
  "Marker": ""
}
```

Sample Response

```plaintext
HTTP/1.1 200 OK
x-amzn-RequestId: <RequestId>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Date: <Date>
```
{  "OrderableReplicationInstances": [  {  "StorageType": "gp2",  "ReplicationInstanceClass": "dms.c4.2xlarge",  "EngineVersion": "1.3.0",  "IncludedAllocatedStorage": 100,  "DefaultAllocatedStorage": 100,  "MinAllocatedStorage": 5,  "MaxAllocatedStorage": 6144  },  {  "StorageType": "gp2",  "ReplicationInstanceClass": "dms.c4.4xlarge",  "EngineVersion": "1.3.0",  "IncludedAllocatedStorage": 100,  "DefaultAllocatedStorage": 100,  "MinAllocatedStorage": 5,  "MaxAllocatedStorage": 6144  },  {  "StorageType": "gp2",  "ReplicationInstanceClass": "dms.c4.large",  "EngineVersion": "1.3.0",  "IncludedAllocatedStorage": 100,  "DefaultAllocatedStorage": 100,  "MinAllocatedStorage": 5,  "MaxAllocatedStorage": 6144  },  {  "StorageType": "gp2",  "ReplicationInstanceClass": "dms.c4.xlarge",  "EngineVersion": "1.3.0",  "IncludedAllocatedStorage": 100,  "DefaultAllocatedStorage": 100,  "MinAllocatedStorage": 5,  "MaxAllocatedStorage": 6144  },  {  "StorageType": "gp2",  "ReplicationInstanceClass": "dms.t2.large",  "EngineVersion": "1.3.0",  "IncludedAllocatedStorage": 50,  "DefaultAllocatedStorage": 50,  "MinAllocatedStorage": 5,  "MaxAllocatedStorage": 6144  },  {  "StorageType": "gp2",  "ReplicationInstanceClass": "dms.t2.medium",  "EngineVersion": "1.3.0",  "IncludedAllocatedStorage": 50,  "DefaultAllocatedStorage": 50,  "MinAllocatedStorage": 5,  "MaxAllocatedStorage": 6144  },  {  "StorageType": "gp2",  "ReplicationInstanceClass": "dms.t2.micro",  "EngineVersion": "1.3.0",  "IncludedAllocatedStorage": 50,  "DefaultAllocatedStorage": 50,  "MinAllocatedStorage": 5,  "MaxAllocatedStorage": 6144  }  ]}
"StorageType":"gp2",
"ReplicationInstanceClass":"dms.t2.small",
"EngineVersion":"1.3.0",
"IncludedAllocatedStorage":50,
"DefaultAllocatedStorage":50,
"MinAllocatedStorage":5,
"MaxAllocatedStorage":6144
},

"StorageType":"gp2",
"ReplicationInstanceClass":"dms.c4.2xlarge",
"EngineVersion":"1.4.0",
"IncludedAllocatedStorage":100,
"DefaultAllocatedStorage":100,
"MinAllocatedStorage":5,
"MaxAllocatedStorage":6144
},

"StorageType":"gp2",
"ReplicationInstanceClass":"dms.c4.4xlarge",
"EngineVersion":"1.4.0",
"IncludedAllocatedStorage":100,
"DefaultAllocatedStorage":100,
"MinAllocatedStorage":5,
"MaxAllocatedStorage":6144
},

"StorageType":"gp2",
"ReplicationInstanceClass":"dms.c4.large",
"EngineVersion":"1.4.0",
"IncludedAllocatedStorage":100,
"DefaultAllocatedStorage":100,
"MinAllocatedStorage":5,
"MaxAllocatedStorage":6144
},

"StorageType":"gp2",
"ReplicationInstanceClass":"dms.c4.xlarge",
"EngineVersion":"1.4.0",
"IncludedAllocatedStorage":100,
"DefaultAllocatedStorage":100,
"MinAllocatedStorage":5,
"MaxAllocatedStorage":6144
},

"StorageType":"gp2",
"ReplicationInstanceClass":"dms.t2.large",
"EngineVersion":"1.4.0",
"IncludedAllocatedStorage":50,
"DefaultAllocatedStorage":50,
"MinAllocatedStorage":5,
"MaxAllocatedStorage":6144
},

"StorageType":"gp2",
"ReplicationInstanceClass":"dms.t2.medium",
"EngineVersion":"1.4.0",
"IncludedAllocatedStorage":50,
"DefaultAllocatedStorage":50,
"MinAllocatedStorage":5,
"MaxAllocatedStorage":6144
},

"StorageType":"gp2",
"ReplicationInstanceClass":"dms.t2.micro",
"EngineVersion":"1.4.0",
"IncludedAllocatedStorage":50,
"DefaultAllocatedStorage":50,
"MinAllocatedStorage":5,
"MaxAllocatedStorage":6144
}
"IncludedAllocatedStorage":50,
"DefaultAllocatedStorage":50,
"MinAllocatedStorage":5,
"MaxAllocatedStorage":6144
},
{
  "StorageType":"gp2",
  "ReplicationInstanceClass":"dms.t2.small",
  "EngineVersion":"1.4.0",
  "IncludedAllocatedStorage":50,
  "DefaultAllocatedStorage":50,
  "MinAllocatedStorage":5,
  "MaxAllocatedStorage":6144
},
{
  "StorageType":"gp2",
  "ReplicationInstanceClass":"dms.c4.2xlarge",
  "EngineVersion":"1.5.0",
  "IncludedAllocatedStorage":100,
  "DefaultAllocatedStorage":100,
  "MinAllocatedStorage":5,
  "MaxAllocatedStorage":6144
},
{
  "StorageType":"gp2",
  "ReplicationInstanceClass":"dms.c4.4xlarge",
  "EngineVersion":"1.5.0",
  "IncludedAllocatedStorage":100,
  "DefaultAllocatedStorage":100,
  "MinAllocatedStorage":5,
  "MaxAllocatedStorage":6144
},
{
  "StorageType":"gp2",
  "ReplicationInstanceClass":"dms.c4.xlarge",
  "EngineVersion":"1.5.0",
  "IncludedAllocatedStorage":100,
  "DefaultAllocatedStorage":100,
  "MinAllocatedStorage":5,
  "MaxAllocatedStorage":6144
},
{
  "StorageType":"gp2",
  "ReplicationInstanceClass":"dms.t2.large",
  "EngineVersion":"1.5.0",
  "IncludedAllocatedStorage":50,
  "DefaultAllocatedStorage":50,
  "MinAllocatedStorage":5,
  "MaxAllocatedStorage":6144
},
{
  "StorageType":"gp2",
  "ReplicationInstanceClass":"dms.t2.medium",
  "EngineVersion":"1.5.0",
  "IncludedAllocatedStorage":50,
  "DefaultAllocatedStorage":50,
  "MinAllocatedStorage":5,
"MaxAllocatedStorage":6144
},
{
  "StorageType":"gp2",
  "ReplicationInstanceClass":"dms.t2.micro",
  "EngineVersion":"1.5.0",
  "IncludedAllocatedStorage":50,
  "DefaultAllocatedStorage":50,
  "MinAllocatedStorage":5,
  "MaxAllocatedStorage":6144
},
{
  "StorageType":"gp2",
  "ReplicationInstanceClass":"dms.t2.small",
  "EngineVersion":"1.5.0",
  "IncludedAllocatedStorage":50,
  "DefaultAllocatedStorage":50,
  "MinAllocatedStorage":5,
  "MaxAllocatedStorage":6144
}
]

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

Returns the status of the RefreshSchemas operation.

Request Syntax

```
{
    "EndpointArn": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 215).

The request accepts the following data in JSON format.

**EndpointArn (p. 83)**

The Amazon Resource Name (ARN) string that uniquely identifies the endpoint.

Type: String

Required: Yes

Response Syntax

```
{
    "RefreshSchemasStatus": {
        "EndpointArn": "string",
        "LastFailureMessage": "string",
        "LastRefreshDate": number,
        "ReplicationInstanceArn": "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.

**RefreshSchemasStatus (p. 83)**

The status of the schema.

Type: RefreshSchemasStatus (p. 190) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 217).
InvalidResourceStateFault

The resource is in a state that prevents it from being used for database migration.

HTTP Status Code: 400

ResourceNotFoundException

The resource could not be found.

HTTP Status Code: 400

Example

Sample Request

```
POST / HTTP/1.1
Host: dms.<region>.<domain>
x-amz-Date: <Date>
Authorization: AWS4-HMAC-SHA256
Credential=<Credential>, SignedHeaders=contenttype;date;host;user-agent;x-amz-date;x-amz-target;x-amzn-requestid,Signature=<Signature>
User-Agent: <UserAgentString>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Connection: Keep-Alive
X-Amz-Target: AmazonDMSv20160101.DescribeRefreshSchemasStatus
{
  "EndpointArn": "arn:aws:dms:us-east-1:123456789012:endpoint:WKBULDZKUDQZIHPOUUSEH34EMU"
}
```

Sample Response

```
HTTP/1.1 200 OK
x-amzn-RequestId: <RequestId>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Date: <Date>
{
  "RefreshSchemasStatus":{
    "Status":"successful",
    "LastRefreshDate":1457659238.93,
    "EndpointArn": "arn:aws:dms:us-east-1:123456789012:endpoint:WKBULDZKUDQZIHPOUUSEH34EMU",
    "ReplicationInstanceArn": "arn:aws:dms:us-east-1:123456789012:rep:6USOU366XFJWATDJGBCJS3VIQ"
  }
}
```

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
DescribeReplicationInstances

Returns information about replication instances for your account in the current region.

Request Syntax

```json
{
  "Filters": [
    {
      "Name": "string",
      "Values": [ "string" ]
    }
  ],
  "Marker": "string",
  "MaxRecords": number
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 215).

The request accepts the following data in JSON format.

**Filters (p. 86)**

Filters applied to the describe action.

- Valid filter names: replication-instance-arn | replication-instance-id | replication-instance-class | engine-version
- Type: Array of Filter (p. 184) objects
- Required: No

**Marker (p. 86)**

An optional pagination token provided by a previous request. If this parameter is specified, the response includes only records beyond the marker, up to the value specified by MaxRecords.

- Type: String
- Required: No

**MaxRecords (p. 86)**

The maximum number of records to include in the response. If more records exist than the specified MaxRecords value, a pagination token called a marker is included in the response so that the remaining results can be retrieved.

- Default: 100
- Constraints: Minimum 20, maximum 100.
- Type: Integer
- Required: No
Response Syntax

```json
{
    "Marker": "string",
    "ReplicationInstances": [
        {
            "AllocatedStorage": number,
            "AutoMinorVersionUpgrade": boolean,
            "AvailabilityZone": "string",
            "EngineVersion": "string",
            "FreeUntil": number,
            "InstanceCreateTime": number,
            "KmsKeyId": "string",
            "MultiAZ": boolean,
            "PendingModifiedValues": {
                "AllocatedStorage": number,
                "EngineVersion": "string",
                "MultiAZ": boolean,
                "ReplicationInstanceClass": "string"
            },
            "PreferredMaintenanceWindow": "string",
            "PubliclyAccessible": boolean,
            "ReplicationInstanceArn": "string",
            "ReplicationInstanceClass": "string",
            "ReplicationInstanceIdentifier": "string",
            "ReplicationInstancePrivateIpAddresses": ["string"],
            "ReplicationInstancePublicIpAddresses": ["string"],
            "ReplicationInstanceStatus": "string",
            "ReplicationSubnetGroup": {
                "ReplicationSubnetGroupDescription": "string",
                "ReplicationSubnetGroupIdentifier": "string",
                "SubnetGroupStatus": "string",
                "Subnets": [
                    {
                        "SubnetAvailabilityZone": {
                            "Name": "string"
                        },
                        "SubnetIdentifier": "string",
                        "SubnetStatus": "string"
                    }
                ],
                "VpcId": "string"
            },
            "SecondaryAvailabilityZone": "string",
            "VpcSecurityGroups": [ {
                "Status": "string",
                "VpcSecurityGroupId": "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.
Marker (p. 87)

An optional pagination token provided by a previous request. If this parameter is specified, the response includes only records beyond the marker, up to the value specified by MaxRecords.

Type: String

ReplicationInstances (p. 87)

The replication instances described.

Type: Array of ReplicationInstance (p. 191) objects

Errors

For information about the errors that are common to all actions, see Common Errors (p. 217).

ResourceNotFoundFault

The resource could not be found.

HTTP Status Code: 400

Example

Sample Request

```
POST / HTTP/1.1
Host: dms.<region>.<domain>
x-amz-Date: <Date>
Authorization: AWS4-HMAC-SHA256
Credential=<Credential>,
SignedHeaders=contenttype;date;host;user-agent;x-amz-date;x-amz-target;x-amzn-requestid,Signature=<Signature>
User-Agent: <UserAgentString>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Connection: Keep-Alive
X-Amz-Target: AmazonDMSv20160101.DescribeReplicationInstances
{
    "Filters": [
        {
            "Name": "rep-instance-arn",
            "Values": [
            ]
        },
        {
            "MaxRecords": 0,
            "Marker": ""
        }
    ]
}
```

Sample Response
HTTP/1.1 200 OK
x-amzn-RequestId: <RequestId>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Date: <Date>
{
    "ReplicationInstances": [
        {
            "AvailabilityZone": "us-east-1c",
            "PubliclyAccessible": true,
            "ReplicationInstanceClass": "dms.t2.micro",
            "ReplicationSubnetGroup": {
                "ReplicationSubnetGroupDescription": "default",
                "Subnets": [
                    {
                        "SubnetStatus": "Active",
                        "SubnetIdentifier": "subnet-f6dd91af",
                        "SubnetAvailabilityZone": {
                            "Name": "us-east-1d"
                        }
                    },
                    {
                        "SubnetStatus": "Active",
                        "SubnetIdentifier": "subnet-3605751d",
                        "SubnetAvailabilityZone": {
                            "Name": "us-east-1b"
                        }
                    },
                    {
                        "SubnetStatus": "Active",
                        "SubnetIdentifier": "subnet-c2daefb5",
                        "SubnetAvailabilityZone": {
                            "Name": "us-east-1c"
                        }
                    },
                    {
                        "SubnetStatus": "Active",
                        "SubnetIdentifier": "subnet-85e90cb8",
                        "SubnetAvailabilityZone": {
                            "Name": "us-east-1e"
                        }
                    }
                ]
            },
            "VpcId": "vpc-6741a603",
            "SubnetGroupStatus": "Complete",
            "ReplicationSubnetGroupIdentifier": "default"
        },
        "AutoMinorVersionUpgrade": true,
        "ReplicationInstanceStatus": "creating",
        "KmsKeyId": "arn:aws:kms:us-east-1:123456789012:key/4dc17316-5543-4ded-b1e3-d53a7cfb411d",
        "AllocatedStorage": 5,
        "EngineVersion": "1.5.0",
        "ReplicationInstanceIdentifier": "test-rep-1",
        "PreferredMaintenanceWindow": "sun:06:00-sun:14:00",
        "PendingModifiedValues": {}
    ]
}
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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
DescribeReplicationInstanceTaskLogs

Returns information about the task logs for the specified task.

Request Syntax

```json
{
    "Marker": "string",
    "MaxRecords": number,
    "ReplicationInstanceArn": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 215).

The request accepts the following data in JSON format.

**Marker (p. 91)**

An optional pagination token provided by a previous request. If this parameter is specified, the response includes only records beyond the marker, up to the value specified by `MaxRecords`.

Type: String

Required: No

**MaxRecords (p. 91)**

The maximum number of records to include in the response. If more records exist than the specified `MaxRecords` value, a pagination token called a marker is included in the response so that the remaining results can be retrieved.

Default: 100

Constraints: Minimum 20, maximum 100.

Type: Integer

Required: No

**ReplicationInstanceArn (p. 91)**

The Amazon Resource Name (ARN) of the replication instance.

Type: String

Required: Yes

Response Syntax

```json
{
    "Marker": "string",
    "ReplicationInstanceArn": "string",
    "ReplicationInstanceTaskLogs": [
```
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.

**Marker (p. 91)**

An optional pagination token provided by a previous request. If this parameter is specified, the response includes only records beyond the marker, up to the value specified by MaxRecords.

Type: String

**ReplicationInstanceArn (p. 91)**

The Amazon Resource Name (ARN) of the replication instance.

Type: String

**ReplicationInstanceTaskLogs (p. 91)**

An array of replication task log metadata. Each member of the array contains the replication task name, ARN, and task log size (in bytes).

Type: Array of ReplicationInstanceTaskLog (p. 195) objects

Errors

For information about the errors that are common to all actions, see Common Errors (p. 217).

**InvalidResourceStateFault**

The resource is in a state that prevents it from being used for database migration.

HTTP Status Code: 400

**ResourceNotFoundException**

The resource could not be found.

HTTP Status Code: 400

Example

**Sample Request**

POST / HTTP/1.1
Host: dms.<region>.<domain>
x-amz-Date: <Date>
Authorization: AWS4-HMAC-SHA256
Credential=<Credential>,
SignedHeaders=contenttype;date;host;user-agent;x-amz-date;x-amz-target;x-amzn-requestid,Signature=<Signature>
User-Agent: <UserAgentString>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Connection: Keep-Alive
X-Amz-Target: AmazonDMSv20160101.DescribeReplicationInstanceTaskLogs
{
  "Filters": [
    {
      "Name": "replication-task-arn",
      "Values": [
        "arn:aws:dms:us-east-1:237565436:task:MY34U6Z4MSY52GRITX304AY"
      ]
    },
    {
      "MaxRecords": 0,
      "Marker": ""
    }
  ],
  "ReplicationInstanceTaskLogs": [
    {
      "ReplicationTaskName": "mysql-to-ddb",
      "ReplicationInstanceTaskLogSize": 3726134
    }
  ],
  "ReplicationInstanceArn": "arn:aws:dms:us-east-1:237565436:rep:CDSFSFSFFFSSUFCAW"
}

Sample Response

HTTP/1.1 200 OK
x-amzn-RequestId: <RequestId>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Date: <Date>
{
  "ReplicationInstanceTaskLogs": [
    {
      "ReplicationTaskName": "mysql-to-ddb",
      "ReplicationInstanceTaskLogSize": 3726134
    }
  ],
  "ReplicationInstanceArn": "arn:aws:dms:us-east-1:237565436:rep:CDSFSFSFFFSSUFCAW"
}

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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
• AWS SDK for Ruby V2
DescribeReplicationSubnetGroups

Returns information about the replication subnet groups.

Request Syntax

```json
{
  "Filters": [
    {
      "Name": "string",
      "Values": [ "string" ]
    },
    "Marker": "string",
    "MaxRecords": number
  ]
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 215).

The request accepts the following data in JSON format.

Filters (p. 95)

Filters applied to the describe action.

Type: Array of Filter (p. 184) objects

Required: No

Marker (p. 95)

An optional pagination token provided by a previous request. If this parameter is specified, the response includes only records beyond the marker, up to the value specified by MaxRecords.

Type: String

Required: No

MaxRecords (p. 95)

The maximum number of records to include in the response. If more records exist than the specified MaxRecords value, a pagination token called a marker is included in the response so that the remaining results can be retrieved.

Default: 100

Constraints: Minimum 20, maximum 100.

Type: Integer

Required: No

Response Syntax

```json
{
  "Marker": "string",
}
```
"ReplicationSubnetGroups": [ 
  { 
    "ReplicationSubnetGroupDescription": "string",
    "ReplicationSubnetGroupIdentifier": "string",
    "SubnetGroupStatus": "string",
    "Subnets": [ 
      { 
        "SubnetAvailabilityZone": { 
          "Name": "string"
        }, 
        "SubnetIdentifier": "string",
        "SubnetStatus": "string"
      }
    ], 
    "VpcId": "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.

**Marker (p. 95)**

An optional pagination token provided by a previous request. If this parameter is specified, the response includes only records beyond the marker, up to the value specified by MaxRecords.

Type: String

**ReplicationSubnetGroups (p. 95)**

A description of the replication subnet groups.

Type: Array of ReplicationSubnetGroup (p. 197) objects

Errors

For information about the errors that are common to all actions, see Common Errors (p. 217).

**ResourceNotFoundFault**

The resource could not be found.

HTTP Status Code: 400

Example

**Sample Request**

POST / HTTP/1.1
Host: dms.<region>.<domain>
x-amz-Date: <Date>
Authorization: AWS4-HMAC-SHA256
Credential=<Credential>,

API Version 2016-01-01
SignedHeaders=contenttype;date;host;user-agent;x-amz-date;x-amz-target;x-amzn-requestid,Signature=<Signature>
User-Agent: <UserAgentString>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Connection: Keep-Alive
X-Amz-Target: AmazonDMSv20160101.DescribeReplicationSubnetGroups
{
    "Filters":[
        {
            "Name":"replication-subnet-group-id",
            "Values": [
                "test-subnet-group"
            ]
        },
    ],
    "MaxRecords":0,
    "Marker":"
}

Sample Response

HTTP/1.1 200 OK
x-amzn-RequestId: <RequestId>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Date: <Date>
{
    "ReplicationSubnetGroups": [
        {
            "ReplicationSubnetGroupDescription":"dms testing",
            "Subnets": [
                {
                    "SubnetStatus":"Active",
                    "SubnetIdentifier":"subnet-f6dd91af",
                    "SubnetAvailabilityZone": {
                        "Name": "us-east-1d"
                    }
                },
                {
                    "SubnetStatus":"Active",
                    "SubnetIdentifier":"subnet-3605751d",
                    "SubnetAvailabilityZone": {
                        "Name": "us-east-1b"
                    }
                },
                {
                    "SubnetStatus":"Active",
                    "SubnetIdentifier":"subnet-c2daefb5",
                    "SubnetAvailabilityZone": {
                        "Name": "us-east-1c"
                    }
                }
            ],
            "VpcId": "vpc-6741a603",
            "SubnetGroupStatus": "Complete",
            "ReplicationSubnetGroupIdentifier": "test-subnet-group"
        }
    ]
}
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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
DescribeReplicationTaskAssessmentResults

Returns the task assessment results from Amazon S3. This action always returns the latest results.

Request Syntax

```
{
  "Marker": "string",
  "MaxRecords": number,
  "ReplicationTaskArn": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 215).

The request accepts the following data in JSON format.

**Marker (p. 99)**

An optional pagination token provided by a previous request. If this parameter is specified, the response includes only records beyond the marker, up to the value specified by `MaxRecords`.

Type: String

Required: No

**MaxRecords (p. 99)**

The maximum number of records to include in the response. If more records exist than the specified `MaxRecords` value, a pagination token called a marker is included in the response so that the remaining results can be retrieved.

Default: 100

Constraints: Minimum 20, maximum 100.

Type: Integer

Required: No

**ReplicationTaskArn (p. 99)**

- The Amazon Resource Name (ARN) string that uniquely identifies the task. When this input parameter is specified the API will return only one result and ignore the values of the max-records and marker parameters.

Type: String

Required: No

Response Syntax

```
{
  "BucketName": "string",
  "Marker": "string",
}
```
"ReplicationTaskAssessmentResults": [
  {
    "AssessmentResults": "string",
    "AssessmentResultsFile": "string",
    "AssessmentStatus": "string",
    "ReplicationTaskArn": "string",
    "ReplicationTaskIdentifier": "string",
    "ReplicationTaskLastAssessmentDate": number,
    "S3ObjectUrl": "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.

BucketName (p. 99)

- The Amazon S3 bucket where the task assessment report is located.
  Type: String

Marker (p. 99)

An optional pagination token provided by a previous request. If this parameter is specified, the response includes only records beyond the marker, up to the value specified by MaxRecords.

Type: String

ReplicationTaskAssessmentResults (p. 99)

The task assessment report.

Type: Array of ReplicationTaskAssessmentResult (p. 201) objects

Errors

For information about the errors that are common to all actions, see Common Errors (p. 217).

ResourceNotFoundFault

The resource could not be found.

HTTP Status Code: 400

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
• AWS SDK for JavaScript
• AWS SDK for PHP V3
• AWS SDK for Python
• AWS SDK for Ruby V2
DescribeReplicationTasks

Returns information about replication tasks for your account in the current region.

Request Syntax

```json
{
    "Filters": [
        {
            "Name": "string",
            "Values": [ "string" ]
        }
    ],
    "Marker": "string",
    "MaxRecords": number
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 215).

The request accepts the following data in JSON format.

**Filters (p. 102)**

Filters applied to the describe action.

Valid filter names: replication-task-arn | replication-task-id | migration-type | endpoint-arn | replication-instance-arn

Type: Array of Filter (p. 184) objects

Required: No

**Marker (p. 102)**

An optional pagination token provided by a previous request. If this parameter is specified, the response includes only records beyond the marker, up to the value specified by MaxRecords.

Type: String

Required: No

**MaxRecords (p. 102)**

The maximum number of records to include in the response. If more records exist than the specified MaxRecords value, a pagination token called a marker is included in the response so that the remaining results can be retrieved.

Default: 100

Constraints: Minimum 20, maximum 100.

Type: Integer

Required: No
Response Syntax

```json
{
  "Marker": "string",
  "ReplicationTasks": [
    {
      "CdcStartPosition": "string",
      "CdcStopPosition": "string",
      "LastFailureMessage": "string",
      "MigrationType": "string",
      "RecoveryCheckpoint": "string",
      "ReplicationInstanceArn": "string",
      "ReplicationTaskArn": "string",
      "ReplicationTaskCreationDate": number,
      "ReplicationTaskIdentifier": "string",
      "ReplicationTaskSettings": "string",
      "ReplicationTaskStartDate": number,
      "ReplicationTaskStats": {
        "ElapsedTimeMillis": number,
        "FullLoadProgressPercent": number,
        "TablesErrored": number,
        "TablesLoaded": number,
        "TablesLoading": number,
        "TablesQueued": number
      },
      "SourceEndpointArn": "string",
      "Status": "string",
      "StopReason": "string",
      "TableMappings": "string",
      "TargetEndpointArn": "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.

**Marker (p. 103)**

An optional pagination token provided by a previous request. If this parameter is specified, the response includes only records beyond the marker, up to the value specified by MaxRecords.

Type: String

**ReplicationTasks (p. 103)**

A description of the replication tasks.

Type: Array of ReplicationTask (p. 198) objects

Errors

For information about the errors that are common to all actions, see Common Errors (p. 217).

**ResourceNotFoundException**

The resource could not be found.
HTTP Status Code: 400

Example

Sample Request

POST / HTTP/1.1
Host: dms.<region>.<domain>
Authorization: AWS4-HMAC-SHA256
x-amz-Date: <Date>
SignedHeaders=content-type;date;host;user-agent;x-amz-date;x-amz-target;x-amzn-requestId,Signature=
User-Agent: <UserAgentString>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Connection: Keep-Alive
X-Amz-Target: AmazonDMSv20160101.DescribeReplicationTasks
{
  "Filters": [
    {
      "Name": "endpoint-arn",
      "Values": [
        "arn:aws:dms:us-east-1:123456789012:endpoint:RZZK4EZWSUANC7Y3P4E776WHBE"
      ]
    },
    {
      "MaxRecords": 0,
      "Marker": ""
    }
  ]
}

Sample Response

HTTP/1.1 200 OK
x-amzn-RequestId: <RequestId>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Date: <Date>
{
  "ReplicationTasks": [
    {
      "ReplicationTaskIdentifier": "aks145",
      "ReplicationInstanceArn": "arn:aws:dms:us-east-1:123456789012:rep:6USOU3656XJYUAD3BCJS3V1Q",
      "TableMappings": "( \n        { "Type": "Include", "SourceSchema": "testDB", "SourceTable": "%" } \n      )",
      "ReplicationTaskStartDate": 1452868617.764,
      "ReplicationTaskStats": {
        "TablesLoading": 0,
        "TablesQueued": 0,
        "TablesErrored": 0,
      }
    }
  ]
}
"FullLoadProgressPercent":100,
"TablesLoaded":0,
"ElapsedTimeMillis":0
},
"Status":"stopped",
"ReplicationTaskArn":"arn:aws:dms:us-east-1:123456789012:task:RALPZGY13IUSJCBKIRBEURKDF",
"ReplicationTaskCreationDate":1449185680.107,
"MigrationType":"full-load",
"TargetEndpointArn":"arn:aws:dms:us-east-1:123456789012:endpoint:GVBUJQXJZASXWHTWCLN1WNT57E",
"ReplicationTaskSettings":{"RelatedTargetName":null,
"FullLoadSettings":{"TargetTablePrepMode":"DO_NOTHING",
"CreatePkAfterFullLoad":false,
"StopTaskCachedChangesApplied":false,
"StopTaskCachedChangesNotApplied":false,
"ResumeEnabled":false,
"ResumeMinTableSize":100000,
"ResumeOnlyClusteredPKTables":false,
"MaxFullLoadSubTasks":8,
"TransactionConsistencyTimeout":600,
"CommitRate":10000
}]
]

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

Returns information about the schema for the specified endpoint.

Request Syntax

```json
{
   "EndpointArn": "string",
   "Marker": "string",
   "MaxRecords": number
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 215).

The request accepts the following data in JSON format.

**EndpointArn (p. 106)**

The Amazon Resource Name (ARN) string that uniquely identifies the endpoint.

Type: String

Required: Yes

**Marker (p. 106)**

An optional pagination token provided by a previous request. If this parameter is specified, the response includes only records beyond the marker, up to the value specified by MaxRecords.

Type: String

Required: No

**MaxRecords (p. 106)**

The maximum number of records to include in the response. If more records exist than the specified MaxRecords value, a pagination token called a marker is included in the response so that the remaining results can be retrieved.

Default: 100

Constraints: Minimum 20, maximum 100.

Type: Integer

Required: No

Response Syntax

```json
{
   "Marker": "string",
   "Schemas": [ "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.

Marker (p. 106)

An optional pagination token provided by a previous request. If this parameter is specified, the response includes only records beyond the marker, up to the value specified by MaxRecords.

Type: String

Schemas (p. 106)

The described schema.

Type: Array of strings

Errors

For information about the errors that are common to all actions, see Common Errors (p. 217).

InvalidResourceStateFault

The resource is in a state that prevents it from being used for database migration.

HTTP Status Code: 400

ResourceNotFoundFault

The resource could not be found.

HTTP Status Code: 400

Example

Sample Request

```plaintext
POST / HTTP/1.1
Host: dms.<region>.<domain>
x-amz-Date: <Date>
Authorization: AWS4-HMAC-SHA256
Credential=<Credential>,
SignedHeaders=contenttype;date;host;user-agent;x-amz-date;x-amz-target;x-amzn-requestid,Signature=<Signature>
User-Agent: <UserAgentString>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Connection: Keep-Alive
X-Amz-Target: AmazonDMSv20160101.DescribeSchemas
{
  "EndpointArn":"arn:aws:dms:us-east-1:123456789012:endpoint:WKBULDZKUDQZIHPOUEH34EMU",
  "MaxRecords":0,
  "Marker":"
```
Sample Response

HTTP/1.1 200 OK
x-amzn-RequestId: <RequestId>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Date: <Date>
{
  "Schemas": [
    "testDB",
    "tmp"
  ]
}

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

Returns table statistics on the database migration task, including table name, rows inserted, rows updated, and rows deleted.

Note that the "last updated" column the DMS console only indicates the time that AWS DMS last updated the table statistics record for a table. It does not indicate the time of the last update to the table.

Request Syntax

```json
{
    "Filters": [
        {
            "Name": "string",
            "Values": [ "string" ]
        }
    ],
    "Marker": "string",
    "MaxRecords": number,
    "ReplicationTaskArn": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 215).

The request accepts the following data in JSON format.

Filters (p. 109)

Filters applied to the describe table statistics action.

Valid filter names: schema-name | table-name | table-state

A combination of filters creates an AND condition where each record matches all specified filters.

Type: Array of Filter (p. 184) objects

Required: No

Marker (p. 109)

An optional pagination token provided by a previous request. If this parameter is specified, the response includes only records beyond the marker, up to the value specified by MaxRecords.

Type: String

Required: No

MaxRecords (p. 109)

The maximum number of records to include in the response. If more records exist than the specified MaxRecords value, a pagination token called a marker is included in the response so that the remaining results can be retrieved.

Default: 100

Constraints: Minimum 20, maximum 500.
Type: Integer
Required: No

**ReplicationTaskArn (p. 109)**

The Amazon Resource Name (ARN) of the replication task.

Type: String
Required: Yes

### Response Syntax

```json
{
  "Marker": "string",
  "ReplicationTaskArn": "string",
  "TableStatistics": [
    {
      "Ddls": number,
      "Deletes": number,
      "FullLoadCondtnlChkFailedRows": number,
      "FullLoadErrorRows": number,
      "FullLoadRows": number,
      "Inserts": number,
      "LastUpdateTime": number,
      "SchemaName": "string",
      "TableName": "string",
      "TableState": "string",
      "Updates": number,
      "ValidationFailedRecords": number,
      "ValidationPendingRecords": number,
      "ValidationState": "string",
      "ValidationStateDetails": "string",
      "ValidationSuspendedRecords": number
    }
  ]
}
```

### Response Elements

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

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

**Marker (p. 110)**

An optional pagination token provided by a previous request. If this parameter is specified, the response includes only records beyond the marker, up to the value specified by MaxRecords.

Type: String

**ReplicationTaskArn (p. 110)**

The Amazon Resource Name (ARN) of the replication task.

Type: String

**TableStatistics (p. 110)**

The table statistics.
Errors

For information about the errors that are common to all actions, see Common Errors (p. 217).

InvalidResourceStateFault

The resource is in a state that prevents it from being used for database migration.

HTTP Status Code: 400

ResourceNotFoundFault

The resource could not be found.

HTTP Status Code: 400

Example

Sample Request

```plaintext
POST / HTTP/1.1
Host: dms.<region>.<domain>
x-amz-Date: <Date>
Authorization: AWS4-HMAC-SHA256
Credential=<Credential>,
SignedHeaders=contenttype;date;host;user-agent;x-amz-date;x-amz-target;x-amzn-requestid,Signature=<Signature>
User-Agent: <UserAgentString>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Connection: Keep-Alive
X-Amz-Target: AmazonDMSv20160101.DescribeTableStatistics
{
  "SchemaName": "",
  "TableNames": [""],
  "MaxRecords": 0,
  "Marker": ""
}
```

Sample Response

```plaintext
HTTP/1.1 200 OK
x-amzn-RequestId: <RequestId>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Date: <Date>
{
  "TableStatistics": [
    {
      "SchemaName": "",
      "TableNames": [""],
      "MaxRecords": 0,
      "Marker": ""
    }
  ]
}
```
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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
ImportCertificate

Uploads the specified certificate.

Request Syntax

```json
{
    "CertificateIdentifier": "string",
    "CertificatePem": "string",
    "CertificateWallet": blob,
    "Tags": [
        {
            "Key": "string",
            "Value": "string"
        }
    ]
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 215).

The request accepts the following data in JSON format.

CertificateIdentifier (p. 113)

The customer-assigned name of the certificate. Valid characters are A-z and 0-9.

Type: String

Required: Yes

CertificatePem (p. 113)

The contents of the .pem X.509 certificate file for the certificate.

Type: String

Required: No

CertificateWallet (p. 113)

The location of the imported Oracle Wallet certificate for use with SSL.

Type: Base64-encoded binary data object

Required: No

Tags (p. 113)

The tags associated with the certificate.

Type: Array of Tag (p. 213) objects

Required: No

Response Syntax

```json
{
}
```
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.

Certificate (p. 113)

The certificate to be uploaded.

Type: Certificate (p. 169) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 217).

InvalidCertificateFault

The certificate was not valid.

HTTP Status Code: 400

ResourceAlreadyExistsFault

The resource you are attempting to create already exists.

HTTP Status Code: 400

ResourceQuotaExceededFault

The quota for this resource quota has been exceeded.

HTTP Status Code: 400

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
• AWS SDK for JavaScript
• AWS SDK for PHP V3
• AWS SDK for Python
• AWS SDK for Ruby V2
ListTagsForResource

Lists all tags for an AWS DMS resource.

Request Syntax

```json
{
   "ResourceArn": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 215).

The request accepts the following data in JSON format.

**ResourceArn (p. 116)**

The Amazon Resource Name (ARN) string that uniquely identifies the AWS DMS resource.

Type: String

Required: Yes

Response Syntax

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

Response Elements

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

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

**TagList (p. 116)**

A list of tags for the resource.

Type: Array of Tag (p. 213) objects

Errors

For information about the errors that are common to all actions, see Common Errors (p. 217).
ResourceNotFoundFault

The resource could not be found.

HTTP Status Code: 400

Example

Sample Request

POST / HTTP/1.1
Host: dms.<region>.<domain>
x-amz-Date: <Date>
Authorization: AWS4-HMAC-SHA256
Credential=<Credential>,
SignedHeaders=contenttype:date:host;user-agent;x-amz-date;x-amz-target;x-amzn-requestid,Signature=<Signature>
User-Agent: <UserAgentString>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Connection: Keep-Alive
X-Amz-Target: AmazonDMSv20160101.ListTagsForResource
{
}

Sample Response

HTTP/1.1 200 OK
x-amzn-RequestId: <RequestId>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Date: <Date>
{
    "TagList":[
    {
        "Value":"1234",
        "Key":"CostCenter"
    }
    ]
}

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
• AWS SDK for Java
• AWS SDK for JavaScript
• AWS SDK for PHP V3
• AWS SDK for Python
• AWS SDK for Ruby V2
ModifyEndpoint

Modifies the specified endpoint.

Request Syntax

```json
{
    "CertificateArn": "string",
    "DatabaseName": "string",
    "DmsTransferSettings": {
        "BucketName": "string",
        "ServiceAccessRoleArn": "string"
    },
    "DynamoDbSettings": {
        "ServiceAccessRoleArn": "string"
    },
    "EndpointArn": "string",
    "EndpointIdentifier": "string",
    "EndpointType": "string",
    "EngineName": "string",
    "ExternalTableDefinition": "string",
    "ExtraConnectionAttributes": "string",
    "MongoDbSettings": {
        "AuthMechanism": "string",
        "AuthSource": "string",
        "AuthType": "string",
        "DatabaseName": "string",
        "DocsToInvestigate": "string",
        "ExtractDocId": "string",
        "KmsKeyId": "string",
        "NestingLevel": "string",
        "Password": "string",
        "Port": number,
        "ServerName": "string",
        "Username": "string"
    },
    "Password": "string",
    "Port": number,
    "S3Settings": {
        "BucketFolder": "string",
        "BucketName": "string",
        "CompressionType": "string",
        "CsvDelimiter": "string",
        "CsvRowDelimiter": "string",
        "ExternalTableDefinition": "string",
        "ServiceAccessRoleArn": "string"
    },
    "ServerName": "string",
    "ServiceAccessRoleArn": "string",
    "SslMode": "string",
    "Username": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 215).

The request accepts the following data in JSON format.
CertificateArn (p. 119)

The Amazon Resource Name (ARN) of the certificate used for SSL connection.
Type: String
Required: No

DatabaseName (p. 119)

The name of the endpoint database.
Type: String
Required: No

DmsTransferSettings (p. 119)

The settings in JSON format for the DMS Transfer type source endpoint.
Attributes include:
• serviceAccessRoleArn - The IAM role that has permission to access the Amazon S3 bucket.
• BucketName - The name of the S3 bucket to use.
• compressionType - An optional parameter to use GZIP to compress the target files. Set to NONE (the default) or do not use to leave the files uncompressed.

Shorthand syntax: ServiceAccessRoleArn=string, BucketName=string, CompressionType=string

JSON syntax:

{ "ServiceAccessRoleArn": "string", "BucketName": "string", "CompressionType": "none" | "gzip" }

Type: DmsTransferSettings (p. 173) object
Required: No

DynamoDbSettings (p. 119)

Settings in JSON format for the target Amazon DynamoDB endpoint. For more information about the available settings, see the Using Object Mapping to Migrate Data to DynamoDB section at Using an Amazon DynamoDB Database as a Target for AWS Database Migration Service.

Type: DynamoDbSettings (p. 174) object
Required: No

EndpointArn (p. 119)

The Amazon Resource Name (ARN) string that uniquely identifies the endpoint.
Type: String
Required: Yes

EndpointIdentifier (p. 119)

The database endpoint identifier. Identifiers must begin with a letter; must contain only ASCII letters, digits, and hyphens; and must not end with a hyphen or contain two consecutive hyphens.
Type: String
Required: No

EndpointType (p. 119)

The type of endpoint.
Type: String

Valid Values: source | target

Required: No

**EngineName (p. 119)**

The type of engine for the endpoint. Valid values, depending on the EndPointType, include mysql, oracle, postgres, mariadb, aurora, aurora-postgresql, redshift, s3, db2, azuredb, sybase, sybase, dynamodb, mongodb, and sqlserver.

Type: String

Required: No

**ExternalTableDefinition (p. 119)**

The external table definition.

Type: String

Required: No

**ExtraConnectionAttributes (p. 119)**

Additional attributes associated with the connection. To reset this parameter, pass the empty string (""") as an argument.

Type: String

Required: No

**MongoDBSettings (p. 119)**

Settings in JSON format for the source MongoDB endpoint. For more information about the available settings, see the Configuration Properties When Using MongoDB as a Source for AWS Database Migration Service section at Using Amazon S3 as a Target for AWS Database Migration Service.

Type: MongoDBSettings (p. 185) object

Required: No

**Password (p. 119)**

The password to be used to login to the endpoint database.

Type: String

Required: No

**Port (p. 119)**

The port used by the endpoint database.

Type: Integer

Required: No

**S3Settings (p. 119)**

Settings in JSON format for the target S3 endpoint. For more information about the available settings, see the Extra Connection Attributes section at Using Amazon S3 as a Target for AWS Database Migration Service.

Type: S3Settings (p. 205) object
ServerName (p. 119)
The name of the server where the endpoint database resides.
Type: String
Required: No

ServiceAccessRoleArn (p. 119)
The Amazon Resource Name (ARN) for the service access role you want to use to modify the endpoint.
Type: String
Required: No

SslMode (p. 119)
The SSL mode to be used.
SSL mode can be one of four values: none, require, verify-ca, verify-full.
The default value is none.
Type: String
Valid Values: none | require | verify-ca | verify-full
Required: No

Username (p. 119)
The user name to be used to login to the endpoint database.
Type: String
Required: No

Response Syntax

```json
{
   "Endpoint": {
      "CertificateArn": "string",
      "DatabaseName": "string",
      "DmsTransferSettings": {
         "BucketName": "string",
         "ServiceAccessRoleArn": "string"
      },
      "DynamoDbSettings": {
         "ServiceAccessRoleArn": "string"
      },
      "EndpointArn": "string",
      "EndpointIdentifier": "string",
      "EndpointType": "string",
      "EngineDisplayName": "string",
      "EngineName": "string",
      "ExternalId": "string",
      "ExternalTableDefinition": "string",
      "ExtraConnectionAttributes": "string",
      "KmsKeyId": "string",
      "MongoDbSettings": {}
   }
}
```

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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.

**Endpoint (p. 122)**

The modified endpoint.

Type: Endpoint (p. 175) object

**Errors**

For information about the errors that are common to all actions, see Common Errors (p. 217).

**AccessDeniedFault**

AWS DMS was denied access to the endpoint.

HTTP Status Code: 400

**InvalidResourceStateFault**

The resource is in a state that prevents it from being used for database migration.

HTTP Status Code: 400

**KMSKeyNotAccessibleFault**

AWS DMS cannot access the KMS key.
HTTP Status Code: 400

ResourceAlreadyExistsFault

The resource you are attempting to create already exists.

HTTP Status Code: 400

ResourceNotFoundFault

The resource could not be found.

Example

Sample Request

POST / HTTP/1.1
Host: dms.<region>.<domain>
x-amz-Date: <Date>
Authorization: AWS4-HMAC-SHA256
Credential=<Credential>,
SignedHeaders=contenttype;date;host;user-agent;x-amz-date;x-amz-target;x-amzn-requestid,Signature=<Signature>
User-Agent: <UserAgentString>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Connection: Keep-Alive
X-Amz-Target: AmazonDMSv20160101.ModifyEndpoint
{
  "EndpointIdentifier":"",
  "EndpointType":"target",
  "EngineName":"
  "Username":",
  "Password":",
  "ServerName":",
  "Port":0,
  "DatabaseName":",
  "ExtraConnectionAttributes":"
}

Sample Response

HTTP/1.1 200 OK
x-amzn-RequestId: <RequestId>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Date: <Date>
{
  "Endpoint":{
    "Username":"username",
    "Status":"active",
    "ServerName":"apurvap-source.cxln7iyxxllo.us-west-
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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
ModifyEventSubscription

Modifies an existing AWS DMS event notification subscription.

Request Syntax

```json
{
   "Enabled": boolean,
   "EventCategories": [ "string" ],
   "SnsTopicArn": "string",
   "SourceType": "string",
   "SubscriptionName": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 215).

The request accepts the following data in JSON format.

**Enabled (p. 126)**

A Boolean value; set to true to activate the subscription.

Type: Boolean

Required: No

**EventCategories (p. 126)**

A list of event categories for a source type that you want to subscribe to. Use the DescribeEventCategories action to see a list of event categories.

Type: Array of strings

Required: No

**SnsTopicArn (p. 126)**

The Amazon Resource Name (ARN) of the Amazon SNS topic created for event notification. The ARN is created by Amazon SNS when you create a topic and subscribe to it.

Type: String

Required: No

**SourceType (p. 126)**

The type of AWS DMS resource that generates the events you want to subscribe to.

Valid values: replication-instance | migration-task

Type: String

Required: No

**SubscriptionName (p. 126)**

The name of the AWS DMS event notification subscription to be modified.
Response Syntax

```json
{
    "EventSubscription": {
        "CustomerAwsId": "string",
        "CustSubscriptionId": "string",
        "Enabled": boolean,
        "EventCategoriesList": [ "string" ],
        "SnsTopicArn": "string",
        "SourceIdsList": [ "string" ],
        "SourceType": "string",
        "Status": "string",
        "SubscriptionCreationTime": "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.

**EventSubscription (p. 127)**

The modified event subscription.

Type: EventSubscription (p. 182) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 217).

**ResourceNotFoundFault**

The resource could not be found.

HTTP Status Code: 400

**ResourceQuotaExceededFault**

The quota for this resource quota has been exceeded.

HTTP Status Code: 400

**SNSInvalidTopicFault**

The SNS topic is invalid.

HTTP Status Code: 400

**SNSNoAuthorizationFault**

You are not authorized for the SNS subscription.

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

Modifies the replication instance to apply new settings. You can change one or more parameters by specifying these parameters and the new values in the request.

Some settings are applied during the maintenance window.

Request Syntax

```json
{
  "AllocatedStorage": number,
  "AllowMajorVersionUpgrade": boolean,
  "ApplyImmediately": boolean,
  "AutoMinorVersionUpgrade": boolean,
  "EngineVersion": "string",
  "MultiAZ": boolean,
  "PreferredMaintenanceWindow": "string",
  "ReplicationInstanceArn": "string",
  "ReplicationInstanceClass": "string",
  "ReplicationInstanceIdentifier": "string",
  "VpcSecurityGroupIds": [ "string" ]
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 215).

The request accepts the following data in JSON format.

AllocatedStorage (p. 129)

The amount of storage (in gigabytes) to be allocated for the replication instance.

Type: Integer

Required: No

AllowMajorVersionUpgrade (p. 129)

Indicates that major version upgrades are allowed. Changing this parameter does not result in an outage and the change is asynchronously applied as soon as possible.

Constraints: This parameter must be set to true when specifying a value for the EngineVersion parameter that is a different major version than the replication instance's current version.

Type: Boolean

Required: No

ApplyImmediately (p. 129)

Indicates whether the changes should be applied immediately or during the next maintenance window.

Type: Boolean

Required: No
AutoMinorVersionUpgrade (p. 129)

Indicates that minor version upgrades will be applied automatically to the replication instance during the maintenance window. Changing this parameter does not result in an outage except in the following case and the change is asynchronously applied as soon as possible. An outage will result if this parameter is set to true during the maintenance window, and a newer minor version is available, and AWS DMS has enabled auto patching for that engine version.

Type: Boolean
Required: No

EngineVersion (p. 129)

The engine version number of the replication instance.

Type: String
Required: No

MultiAZ (p. 129)

Specifies if the replication instance is a Multi-AZ deployment. You cannot set the AvailabilityZone parameter if the Multi-AZ parameter is set to true.

Type: Boolean
Required: No

PreferredMaintenanceWindow (p. 129)

The weekly time range (in UTC) during which system maintenance can occur, which might result in an outage. Changing this parameter does not result in an outage, except in the following situation, and the change is asynchronously applied as soon as possible. If moving this window to the current time, there must be at least 30 minutes between the current time and end of the window to ensure pending changes are applied.

Default: Uses existing setting
Valid Days: Mon | Tue | Wed | Thu | Fri | Sat | Sun
Constraints: Must be at least 30 minutes
Type: String
Required: No

ReplicationInstanceArn (p. 129)

The Amazon Resource Name (ARN) of the replication instance.

Type: String
Required: Yes

ReplicationInstanceClass (p. 129)

The compute and memory capacity of the replication instance.

Valid Values: dms.t2.micro | dms.t2.small | dms.t2.medium | dms.t2.large | dms.c4.large | dms.c4.xlarge | dms.c4.2xlarge | dms.c4.4xlarge
Type: String
Required: No

**ReplicationInstanceIdentifier (p. 129)**

The replication instance identifier. This parameter is stored as a lowercase string.

Type: String
Required: No

**VpcSecurityGroupIds (p. 129)**

Specifies the VPC security group to be used with the replication instance. The VPC security group must work with the VPC containing the replication instance.

Type: Array of strings
Required: No

**Response Syntax**

```json
{
    "ReplicationInstance": {
        "AllocatedStorage": number,
        "AutoMinorVersionUpgrade": boolean,
        "AvailabilityZone": "string",
        "EngineVersion": "string",
        "FreeUntil": number,
        "InstanceCreateTime": number,
        "KmsKeyId": "string",
        "MultiAZ": boolean,
        "PendingModifiedValues": {
            "AllocatedStorage": number,
            "EngineVersion": "string",
            "MultiAZ": boolean,
            "ReplicationInstanceClass": "string"
        },
        "PreferredMaintenanceWindow": "string",
        "PubliclyAccessible": boolean,
        "ReplicationInstanceArn": "string",
        "ReplicationInstanceClass": "string",
        "ReplicationInstanceIdentifier": "string",
        "ReplicationInstancePrivateIpAddress": "string",
        "ReplicationInstancePrivateIpAddresses": [ "string" ],
        "ReplicationInstancePublicIpAddress": "string",
        "ReplicationInstancePublicIpAddresses": [ "string" ],
        "ReplicationInstanceStatus": "string",
        "ReplicationSubnetGroup": {
            "ReplicationSubnetGroupDescription": "string",
            "ReplicationSubnetGroupIdentifier": "string",
            "SubnetGroupStatus": "string",
            "Subnets": [
                { "SubnetAvailabilityZone": { "Name": "string" },
                "SubnetIdentifier": "string",
                "SubnetStatus": "string"
            }
        },
        "VpcId": "string"
    }
}
```

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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.

**ReplicationInstance (p. 131)**

The modified replication instance.

Type: ReplicationInstance (p. 191) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 217).

**InsufficientResourceCapacityFault**

There are not enough resources allocated to the database migration.

HTTP Status Code: 400

**InvalidResourceStateFault**

The resource is in a state that prevents it from being used for database migration.

HTTP Status Code: 400

**ResourceAlreadyExistsFault**

The resource you are attempting to create already exists.

HTTP Status Code: 400

**ResourceNotFoundFault**

The resource could not be found.

HTTP Status Code: 400

**StorageQuotaExceededFault**

The storage quota has been exceeded.

HTTP Status Code: 400

**UpgradeDependencyFailureFault**

An upgrade dependency is preventing the database migration.

HTTP Status Code: 400
Example

Sample Request

```
POST / HTTP/1.1
Host: dms.<region>.<domain>
x-amz-Date: <Date>
Authorization: AWS4-HMAC-SHA256
Credential=<Credential>,
SignedHeaders=contenttype;date;host;user-agent;x-amz-date;x-amz-target;x-amzn-requestid,Signature=<Signature>
User-Agent: <UserAgentString>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Connection: Keep-Alive
X-Amz-Target: AmazonDMSv20160101.ModifyReplicationInstance
{
    "ReplicationInstanceArn":"arn:aws:dms:us-east-1:123456789012:rep:PWEBBEUNOLU7VE2OHT4H4QGQ",
    "AllocatedStorage":0,
    "ApplyImmediately":true,
    "ReplicationInstanceClass":"dms.t2.small",
    "PreferredMaintenanceWindow":"",
    "EngineVersion":"
    "AllowMajorVersionUpgrade":true,
    "AutoMinorVersionUpgrade":true,
    "ReplicationInstanceIdentifier":"
}
```

Sample Response

```
HTTP/1.1 200 OK
x-amzn-RequestId: <RequestId>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Date: <Date>
{
    "ReplicationInstance":{
        "AvailabilityZone":"us-east-1c",
        "ReplicationInstancePrivateIpAddress":"172.31.6.45",
        "ReplicationInstanceArn":"arn:aws:dms:us-east-1:123456789012:rep:PWEBBEUNOLU7VE2OHT4H4GQ",
        "ReplicationInstanceClass":"dms.t2.micro",
        "ReplicationSubnetGroup":{
            "ReplicationSubnetGroupDescription":"default",
            "Subnets":[
                {
                    "SubnetStatus":"Active",
                    "SubnetIdentifier":"subnet-f6dd91af",
                    "SubnetAvailabilityZone":{
                        "Name":"us-east-1d"
                    }
                },
                {
                    "SubnetStatus":"Active",
                    "SubnetIdentifier":"subnet-3605751d",
                    "SubnetAvailabilityZone":{
                        \n                    }
                }
            ]
        }
    }
}
```
"Name":"us-east-1b"
},
{
"SubnetStatus":"Active",
"SubnetIdentifier":"subnet-c2daefb5",
"SubnetAvailabilityZone":{
"Name":"us-east-1c"
},
{
"SubnetStatus":"Active",
"SubnetIdentifier":"subnet-85e90cb8",
"SubnetAvailabilityZone":{
"Name":"us-east-1e"
}
}
},
"VpcId":"vpc-6741a603",
"SubnetGroupStatus":"Complete",
"ReplicationSubnetGroupIdentifier":"default"
},
"AutoMinorVersionUpgrade":true,
"ReplicationInstanceStatus":"available",
"KmsKeyId":"arn:aws:kms:us-east-1:123456789012:key/4dc17316-5543-4ded-b1e3-d53a7cfa411d",
"InstanceCreateTime":1457645140.38,
"ReplicationInstancePublicIpAddress":"52.87.66.36",
"AllocatedStorage":5,
"EngineVersion":"1.5.0",
"ReplicationInstanceIdentifier":"test-rep-1",
"PubliclyAccessible":true,
"PreferredMaintenanceWindow":"sun:06:00-sun:14:00",
"PendingModifiedValues":{
"ReplicationInstanceClass":"dms.t2.small"
}
}]

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

Modifies the settings for the specified replication subnet group.

Request Syntax

```
{
  "ReplicationSubnetGroupDescription": "string",
  "ReplicationSubnetGroupIdentifier": "string",
  "SubnetIds": ["string"]
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 215).

The request accepts the following data in JSON format.

**ReplicationSubnetGroupDescription** (p. 135)

The description of the replication instance subnet group.

Type: String  
Required: No

**ReplicationSubnetGroupIdentifier** (p. 135)

The name of the replication instance subnet group.

Type: String  
Required: Yes

**SubnetIds** (p. 135)

A list of subnet IDs.

Type: Array of strings  
Required: Yes

Response Syntax

```
{
  "ReplicationSubnetGroup": {
    "ReplicationSubnetGroupDescription": "string",
    "ReplicationSubnetGroupIdentifier": "string",
    "SubnetGroupStatus": "string",
    "Subnets": [
      {
        "SubnetAvailabilityZone": {
          "Name": "string"
        }
      }
    ]
  }
}
```

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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.

ReplicationSubnetGroup (p. 135)

The modified replication subnet group.

Type: ReplicationSubnetGroup (p. 197) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 217).

AccessDeniedFault

AWS DMS was denied access to the endpoint.

HTTP Status Code: 400

InvalidSubnet

The subnet provided is invalid.

HTTP Status Code: 400

ReplicationSubnetGroupDoesNotCoverEnoughAZs

The replication subnet group does not cover enough Availability Zones (AZs). Edit the replication subnet group and add more AZs.

HTTP Status Code: 400

ResourceNotFoundFault

The resource could not be found.

HTTP Status Code: 400

ResourceQuotaExceededFault

The quota for this resource quota has been exceeded.

HTTP Status Code: 400

SubnetAlreadyInUse

The specified subnet is already in use.

HTTP Status Code: 400
Example

Sample Request

POST / HTTP/1.1
Host: dms.<region>.<domain>
x-amz-Date: <Date>
Authorization: AWS4-HMAC-SHA256
Credential=<Credential>,
SignedHeaders=contenttype;date;host;user-agent;x-amz-date;x-amz-target;x-amzn-requestid,Signature=<Signature>
User-Agent: <UserAgentString>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Connection: Keep-Alive
X-Amz-Target: AmazonDMSv20160101.ModifyReplicationSubnetGroup
{
    "ReplicationSubnetGroupIdentifier":"test-subnet-group",
    "ReplicationSubnetGroupDescription":"",
    "SubnetIds": [ 
        "subnet-f6dd91af",
        "subnet-3605751d 
    ]
}

Sample Response

HTTP/1.1 200 OK
x-amzn-RequestId: <RequestId>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Date: <Date>

{
    "ReplicationSubnetGroup": { 
        "ReplicationSubnetGroupDescription": "dms testing",
        "Subnets": [ 
            { 
                "SubnetStatus": "Active",
                "SubnetIdentifier": "subnet-f6dd91af",
                "SubnetAvailabilityZone": { 
                    "Name": "us-east-1d"
                }
            },
            { 
                "SubnetStatus": "Active",
                "SubnetIdentifier": "subnet-3605751d",
                "SubnetAvailabilityZone": { 
                    "Name": "us-east-1b"
                }
            }
        ],
        "VpcId": "vpc-6741a603",
        "SubnetGroupStatus": "Complete",
        "ReplicationSubnetGroupIdentifier": "test-subnet-group"
    }
}
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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
ModifyReplicationTask

Modifies the specified replication task.

You can't modify the task endpoints. The task must be stopped before you can modify it.

For more information about AWS DMS tasks, see the AWS DMS user guide at Working with Migration Tasks

Request Syntax

```json
{
    "CdcStartPosition": "string",
    "CdcStartTime": number,
    "CdcStopPosition": "string",
    "MigrationType": "string",
    "ReplicationTaskArn": "string",
    "ReplicationTaskIdentifier": "string",
    "ReplicationTaskSettings": "string",
    "TableMappings": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 215).

The request accepts the following data in JSON format.

CdcStartPosition (p. 139)

Indicates when you want a change data capture (CDC) operation to start. Use either CdcStartPosition or CdcStartTime to specify when you want a CDC operation to start. Specifying both values results in an error.

The value can be in date, checkpoint, or LSN/SCN format.

Date Example: `--cdc-start-position "2018-03-08T12:12:12"`

Checkpoint Example: `--cdc-start-position "checkpoint:V1#27#mysql-bin-changelog.157832:1975:-1:2002:677883278264080:mysql-bin-changelog.157832:1876#0#0##0##0#93"`

LSN Example: `--cdc-start-position "mysql-bin-changelog.000024:373"`

Type: String

Required: No

CdcStartTime (p. 139)

Indicates the start time for a change data capture (CDC) operation. Use either CdcStartTime or CdcStartPosition to specify when you want a CDC operation to start. Specifying both values results in an error.

Timestamp Example: `--cdc-start-time "2018-03-08T12:12:12"`

Type: Timestamp
Required: No

**CdcStopPosition (p. 139)**

Indicates when you want a change data capture (CDC) operation to stop. The value can be either server time or commit time.

Server time example: `--cdc-stop-position "server_time:3018-02-09T12:12:12"`

Commit time example: `--cdc-stop-position "commit_time: 3018-02-09T12:12:12 "`

Type: String

Required: No

**MigrationType (p. 139)**

The migration type.

Valid values: `full-load | cdc | full-load-and-cdc`

Type: String

Valid Values: `full-load | cdc | full-load-and-cdc`

Required: No

**ReplicationTaskArn (p. 139)**

The Amazon Resource Name (ARN) of the replication task.

Type: String

Required: Yes

**ReplicationTaskIdentifier (p. 139)**

The replication task identifier.

Constraints:
- Must contain from 1 to 255 alphanumeric characters or hyphens.
- First character must be a letter.
- Cannot end with a hyphen or contain two consecutive hyphens.

Type: String

Required: No

**ReplicationTaskSettings (p. 139)**

JSON file that contains settings for the task, such as target metadata settings.

Type: String

Required: No

**TableMappings (p. 139)**

When using the AWS CLI or boto3, provide the path of the JSON file that contains the table mappings. Precede the path with "file://". When working with the DMS API, provide the JSON as the parameter value.

For example, `--table-mappings file://mappingfile.json`

Type: String
### Response Syntax

```json
{
    "ReplicationTask": {
        "CdcStartPosition": "string",
        "CdcStopPosition": "string",
        "LastFailureMessage": "string",
        "MigrationType": "string",
        "RecoveryCheckpoint": "string",
        "ReplicationInstanceArn": "string",
        "ReplicationTaskArn": "string",
        "ReplicationTaskCreationDate": number,
        "ReplicationTaskIdentifier": "string",
        "ReplicationTaskSettings": "string",
        "ReplicationTaskStartDate": number,
        "ReplicationTaskStats": {
            "ElapsedTimeMillis": number,
            "FullLoadProgressPercent": number,
            "TablesErrored": number,
            "TablesLoaded": number,
            "TablesLoading": number,
            "TablesQueued": number
        },
        "SourceEndpointArn": "string",
        "Status": "string",
        "StopReason": "string",
        "TableMappings": "string",
        "TargetEndpointArn": "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.

**ReplicationTask (p. 141)**

The replication task that was modified.

Type: ReplicationTask (p. 198) object

### Errors

For information about the errors that are common to all actions, see Common Errors (p. 217).

**InvalidResourceStateFault**

The resource is in a state that prevents it from being used for database migration.

HTTP Status Code: 400

**KMSKeyNotAccessibleFault**

AWS DMS cannot access the KMS key.
HTTP Status Code: 400
ResourceAlreadyExistsFault
The resource you are attempting to create already exists.

HTTP Status Code: 400
ResourceNotFoundException
The resource could not be found.

HTTP Status Code: 400

Example

Sample Request

Sample Response

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

Reboots a replication instance. Rebooting results in a momentary outage, until the replication instance becomes available again.

Request Syntax

```
{
   "ForceFailover": boolean,
   "ReplicationInstanceArn": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 215).

The request accepts the following data in JSON format.

**ForceFailover (p. 143)**

If this parameter is `true`, the reboot is conducted through a Multi-AZ failover. (If the instance isn't configured for Multi-AZ, then you can't specify `true`.)

Type: Boolean

Required: No

**ReplicationInstanceArn (p. 143)**

The Amazon Resource Name (ARN) of the replication instance.

Type: String

Required: Yes

Response Syntax

```
{
   "ReplicationInstance": {
      "AllocatedStorage": number,
      "AutoMinorVersionUpgrade": boolean,
      "AvailabilityZone": "string",
      "EngineVersion": "string",
      "FreeUntil": number,
      "InstanceCreateTime": number,
      "KmsKeyId": "string",
      "MultiAZ": boolean,
      "PendingModifiedValues": {
         "AllocatedStorage": number,
         "EngineVersion": "string",
         "MultiAZ": boolean,
         "ReplicationInstanceClass": "string"
      },
      "PreferredMaintenanceWindow": "string",
      "PubliclyAccessible": boolean,
      ... other fields...
   }
}
```
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.

ReplicationInstance (p. 143)

The replication instance that is being rebooted.

Type: ReplicationInstance (p. 191) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 217).

InvalidResourceStateFault

The resource is in a state that prevents it from being used for database migration.

HTTP Status Code: 400

ResourceNotFoundFault

The resource could not be found.

HTTP Status Code: 400
See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
RefreshSchemas

Populates the schema for the specified endpoint. This is an asynchronous operation and can take several minutes. You can check the status of this operation by calling the DescribeRefreshSchemasStatus operation.

Request Syntax

```
{
   "EndpointArn": "string",
   "ReplicationInstanceArn": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 215).

The request accepts the following data in JSON format.

**EndpointArn (p. 146)**

The Amazon Resource Name (ARN) string that uniquely identifies the endpoint.

- Type: String
- Required: Yes

**ReplicationInstanceArn (p. 146)**

The Amazon Resource Name (ARN) of the replication instance.

- Type: String
- Required: Yes

Response Syntax

```
{
   "RefreshSchemasStatus": {
      "EndpointArn": "string",
      "LastFailureMessage": "string",
      "LastRefreshDate": number,
      "ReplicationInstanceArn": "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.
RefreshSchemasStatus (p. 146)

The status of the refreshed schema.

Type: RefreshSchemasStatus (p. 190) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 217).

InvalidResourceStateFault

The resource is in a state that prevents it from being used for database migration.

HTTP Status Code: 400

KMSKeyNotAccessibleFault

AWS DMS cannot access the KMS key.

HTTP Status Code: 400

ResourceNotFoundFault

The resource could not be found.

HTTP Status Code: 400

ResourceQuotaExceededFault

The quota for this resource quota has been exceeded.

HTTP Status Code: 400

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
ReloadTables

Reloads the target database table with the source data.

Request Syntax

```json
{
    "ReloadOption": "string",
    "ReplicationTaskArn": "string",
    "TablesToReload": [
        {
            "SchemaName": "string",
            "TableName": "string"
        }
    ]
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 215).

The request accepts the following data in JSON format.

**ReloadOption (p. 148)**

Options for reload. Specify data-reload to reload the data and re-validate it if validation is enabled. Specify validate-only to re-validate the table. This option applies only when validation is enabled for the task.

Valid values: data-reload, validate-only

Default value is data-reload.

Type: String

Valid Values: data-reload | validate-only

Required: No

**ReplicationTaskArn (p. 148)**

The Amazon Resource Name (ARN) of the replication task.

Type: String

Required: Yes

**TablesToReload (p. 148)**

The name and schema of the table to be reloaded.

Type: Array of TableToReload (p. 212) objects

Required: Yes

Response Syntax

```json
{
}
```
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.

**ReplicationTaskArn (p. 148)**

The Amazon Resource Name (ARN) of the replication task.

Type: String

Errors

For information about the errors that are common to all actions, see Common Errors (p. 217).

**InvalidResourceStateFault**

The resource is in a state that prevents it from being used for database migration.

HTTP Status Code: 400

**ResourceNotFoundException**

The resource could not be found.

HTTP Status Code: 400

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
RemoveTagsFromResource

Removes metadata tags from a DMS resource.

Request Syntax

```json
{
   "ResourceArn": "string",
   "TagKeys": [ "string" ]
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 215).

The request accepts the following data in JSON format.

ResourceArn (p. 150)

> The Amazon Resource Name (ARN) of the AWS DMS resource the tag is to be removed from.

Type: String

Required: Yes

TagKeys (p. 150)

The tag key (name) of the tag to be removed.

Type: Array of strings

Required: Yes

Response Elements

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

Errors

For information about the errors that are common to all actions, see Common Errors (p. 217).

ResourceNotFoundFault

The resource could not be found.

HTTP Status Code: 400

Example

Sample Request
POST / HTTP/1.1
Host: dms.<region>.<domain>
x-amz-Date: <Date>
Authorization: AWS4-HMAC-SHA256
Credential=<Credential>,
SignedHeaders=contenttype;date;host;user-agent;x-amz-date;x-amz-target;x-amzn-requestid,Signature=<Signature>
User-Agent: <UserAgentString>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Connection: Keep-Alive
X-Amz-Target: AmazonDMSv20160101.RemoveTagsFromResource
{
  "TagKeys"[:
    "CostCenter"
  ]
}

Sample Response

Empty

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

Starts the replication task.

For more information about AWS DMS tasks, see the AWS DMS user guide at Working with Migration Tasks

Request Syntax

```json
{
   "CdcStartPosition": "string",
   "CdcStartTime": number,
   "CdcStopPosition": "string",
   "ReplicationTaskArn": "string",
   "StartReplicationTaskType": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 215).

The request accepts the following data in JSON format.

**CdcStartPosition (p. 152)**

Indicates when you want a change data capture (CDC) operation to start. Use either CdcStartPosition or CdcStartTime to specify when you want a CDC operation to start. Specifying both values results in an error.

The value can be in date, checkpoint, or LSN/SCN format.

Date Example: `--cdc-start-position "2018-03-08T12:12:12"`

Checkpoint Example: `--cdc-start-position "checkpoint:V1#27#mysql-bin-changelog.157832:1975:-1:2002:677883278264080:mysql-bin-changelog.157832:1876#0#0#0#0#93"`

LSN Example: `--cdc-start-position "mysql-bin-changelog.000024:373"

Type: String

Required: No

**CdcStartTime (p. 152)**

Indicates the start time for a change data capture (CDC) operation. Use either CdcStartTime or CdcStartPosition to specify when you want a CDC operation to start. Specifying both values results in an error.

Timestamp Example: `--cdc-start-time "2018-03-08T12:12:12"

Type: Timestamp

Required: No

**CdcStopPosition (p. 152)**

Indicates when you want a change data capture (CDC) operation to stop. The value can be either server time or commit time.
Server time example: --cdc-stop-position "server_time:3018-02-09T12:12:12"
Commit time example: --cdc-stop-position "commit_time: 3018-02-09T12:12:12"

Type: String
Required: No

**ReplicationTaskArn (p. 152)**

The Amazon Resource Name (ARN) of the replication task to be started.

Type: String
Required: Yes

**StartReplicationTaskType (p. 152)**

The type of replication task.

Type: String
Valid Values: start-replication | resume-processing | reload-target
Required: Yes

**Response Syntax**

```
{
  "ReplicationTask": {
    "CdcStartPosition": "string",
    "CdcStopPosition": "string",
    "LastFailureMessage": "string",
    "MigrationType": "string",
    "RecoveryCheckpoint": "string",
    "ReplicationInstanceArn": "string",
    "ReplicationTaskArn": "string",
    "ReplicationTaskCreationDate": number,
    "ReplicationTaskIdentifier": "string",
    "ReplicationTaskSettings": "string",
    "ReplicationTaskStartDate": number,
    "ReplicationTaskStats": {
      "ElapsedTimeMillis": number,
      "FullLoadProgressPercent": number,
      "TablesErrored": number,
      "TablesLoaded": number,
      "TablesLoading": number,
      "TablesQueued": number
    },
    "SourceEndpointArn": "string",
    "Status": "string",
    "StopReason": "string",
    "TableMappings": "string",
    "TargetEndpointArn": "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.
ReplicationTask (p. 153)

The replication task started.

Type: ReplicationTask (p. 198) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 217).

AccessDeniedFault

AWS DMS was denied access to the endpoint.

HTTP Status Code: 400

InvalidResourceStateFault

The resource is in a state that prevents it from being used for database migration.

HTTP Status Code: 400

ResourceNotFoundFault

The resource could not be found.

HTTP Status Code: 400

Example

Sample Request

```
POST / HTTP/1.1
Host: dms.<region>.<domain>
x-amz-Date: <Date>
Authorization: AWS4-HMAC-SHA256
Credential=<Credential>,
SignedHeaders=contenttype;date;host;user-agent;x-amz-date;x-amz-target;x-amzn-requestid,Signature=<Signature>
User-Agent: <UserAgentString>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Connection: Keep-Alive
X-Amz-Target: AmazonDMSv20160101.StartReplicationTask
{
"ReplicationTaskArn":"arn:aws:dms:us-east-1:123456789012:task:RALPZGYI3IUSJCBKKIRBEURKDY",
"StartReplicationTaskType":"reload-target",
"CdcStartTime":null
}
```

Sample Response

```
HTTP/1.1 200 OK
x-amzn-RequestId: <RequestId>
```
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Date: <Date>
{
  "ReplicationTask":{
    "SourceEndpointArn":"arn:aws:dms:us-east-1:123456789012:endpoint:RZZK4EZW5UANC7Y3P4E776WHBE",
    "ReplicationTaskIdentifier":"aks145",
    "ReplicationInstanceArn":"arn:aws:dms:us-east-1:123456789012:rep:6USOU366XFJUWATDJGBCJSV1Q",
    "TableMappings":"{
        "TableMappings": [
          { "Type": "Include",
            "SourceSchema": "testDB",
            "SourceTable": "%" },
          { "Type": "Include",
            "SourceSchema": "testDB",
            "SourceTable": "%" }
        ],
        "ReplicationTaskStartDateTime":1457658794.056,
        "Status": "starting",
        "ReplicationTaskArn":"arn:aws:dms:us-east-1:123456789012:task:RALPZGYI3IUSJCBKKIRBEURKDY",
        "MigrationType": "full-load",
        "TargetEndpointArn":"arn:aws:dms:us-east-1:123456789012:endpoint:GVBUJQXJZASXWHTWCLN2WNT57E",
        "ReplicationTaskSettings":{
          "TargetMetadata": {
            "TargetSchema": "",
            "SupportLobs":true,
            "LobChunkSize":64,
            "LimitedSizeLobMode":false,
            "LobMaxSize":0,
            "FullLoadSettings":{
              "FullLoadEnabled":true,
              "TargetTablePrepMode": "DO NOTHING",
              "CreatePKAfterFullLoad":false,
              "StopTaskCachedChangesApplied":false,
              "StopTaskCachedChangesNotApplied":false,
              "ResumeEnabled":false,
              "ResumeMinTableSize":100000,
              "ResumeOnlyClusteredPKTables":false,
              "MaxFullLoadSubTasks":8,
              "TransactionConsistencyTimeout":600,
              "CommitRate":10000
            }
          }
        }
      }
  }
}

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

Starts the replication task assessment for unsupported data types in the source database.

Request Syntax

{  "ReplicationTaskArn": "string" }

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 215).

The request accepts the following data in JSON format.

ReplicationTaskArn (p. 157)

The Amazon Resource Name (ARN) of the replication task.

Type: String

Required: Yes

Response Syntax

{  "ReplicationTask": {    "CdcStartPosition": "string",    "CdcStopPosition": "string",    "LastFailureMessage": "string",    "MigrationType": "string",    "RecoveryCheckpoint": "string",    "ReplicationInstanceArn": "string",    "ReplicationTaskArn": "string",    "ReplicationTaskCreationDate": number,    "ReplicationTaskIdentifier": "string",    "ReplicationTaskSettings": "string",    "ReplicationTaskStartDate": number,    "ReplicationTaskStats": {      "ElapsedTimeMillis": number,      "FullLoadProgressPercent": number,      "TablesErrored": number,      "TablesLoaded": number,      "TablesLoading": number,      "TablesQueued": number    },    "SourceEndpointArn": "string",    "Status": "string",    "StopReason": "string",    "TableMappings": "string",    "TargetEndpointArn": "string"  }  }

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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.

ReplicationTask (p. 157)

The assessed replication task.

Type: ReplicationTask (p. 198) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 217).

InvalidResourceStateFault

The resource is in a state that prevents it from being used for database migration.

HTTP Status Code: 400

ResourceNotFoundFault

The resource could not be found.

HTTP Status Code: 400

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
StopReplicationTask

Stops the replication task.

Request Syntax

```
{  
  "ReplicationTaskArn": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 215).

The request accepts the following data in JSON format.

**ReplicationTaskArn (p. 159)**

The Amazon Resource Name(ARN) of the replication task to be stopped.

Type: String

Required: Yes

Response Syntax

```
{  
  "ReplicationTask": {  
    "CdcStartPosition": "string",
    "CdcStopPosition": "string",
    "LastFailureMessage": "string",
    "MigrationType": "string",
    "RecoveryCheckpoint": "string",
    "ReplicationInstanceArn": "string",
    "ReplicationTaskArn": "string",
    "ReplicationTaskCreationDate": number,
    "ReplicationTaskIdentifier": "string",
    "ReplicationTaskSettings": "string",
    "ReplicationTaskStartDate": number,
    "ReplicationTaskStats": {  
      "ElapsedTimeMillis": number,
      "FullLoadProgressPercent": number,
      "TablesErrored": number,
      "TablesLoaded": number,
      "TablesLoading": number,
      "TablesQueued": number
    },
    "SourceEndpointArn": "string",
    "Status": "string",
    "StopReason": "string",
    "TableMappings": "string",
    "TargetEndpointArn": "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.

ReplicationTask (p. 159)

The replication task stopped.

Type: ReplicationTask (p. 198) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 217).

InvalidResourceStateFault

The resource is in a state that prevents it from being used for database migration.

HTTP Status Code: 400

ResourceNotFoundFault

The resource could not be found.

HTTP Status Code: 400

Example

Sample Request

POST / HTTP/1.1
Host: dms.<region>.<domain>
x-amz-Date: <Date>
Authorization: AWS4-HMAC-SHA256
Credential=<Credential>,
SignedHeaders=contenttype;date;host;user-agent;x-amz-date;x-amz-target;x-amzn-requestid,Signature=<Signature>
User-Agent: <UserAgentString>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Connection: Keep-Alive
X-Amz-Target: AmazonDMSv20160101.StopReplicationTask
{
   "ReplicationTaskArn":"arn:aws:dms:us-east-1:123456789012:task:OEAMB3NXSTZ6LFY2FEPPBEBXYPM"
}

Sample Response

HTTP/1.1 200 OK
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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
See Also

- AWS SDK for Ruby V2
TestConnection

Tests the connection between the replication instance and the endpoint.

Request Syntax

```json
{
   "EndpointArn": "string",
   "ReplicationInstanceArn": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 215).

The request accepts the following data in JSON format.

**EndpointArn (p. 163)**

The Amazon Resource Name (ARN) string that uniquely identifies the endpoint.

- Type: String
- Required: Yes

**ReplicationInstanceArn (p. 163)**

The Amazon Resource Name (ARN) of the replication instance.

- Type: String
- Required: Yes

Response Syntax

```json
{
   "Connection": {
      "EndpointArn": "string",
      "EndpointIdentifier": "string",
      "LastFailureMessage": "string",
      "ReplicationInstanceArn": "string",
      "ReplicationInstanceIdentifier": "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.

**Connection (p. 163)**

The connection tested.
Type: Connection (p. 171) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 217).

InvalidResourceStateFault

The resource is in a state that prevents it from being used for database migration.

HTTP Status Code: 400

KMSKeyNotAccessibleFault

AWS DMS cannot access the KMS key.

HTTP Status Code: 400

ResourceNotFoundFault

The resource could not be found.

HTTP Status Code: 400

ResourceQuotaExceededFault

The quota for this resource quota has been exceeded.

HTTP Status Code: 400

Example

Sample Request

```
POST / HTTP/1.1
Host: dms.<region>.<domain>
x-amz-Date: <Date>
Authorization: AWS4-HMAC-SHA256
Credential=<Credential>,
SignedHeaders=contenttype;date;host;user-agent;x-amz-date;x-amzn-requestid,Signature=<Signature>
User-Agent: <UserAgentString>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Connection: Keep-Alive
X-Amz-Target: AmazonDMSv20160101.TestConnection
{
  "EndpointArn": "arn:aws:dms:us-east-1:123456789012:endpoint:WKBULDZKUDQZIHPOUUSEH34EMU"
}
```

Sample Response

API Version 2016-01-01
164
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
- AWS SDK for Java
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
Data Types

The AWS Database Migration Service 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:

- AccountQuota (p. 167)
- AvailabilityZone (p. 168)
- Certificate (p. 169)
- Connection (p. 171)
- DmsTransferSettings (p. 173)
- DynamoDbSettings (p. 174)
- Endpoint (p. 175)
- Event (p. 179)
- EventCategoryGroup (p. 181)
- EventSubscription (p. 182)
- Filter (p. 184)
- MongodbSettings (p. 185)
- OrderableReplicationInstance (p. 188)
- RefreshSchemasStatus (p. 190)
- ReplicationInstance (p. 191)
- ReplicationInstanceTaskLog (p. 195)
- ReplicationPendingModifiedValues (p. 196)
- ReplicationSubnetGroup (p. 197)
- ReplicationTask (p. 198)
- ReplicationTaskAssessmentResult (p. 201)
- ReplicationTaskStats (p. 203)
- S3Settings (p. 205)
- Subnet (p. 207)
- SupportedEndpointType (p. 208)
- TableStatistics (p. 209)
- TableToReload (p. 212)
- Tag (p. 213)
- VpcSecurityGroupMembership (p. 214)
AccountQuota

Describes a quota for an AWS account, for example, the number of replication instances allowed.

Contents

AccountQuotaName

The name of the AWS DMS quota for this AWS account.

Type: String
Required: No

Max

The maximum allowed value for the quota.

Type: Long
Required: No

Used

The amount currently used toward the quota maximum.

Type: Long
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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2
AvailabilityZone

Contents

Name

The name of the availability zone.

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2
Certificate

The SSL certificate that can be used to encrypt connections between the endpoints and the replication instance.

Contents

CertificateArn

The Amazon Resource Name (ARN) for the certificate.
Type: String
Required: No

CertificateCreationDate

The date that the certificate was created.
Type: Timestamp
Required: No

CertificateIdentifier

The customer-assigned name of the certificate. Valid characters are A-z and 0-9.
Type: String
Required: No

CertificateOwner

The owner of the certificate.
Type: String
Required: No

CertificatePem

The contents of the .pem X.509 certificate file for the certificate.
Type: String
Required: No

CertificateWallet

The location of the imported Oracle Wallet certificate for use with SSL.
Type: Base64-encoded binary data object
Required: No

KeyLength

The key length of the cryptographic algorithm being used.
Type: Integer
Required: No
**SigningAlgorithm**

The signing algorithm for the certificate.

Type: String

Required: No

**ValidFromDate**

The beginning date that the certificate is valid.

Type: Timestamp

Required: No

**ValidToDate**

The final date that the certificate is valid.

Type: Timestamp

Required: No

### See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
Connection

Contents

EndpointArn

The Amazon Resource Name (ARN) string that uniquely identifies the endpoint.

Type: String
Required: No

EndpointIdentifier

The identifier of the endpoint. Identifiers must begin with a letter; must contain only ASCII letters, digits, and hyphens; and must not end with a hyphen or contain two consecutive hyphens.

Type: String
Required: No

LastFailureMessage

The error message when the connection last failed.

Type: String
Required: No

ReplicationInstanceArn

The Amazon Resource Name (ARN) of the replication instance.

Type: String
Required: No

ReplicationInstanceIdentifier

The replication instance identifier. This parameter is stored as a lowercase string.

Type: String
Required: No

Status

The connection status.

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 Go
- AWS SDK for Java
• AWS SDK for Ruby V2
DmsTransferSettings

The settings in JSON format for the DMS Transfer type source endpoint.

Contents

BucketName

The name of the S3 bucket to use.

Type: String

Required: No

ServiceAccessRoleArn

The IAM role that has permission to access the Amazon S3 bucket.

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2
DynamoDbSettings

Contents

ServiceAccessRoleArn
  The Amazon Resource Name (ARN) used by the service access IAM role.
  
  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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2
Endpoint

Contents

CertificateArn

The Amazon Resource Name (ARN) used for SSL connection to the endpoint.

Type: String
Required: No

DatabaseName

The name of the database at the endpoint.

Type: String
Required: No

DmsTransferSettings

The settings in JSON format for the DMS Transfer type source endpoint.

Attributes include:
- serviceAccessRoleArn - The IAM role that has permission to access the Amazon S3 bucket.
- bucketName - The name of the S3 bucket to use.
- compressionType - An optional parameter to use GZIP to compress the target files. Set to NONE (the default) or do not use to leave the files uncompressed.

Shorthand syntax: ServiceAccessRoleArn=string ,BucketName=string,CompressionType=string

JSON syntax:

```
{ "ServiceAccessRoleArn": "string", "BucketName": "string", "CompressionType": "none"|"gzip" }
```

Type: DmsTransferSettings (p. 173) object
Required: No

DynamoDbSettings

The settings for the target DynamoDB database. For more information, see the DynamoDBSettings structure.

Type: DynamoDbSettings (p. 174) object
Required: No

EndpointArn

The Amazon Resource Name (ARN) string that uniquely identifies the endpoint.

Type: String
Required: No

EndpointIdentifier

The database endpoint identifier. Identifiers must begin with a letter; must contain only ASCII letters, digits, and hyphens; and must not end with a hyphen or contain two consecutive hyphens.
Type: String
Required: No

**EndpointType**

The type of endpoint.

Type: String

Valid Values: source | target

Required: No

**EngineDisplayName**

The expanded name for the engine name. For example, if the EngineName parameter is "aurora," this value would be "Amazon Aurora MySQL."

Type: String

Required: No

**EngineName**

The database engine name. Valid values, depending on the EndPointType, include mysql, oracle, postgres, mariadb, aurora, aurora-postgresql, redshift, s3, db2, azuredb, sybase, sybase, dynamodb, mongodb, and sqlserver.

Type: String

Required: No

**ExternalId**

Value returned by a call to CreateEndpoint that can be used for cross-account validation. Use it on a subsequent call to CreateEndpoint to create the endpoint with a cross-account.

Type: String

Required: No

**ExternalTableDefinition**

The external table definition.

Type: String

Required: No

**ExtraConnectionAttributes**

Additional connection attributes used to connect to the endpoint.

Type: String

Required: No

**KmsKeyId**

The KMS key identifier that will be used to encrypt the connection parameters. If you do not specify a value for the KmsKeyId parameter, then AWS DMS will use your default encryption key. AWS KMS creates the default encryption key for your AWS account. Your AWS account has a different default encryption key for each AWS region.

Type: String
Required: No

**MongoDbSettings**

The settings for the MongoDB source endpoint. For more information, see the `MongoDbSettings` structure.

Type: `MongoDbSettings (p. 185)` object

Required: No

**Port**

The port value used to access the endpoint.

Type: Integer

Required: No

**S3Settings**

The settings for the S3 target endpoint. For more information, see the `S3Settings` structure.

Type: `S3Settings (p. 205)` object

Required: No

**ServerName**

The name of the server at the endpoint.

Type: String

Required: No

**ServiceAccessRoleArn**

The Amazon Resource Name (ARN) used by the service access IAM role.

Type: String

Required: No

**SslMode**

The SSL mode used to connect to the endpoint.

SSL mode can be one of four values: none, require, verify-ca, verify-full.

The default value is none.

Type: String

Valid Values: none | require | verify-ca | verify-full

Required: No

**Status**

The status of the endpoint.

Type: String

Required: No

**Username**

The user name used to connect to the endpoint.
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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2
Event

Contents

Date
The date of the event.
Type: Timestamp
Required: No

EventCategories
The event categories available for the specified source type.
Type: Array of strings
Required: No

Message
The event message.
Type: String
Required: No

SourceIdentifier
The identifier of the event source. An identifier must begin with a letter and must contain only ASCII letters, digits, and hyphens; it cannot end with a hyphen or contain two consecutive hyphens.
Constraints: replication instance, endpoint, migration task
Type: String
Required: No

SourceType
The type of AWS DMS resource that generates events.
Valid values: replication-instance | endpoint | migration-task
Type: String
Valid Values: replication-instance
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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2
EventCategoryGroup

Contents

EventCategories

A list of event categories for aSourceType that you want to subscribe to.

Type: Array of strings

Required: No

SourceType

The type of AWS DMS resource that generates events.

Valid values: replication-instance | replication-server | security-group | migration-task

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2
EventSubscription

Contents

CustomerAwsId

The AWS customer account associated with the AWS DMS event notification subscription.

Type: String

Required: No

CustSubscriptionId

The AWS DMS event notification subscription Id.

Type: String

Required: No

Enabled

Boolean value that indicates if the event subscription is enabled.

Type: Boolean

Required: No

EventCategoriesList

A list of event categories.

Type: Array of strings

Required: No

SnsTopicArn

The topic ARN of the AWS DMS event notification subscription.

Type: String

Required: No

SourceIdsList

A list of source Ids for the event subscription.

Type: Array of strings

Required: No

SourceType

The type of AWS DMS resource that generates events.

Valid values: replication-instance | replication-server | security-group | migration-task

Type: String

Required: No

Status

The status of the AWS DMS event notification subscription.
Constraints:

Can be one of the following: creating | modifying | deleting | active | no-permission | topic-not-exist

The status "no-permission" indicates that AWS DMS no longer has permission to post to the SNS topic. The status "topic-not-exist" indicates that the topic was deleted after the subscription was created.

Type: String

Required: No

SubscriptionCreationTime

The time the RDS event notification subscription was created.

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2
Filter

Contents

Name
The name of the filter.
Type: String
Required: Yes

Values
The filter value.
Type: Array of strings
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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2
MongoDBSettings

Contents

AuthMechanism

The authentication mechanism you use to access the MongoDB source endpoint.

Valid values: DEFAULT, MONGODB_CR, SCRAM_SHA_1

DEFAULT – For MongoDB version 2.x, use MONGODB_CR. For MongoDB version 3.x, use SCRAM_SHA_1. This attribute is not used when authType=No.

Type: String

Valid Values: default | mongodb_cr | scram_sha_1

Required: No

AuthSource

The MongoDB database name. This attribute is not used when authType=NO.

The default is admin.

Type: String

Required: No

AuthType

The authentication type you use to access the MongoDB source endpoint.

Valid values: NO, PASSWORD

When NO is selected, user name and password parameters are not used and can be empty.

Type: String

Valid Values: no | password

Required: No

DatabaseName

The database name on the MongoDB source endpoint.

Type: String

Required: No

DocsToInvestigate

Indicates the number of documents to preview to determine the document organization. Use this attribute when NestingLevel is set to ONE.

Must be a positive value greater than 0. Default value is 1000.

Type: String

Required: No
ExtractDocId

Specifies the document ID. Use this attribute when NestingLevel is set to NONE.

Default value is false.

Type: String

Required: No

KmsKeyId

The KMS key identifier that will be used to encrypt the connection parameters. If you do not specify a value for the KmsKeyId parameter, then AWS DMS will use your default encryption key. AWS KMS creates the default encryption key for your AWS account. Your AWS account has a different default encryption key for each AWS region.

Type: String

Required: No

NestingLevel

Specifies either document or table mode.

Valid values: NONE, ONE

Default value is NONE. Specify NONE to use document mode. Specify ONE to use table mode.

Type: String

Valid Values: none | one

Required: No

Password

The password for the user account you use to access the MongoDB source endpoint.

Type: String

Required: No

Port

The port value for the MongoDB source endpoint.

Type: Integer

Required: No

ServerName

The name of the server on the MongoDB source endpoint.

Type: String

Required: No

Username

The user name you use to access the MongoDB source endpoint.

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2
OrderableReplicationInstance

Contents

DefaultAllocatedStorage
The default amount of storage (in gigabytes) that is allocated for the replication instance.
Type: Integer
Required: No

EngineVersion
The version of the replication engine.
Type: String
Required: No

IncludedAllocatedStorage
The amount of storage (in gigabytes) that is allocated for the replication instance.
Type: Integer
Required: No

MaxAllocatedStorage
The minimum amount of storage (in gigabytes) that can be allocated for the replication instance.
Type: Integer
Required: No

MinAllocatedStorage
The minimum amount of storage (in gigabytes) that can be allocated for the replication instance.
Type: Integer
Required: No

ReplicationInstanceClass
The compute and memory capacity of the replication instance.
Valid Values: dms.t2.micro | dms.t2.small | dms.t2.medium | dms.t2.large | dms.c4.large | dms.c4.xlarge | dms.c4.2xlarge | dms.c4.4xlarge
Type: String
Required: No

StorageType
The type of storage used by the replication instance.
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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2
RefreshSchemasStatus

Contents

EndpointArn
The Amazon Resource Name (ARN) string that uniquely identifies the endpoint.

Type: String
Required: No

LastFailureMessage
The last failure message for the schema.

Type: String
Required: No

LastRefreshDate
The date the schema was last refreshed.

Type: Timestamp
Required: No

ReplicationInstanceArn
The Amazon Resource Name (ARN) of the replication instance.

Type: String
Required: No

Status
The status of the schema.

Type: String
Valid Values: successful | failed | refreshing
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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2
ReplicationInstance

Contents

AllocatedStorage
The amount of storage (in gigabytes) that is allocated for the replication instance.
Type: Integer
Required: No

AutoMinorVersionUpgrade
Boolean value indicating if minor version upgrades will be automatically applied to the instance.
Type: Boolean
Required: No

AvailabilityZone
The Availability Zone for the instance.
Type: String
Required: No

EngineVersion
The engine version number of the replication instance.
Type: String
Required: No

FreeUntil
The expiration date of the free replication instance that is part of the Free DMS program.
Type: Timestamp
Required: No

InstanceCreateTime
The time the replication instance was created.
Type: Timestamp
Required: No

KmsKeyId
The KMS key identifier that is used to encrypt the content on the replication instance. If you do not specify a value for the KmsKeyId parameter, then AWS DMS will use your default encryption key. AWS KMS creates the default encryption key for your AWS account. Your AWS account has a different default encryption key for each AWS region.
Type: String
Required: No
MultiAZ

Specifies if the replication instance is a Multi-AZ deployment. You cannot set the AvailabilityZone parameter if the Multi-AZ parameter is set to true.

Type: Boolean
Required: No

PendingModifiedValues

The pending modification values.

Type: ReplicationPendingModifiedValues (p. 196) object
Required: No

PreferredMaintenanceWindow

The maintenance window times for the replication instance.

Type: String
Required: No

PubliclyAccessible

Specifies the accessibility options for the replication instance. A value of true represents an instance with a public IP address. A value of false represents an instance with a private IP address. The default value is true.

Type: Boolean
Required: No

ReplicationInstanceArn

The Amazon Resource Name (ARN) of the replication instance.

Type: String
Required: No

ReplicationInstanceClass

The compute and memory capacity of the replication instance.

Valid Values: dms.t2.micro | dms.t2.small | dms.t2.medium | dms.t2.large | dms.c4.large | dms.c4.xlarge | dms.c4.2xlarge | dms.c4.4xlarge

Type: String
Required: No

ReplicationInstanceIdentifier

The replication instance identifier. This parameter is stored as a lowercase string.

Constraints:
- Must contain from 1 to 63 alphanumeric characters or hyphens.
- First character must be a letter.
- Cannot end with a hyphen or contain two consecutive hyphens.

Example: myrepinstance
Type: String
Required: No

**ReplicationInstancePrivateIpAddress**

*This member has been deprecated.*

The private IP address of the replication instance.

Type: String
Required: No

**ReplicationInstancePrivateIpAddresses**

The private IP address of the replication instance.

Type: Array of strings
Required: No

**ReplicationInstancePublicIpAddress**

*This member has been deprecated.*

The public IP address of the replication instance.

Type: String
Required: No

**ReplicationInstancePublicIpAddresses**

The public IP address of the replication instance.

Type: Array of strings
Required: No

**ReplicationInstanceStatus**

The status of the replication instance.

Type: String
Required: No

**ReplicationSubnetGroup**

The subnet group for the replication instance.

Type: ReplicationSubnetGroup (p. 197) object
Required: No

**SecondaryAvailabilityZone**

The availability zone of the standby replication instance in a Multi-AZ deployment.

Type: String
Required: No

**VpcSecurityGroups**

The VPC security group for the instance.
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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2
ReplicationInstanceTaskLog

Contains metadata for a replication instance task log.

Contents

ReplicationInstanceTaskLogSize

The size, in bytes, of the replication task log.

Type: Long
Required: No

ReplicationTaskArn

The Amazon Resource Name (ARN) of the replication task.

Type: String
Required: No

ReplicationTaskName

The name of the replication task.

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2
ReplicationPendingModifiedValues

Contents

**AllocatedStorage**

The amount of storage (in gigabytes) that is allocated for the replication instance.

Type: Integer

Required: No

**EngineVersion**

The engine version number of the replication instance.

Type: String

Required: No

**MultiAZ**

Specifies if the replication instance is a Multi-AZ deployment. You cannot set the AvailabilityZone parameter if the Multi-AZ parameter is set to `true`.

Type: Boolean

Required: No

**ReplicationInstanceClass**

The compute and memory capacity of the replication instance.

Valid Values: `dms.t2.micro` | `dms.t2.small` | `dms.t2.medium` | `dms.t2.large` | `dms.c4.large` | `dms.c4.xlarge` | `dms.c4.2xlarge` | `dms.c4.4xlarge`

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2
ReplicationSubnetGroup

Contents

ReplicationSubnetGroupDescription

The description of the replication subnet group.

Type: String
 Required: No

ReplicationSubnetGroupIdentifier

The identifier of the replication instance subnet group.

Type: String
 Required: No

SubnetGroupStatus

The status of the subnet group.

Type: String
 Required: No

Subnets

The subnets that are in the subnet group.

Type: Array of Subnet (p. 207) objects
 Required: No

VpcId

The ID of the VPC.

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2
ReplicationTask

Contents

CdcStartPosition

Indicates when you want a change data capture (CDC) operation to start. Use either CdcStartPosition or CdcStartTime to specify when you want a CDC operation to start. Specifying both values results in an error.

The value can be in date, checkpoint, or LSN/SCN format.

- Date Example: `--cdc-start-position "2018-03-08T12:12:12"`
- Checkpoint Example: `--cdc-start-position "checkpoint:V1#27#mysql-bin-changelog.157832:1975:-1:2002:677883278264080:mysql-bin-changelog.157832:1876#0#0#0#93"`
- LSN Example: `--cdc-start-position "mysql-bin-changelog.000024:373"

Type: String
Required: No

CdcStopPosition

Indicates when you want a change data capture (CDC) operation to stop. The value can be either server time or commit time.

- Server time example: `--cdc-stop-position "server_time:3018-02-09T12:12:12"
- Commit time example: `--cdc-stop-position "commit_time: 3018-02-09T12:12:12 "`

Type: String
Required: No

LastFailureMessage

The last error (failure) message generated for the replication instance.

Type: String
Required: No

MigrationType

The type of migration.

Type: String

Valid Values: full-load | cdc | full-load-and-cdc
Required: No

RecoveryCheckpoint

Indicates the last checkpoint that occurred during a change data capture (CDC) operation. You can provide this value to the CdcStartPosition parameter to start a CDC operation that begins at that checkpoint.

Type: String
Required: No

**ReplicationInstanceArn**

The Amazon Resource Name (ARN) of the replication instance.

Type: String

Required: No

**ReplicationTaskArn**

The Amazon Resource Name (ARN) of the replication task.

Type: String

Required: No

**ReplicationTaskCreationDate**

The date the replication task was created.

Type: Timestamp

Required: No

**ReplicationTaskIdentifier**

The user-assigned replication task identifier or name.

Constraints:

- Must contain from 1 to 255 alphanumeric characters or hyphens.
- First character must be a letter.
- Cannot end with a hyphen or contain two consecutive hyphens.

Type: String

Required: No

**ReplicationTaskSettings**

The settings for the replication task.

Type: String

Required: No

**ReplicationTaskStartDate**

The date the replication task is scheduled to start.

Type: Timestamp

Required: No

**ReplicationTaskStats**

The statistics for the task, including elapsed time, tables loaded, and table errors.

Type: ReplicationTaskStats (p. 203) object

Required: No

**SourceEndpointArn**

The Amazon Resource Name (ARN) string that uniquely identifies the endpoint.
Type: String
Required: No

**Status**
The status of the replication task.
Type: String
Required: No

**StopReason**
The reason the replication task was stopped.
Type: String
Required: No

**TableMappings**
Table mappings specified in the task.
Type: String
Required: No

**TargetEndpointArn**
The Amazon Resource Name (ARN) string that uniquely identifies the endpoint.
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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2
ReplicationTaskAssessmentResult

The task assessment report in JSON format.

Contents

AssessmentResults

The task assessment results in JSON format.

Type: String

Required: No

AssessmentResultsFile

The file containing the results of the task assessment.

Type: String

Required: No

AssessmentStatus

The status of the task assessment.

Type: String

Required: No

ReplicationTaskArn

The Amazon Resource Name (ARN) of the replication task.

Type: String

Required: No

ReplicationTaskIdentifier

The replication task identifier of the task on which the task assessment was run.

Type: String

Required: No

ReplicationTaskLastAssessmentDate

The date the task assessment was completed.

Type: Timestamp

Required: No

S3ObjectUrl

The URL of the S3 object containing the task assessment results.

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2
ReplicationTaskStats

Contents

ElapsedTimeMillis
The elapsed time of the task, in milliseconds.
Type: Long
Required: No

FullLoadProgressPercent
The percent complete for the full load migration task.
Type: Integer
Required: No

TablesErrored
The number of errors that have occurred during this task.
Type: Integer
Required: No

TablesLoaded
The number of tables loaded for this task.
Type: Integer
Required: No

TablesLoading
The number of tables currently loading for this task.
Type: Integer
Required: No

TablesQueued
The number of tables queued for this task.
Type: Integer
Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
S3Settings

Contents

BucketFolder
An optional parameter to set a folder name in the S3 bucket. If provided, tables are created in the path `<bucketFolder>/<schema_name>/<table_name>/`. If this parameter is not specified, then the path used is `<schema_name>/<table_name>/`.

Type: String
Required: No

BucketName
The name of the S3 bucket.

Type: String
Required: No

CompressionType
An optional parameter to use GZIP to compress the target files. Set to GZIP to compress the target files. Set to NONE (the default) or do not use to leave the files uncompressed.

Type: String
Valid Values: none | gzip
Required: No

CsvDelimiter
The delimiter used to separate columns in the source files. The default is a comma.

Type: String
Required: No

CsvRowDelimiter
The delimiter used to separate rows in the source files. The default is a carriage return (\n).

Type: String
Required: No

ExternalTableDefinition
The external table definition.

Type: String
Required: No

ServiceAccessRoleArn
The Amazon Resource Name (ARN) used by the service access IAM role.

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2
Subnet

Contents

SubnetAvailabilityZone

The Availability Zone of the subnet.

Type: AvailabilityZone (p. 168) object

Required: No

SubnetIdentifier

The subnet identifier.

Type: String

Required: No

SubnetStatus

The status of the subnet.

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2
SupportedEndpointType

Contents

EndpointType

The type of endpoint.
Type: String
Valid Values: source | target
Required: No

EngineDisplayName

The expanded name for the engine name. For example, if the EngineName parameter is "aurora," this value would be "Amazon Aurora MySQL."
Type: String
Required: No

EngineName

The database engine name. Valid values, depending on the EndPointType, include mysql, oracle, postgres, mariadb, aurora, aurora-postgresql, redshift, s3, db2, azuredb, sybase, sybase, dynamodb, mongodb, and sqlserver.
Type: String
Required: No

SupportsCDC

Indicates if Change Data Capture (CDC) is supported.
Type: Boolean
Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
TableStatistics

Contents

Ddls
The Data Definition Language (DDL) used to build and modify the structure of your tables.
Type: Long
Required: No

Deletes
The number of delete actions performed on a table.
Type: Long
Required: No

FullLoadCondtntlChkFailedRows
The number of rows that failed conditional checks during the Full Load operation (valid only for DynamoDB as a target migrations).
Type: Long
Required: No

FullLoadErrorRows
The number of rows that failed to load during the Full Load operation (valid only for DynamoDB as a target migrations).
Type: Long
Required: No

FullLoadRows
The number of rows added during the Full Load operation.
Type: Long
Required: No

Inserts
The number of insert actions performed on a table.
Type: Long
Required: No

LastUpdateTime
The last time the table was updated.
Type: Timestamp
Required: No
SchemaName

The schema name.
Type: String
Required: No

TableName

The name of the table.
Type: String
Required: No

TableState

The state of the tables described.
Valid states: Table does not exist | Before load | Full load | Table completed | Table cancelled | Table error | Table all | Table updates | Table is being reloaded
Type: String
Required: No

Updates

The number of update actions performed on a table.
Type: Long
Required: No

ValidationFailedRecords

The number of records that failed validation.
Type: Long
Required: No

ValidationPendingRecords

The number of records that have yet to be validated.
Type: Long
Required: No

ValidationState

The validation state of the table.
The parameter can have the following values
• Not enabled—Validation is not enabled for the table in the migration task.
• Pending records—Some records in the table are waiting for validation.
• Mismatched records—Some records in the table do not match between the source and target.
• Suspended records—Some records in the table could not be validated.
• No primary key—The table could not be validated because it had no primary key.
• Table error—The table was not validated because it was in an error state and some data was not migrated.
• Validated—All rows in the table were validated. If the table is updated, the status can change from Validated.
• Error—The table could not be validated because of an unexpected error.

Type: String
Required: No

ValidationStateDetails

Additional details about the state of validation.

Type: String
Required: No

ValidationSuspendedRecords

The number of records that could not be validated.

Type: Long
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 Go
• AWS SDK for Java
• AWS SDK for Ruby V2
TableToReload

Contents

SchemaName
The schema name of the table to be reloaded.
Type: String
Required: No

TableName
The table name of the table to be reloaded.
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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2
Tag

Contents

Key

A key is the required name of the tag. The string value can be from 1 to 128 Unicode characters in length and cannot be prefixed with "aws:" or "dms:". The string can only contain only the set of Unicode letters, digits, white-space, ', ',', '/', '=', '+', '-' (Java regex: "^[\p{L}\p{Z}\p{N}_.:/=+\-]*$").

Type: String

Required: No

Value

A value is the optional value of the tag. The string value can be from 1 to 256 Unicode characters in length and cannot be prefixed with "aws:" or "dms:". The string can only contain only the set of Unicode letters, digits, white-space, ', ',', '/', '=', '+', '-' (Java regex: "^[\p{L}\p{Z}\p{N}_.:/=+\-]*$").

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2
VpcSecurityGroupMembership

Contents

Status

The status of the VPC security group.

Type: String

Required: No

VpcSecurityGroupId

The VPC security group Id.

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 Go
- AWS SDK for Java
- AWS SDK for Ruby V2
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 Signature Version 4 Signing Process in the Amazon Web Services General Reference.

**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 Task 2: Create a String to Sign for Signature Version 4 in the Amazon Web Services General Reference.

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 Handling Dates in Signature Version 4 in the Amazon Web Services General Reference.

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 Security Token Service, go to AWS Services That Work with IAM in the IAM User Guide.

Condition: If you're using temporary security credentials from the AWS Security Token Service, 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 Task 1: Create a Canonical Request For Signature Version 4 in the Amazon Web Services General Reference.

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: 400

IncompleteSignature
The request signature does not conform to AWS standards.
HTTP Status Code: 400

InternalFailure
The request processing has failed because of an unknown error, exception or failure.
HTTP Status Code: 500

InvalidAction
The action or operation requested is invalid. Verify that the action is typed correctly.
HTTP Status Code: 400

InvalidClientTokenId
The X.509 certificate or AWS access key ID provided does not exist in our records.
HTTP Status Code: 403

InvalidParameterCombination
Parameters that must not be used together were used together.
HTTP Status Code: 400

InvalidParameterValue
An invalid or out-of-range value was supplied for the input parameter.
HTTP Status Code: 400

InvalidQueryParameter
The AWS query string is malformed or does not adhere to AWS standards.
HTTP Status Code: 400

MalformedQueryString
The query string contains a syntax error.
HTTP Status Code: 404

MissingAction
The request is missing an action or a required parameter.
HTTP Status Code: 400
MissingAuthenticationToken

The request must contain either a valid (registered) AWS access key ID or X.509 certificate.

HTTP Status Code: 403

MissingParameter

A required parameter for the specified action is not supplied.

HTTP Status Code: 400

OptInRequired

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

HTTP Status Code: 403

RequestExpired

The request reached the service more than 15 minutes after the date stamp on the request or more than 15 minutes after the request expiration date (such as for pre-signed URLs), or the date stamp on the request is more than 15 minutes in the future.

HTTP Status Code: 400

ServiceUnavailable

The request has failed due to a temporary failure of the server.

HTTP Status Code: 503

ThrottlingException

The request was denied due to request throttling.

HTTP Status Code: 400

ValidationError

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

HTTP Status Code: 400