
AWS Database Migration Service

API Reference

API Version 2016-01-01



AWS Database Migration Service: API Reference

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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 [What Is AWS Database Migration Service?](#) in the *AWS Database Migration Service User Guide*.

This document was last published on June 18, 2021.

Actions

The following actions are supported:

- [AddTagsToResource](#) (p. 4)
- [ApplyPendingMaintenanceAction](#) (p. 6)
- [CancelReplicationTaskAssessmentRun](#) (p. 8)
- [CreateEndpoint](#) (p. 11)
- [CreateEventSubscription](#) (p. 27)
- [CreateReplicationInstance](#) (p. 31)
- [CreateReplicationSubnetGroup](#) (p. 39)
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- [ModifyEndpoint](#) (p. 170)
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- [ModifyReplicationTask](#) (p. 200)
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- [StartReplicationTask](#) (p. 219)
- [StartReplicationTaskAssessment](#) (p. 224)
- [StartReplicationTaskAssessmentRun](#) (p. 226)
- [StopReplicationTask](#) (p. 232)
- [TestConnection](#) (p. 236)

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. For more information, see [Tag](#) data type description.

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. 346).

The request accepts the following data in JSON format.

ResourceArn (p. 4)

Identifies the AWS DMS resource to which tags should be added. The value for this parameter is an Amazon Resource Name (ARN).

For AWS DMS, you can tag a replication instance, an endpoint, or a replication task.

Type: String

Required: Yes

Tags (p. 4)

One or more tags to be assigned to the resource.

Type: Array of [Tag](#) (p. 344) 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. 348).

ResourceNotFoundFault

The resource could not be found.

HTTP Status Code: 400

Examples

Example

This example illustrates one usage of `AddTagsToResource`.

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.AddTagsToResource
{
  "ResourceArn": "arn:aws:dms:us-east-
    1:123456789012:rep:PWEBBEUNOLU7VEB2OHTEH4I4GQ",
  "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 V2](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

ApplyPendingMaintenanceAction

Applies a pending maintenance action to a resource (for example, to a replication instance).

Request Syntax

```
{  
  "ApplyAction": "string",  
  "OptInType": "string",  
  "ReplicationInstanceArn": "string"  
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 346).

The request accepts the following data in JSON format.

ApplyAction (p. 6)

The pending maintenance action to apply to this resource.

Type: String

Required: Yes

OptInType (p. 6)

A value that specifies the type of opt-in request, or undoes an opt-in request. You can't undo an opt-in request of type `immediate`.

Valid values:

- `immediate` - Apply the maintenance action immediately.
- `next-maintenance` - Apply the maintenance action during the next maintenance window for the resource.
- `undo-opt-in` - Cancel any existing `next-maintenance` opt-in requests.

Type: String

Required: Yes

ReplicationInstanceArn (p. 6)

The Amazon Resource Name (ARN) of the AWS DMS resource that the pending maintenance action applies to.

Type: String

Required: Yes

Response Syntax

```
{  
  "ResourcePendingMaintenanceActions": {  
    "PendingMaintenanceActionDetails": [  
      {  
        "ApplyAction": "string",  
        "OptInType": "string",  
        "ReplicationInstanceArn": "string"  
      }  
    ]  
  }  
}
```

```
{
  {
    "Action": "string",
    "AutoAppliedAfterDate": number,
    "CurrentApplyDate": number,
    "Description": "string",
    "ForcedApplyDate": number,
    "OptInStatus": "string"
  },
  "ResourceIdentifier": "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.

ResourcePendingMaintenanceActions (p. 6)

The AWS DMS resource that the pending maintenance action will be applied to.

Type: [ResourcePendingMaintenanceActions](#) (p. 326) object

Errors

For information about the errors that are common to all actions, see [Common Errors](#) (p. 348).

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

CancelReplicationTaskAssessmentRun

Cancels a single premigration assessment run.

This operation prevents any individual assessments from running if they haven't started running. It also attempts to cancel any individual assessments that are currently running.

Request Syntax

```
{  
  "ReplicationTaskAssessmentRunArn": "string"  
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 346).

The request accepts the following data in JSON format.

ReplicationTaskAssessmentRunArn (p. 8)

Amazon Resource Name (ARN) of the premigration assessment run to be canceled.

Type: String

Required: Yes

Response Syntax

```
{  
  "ReplicationTaskAssessmentRun": {  
    "AssessmentProgress": {  
      "IndividualAssessmentCompletedCount": number,  
      "IndividualAssessmentCount": number  
    },  
    "AssessmentRunName": "string",  
    "LastFailureMessage": "string",  
    "ReplicationTaskArn": "string",  
    "ReplicationTaskAssessmentRunArn": "string",  
    "ReplicationTaskAssessmentRunCreationDate": number,  
    "ResultEncryptionMode": "string",  
    "ResultKmsKeyArn": "string",  
    "ResultLocationBucket": "string",  
    "ResultLocationFolder": "string",  
    "ServiceAccessRoleArn": "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.

[ReplicationTaskAssessmentRun \(p. 8\)](#)

The `ReplicationTaskAssessmentRun` object for the canceled assessment run.

Type: [ReplicationTaskAssessmentRun \(p. 318\)](#) object

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 348\)](#).

AccessDeniedFault

AWS DMS was denied access to the endpoint. Check that the role is correctly configured.

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

Examples

Example

This example illustrates one usage of `CancelReplicationTaskAssessmentRun`.

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.CancelReplicationTaskAssessmentRun
{
  "ReplicationTaskAssessmentRunArn": "arn:aws:dms:us-west-2:123456789012:assessment-run:G7C26HZ4A3CRB6DJKIMT4RDSHCIGP4T4BHOMHRA"
}
```

Sample Response

```
HTTP/1.1 200 OK
x-amzn-RequestId: <RequestId>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Date: <Date>
{
  "ReplicationTaskAssessmentRun": {
    "AssessmentProgress": {
      "IndividualAssessmentCompletedCount": 0,
      "IndividualAssessmentCount": 3
    },
    "AssessmentRunName": "Assessment-run-2020-07-10-17-49-37",
    "ReplicationTaskArn": "arn:aws:dms:us-west-2:123456789012:task:L6XROPGLRF25LCREVEDPT3XL5QJM5IZNUSV6Q",
    "ReplicationTaskAssessmentRunArn": "arn:aws:dms:us-west-2:123456789012:assessment-run:G7C26HZ4A3CRB6DJKIMT4RDSHCIGP4T4BHOMHRA",
    "ReplicationTaskAssessmentRunCreationDate": 1594428591.99,
    "ResultEncryptionMode": "NONE",
    "ResultLocationBucket": "s3-endpoint-bucket",
    "ResultLocationFolder": "",
    "ServiceAccessRoleArn": "arn:aws:iam::123456789012:role/Admin",
    "Status": "cancelling"
  }
}
```

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

CreateEndpoint

Creates an endpoint using the provided settings.

Note

For a MySQL source or target endpoint, don't explicitly specify the database using the `DatabaseName` request parameter on the `CreateEndpoint` API call. Specifying `DatabaseName` when you create a MySQL endpoint replicates all the task tables to this single database. For MySQL endpoints, you specify the database only when you specify the schema in the table-mapping rules of the AWS DMS task.

Request Syntax

```
{
  "CertificateArn": "string",
  "DatabaseName": "string",
  "DmsTransferSettings": {
    "BucketName": "string",
    "ServiceAccessRoleArn": "string"
  },
  "DocDbSettings": {
    "DatabaseName": "string",
    "DocsToInvestigate": number,
    "ExtractDocId": boolean,
    "KmsKeyId": "string",
    "NestingLevel": "string",
    "Password": "string",
    "Port": number,
    "SecretsManagerAccessRoleArn": "string",
    "SecretsManagerSecretId": "string",
    "ServerName": "string",
    "Username": "string"
  },
  "DynamoDbSettings": {
    "ServiceAccessRoleArn": "string"
  },
  "ElasticsearchSettings": {
    "EndpointUri": "string",
    "ErrorRetryDuration": number,
    "FullLoadErrorPercentage": number,
    "ServiceAccessRoleArn": "string"
  },
  "EndpointIdentifier": "string",
  "EndpointType": "string",
  "EngineName": "string",
  "ExternalTableDefinition": "string",
  "ExtraConnectionAttributes": "string",
  "IBMDB2Settings": {
    "CurrentLsn": "string",
    "DatabaseName": "string",
    "MaxKBytesPerRead": number,
    "Password": "string",
    "Port": number,
    "SecretsManagerAccessRoleArn": "string",
    "SecretsManagerSecretId": "string",
    "ServerName": "string",
    "SetDataCaptureChanges": boolean,
    "Username": "string"
  },
  "KafkaSettings": {
    "Broker": "string",
    "IncludeControlDetails": boolean,
```

```

    "IncludeNullAndEmpty": boolean,
    "IncludePartitionValue": boolean,
    "IncludeTableAlterOperations": boolean,
    "IncludeTransactionDetails": boolean,
    "MessageFormat": "string",
    "MessageMaxBytes": number,
    "PartitionIncludeSchemaTable": boolean,
    "SaslPassword": "string",
    "SaslUsername": "string",
    "SecurityProtocol": "string",
    "SslCaCertificateArn": "string",
    "SslClientCertificateArn": "string",
    "SslClientKeyArn": "string",
    "SslClientKeyPassword": "string",
    "Topic": "string"
  },
  "KinesisSettings": {
    "IncludeControlDetails": boolean,
    "IncludeNullAndEmpty": boolean,
    "IncludePartitionValue": boolean,
    "IncludeTableAlterOperations": boolean,
    "IncludeTransactionDetails": boolean,
    "MessageFormat": "string",
    "PartitionIncludeSchemaTable": boolean,
    "ServiceAccessRoleArn": "string",
    "StreamArn": "string"
  },
  "KmsKeyId": "string",
  "MicrosoftSQLServerSettings": {
    "BcpPacketSize": number,
    "ControlTablesFileGroup": "string",
    "DatabaseName": "string",
    "Password": "string",
    "Port": number,
    "QuerySingleAlwaysOnNode": boolean,
    "ReadBackupOnly": boolean,
    "SafeguardPolicy": "string",
    "SecretsManagerAccessRoleArn": "string",
    "SecretsManagerSecretId": "string",
    "ServerName": "string",
    "UseBcpFullLoad": boolean,
    "Username": "string",
    "UseThirdPartyBackupDevice": boolean
  },
  "MongoDbSettings": {
    "AuthMechanism": "string",
    "AuthSource": "string",
    "AuthType": "string",
    "DatabaseName": "string",
    "DocsToInvestigate": "string",
    "ExtractDocId": "string",
    "KmsKeyId": "string",
    "NestingLevel": "string",
    "Password": "string",
    "Port": number,
    "SecretsManagerAccessRoleArn": "string",
    "SecretsManagerSecretId": "string",
    "ServerName": "string",
    "Username": "string"
  },
  "MySQLSettings": {
    "AfterConnectScript": "string",
    "CleanSourceMetadataOnMismatch": boolean,
    "DatabaseName": "string",
    "EventsPollInterval": number,
    "MaxFileSize": number,

```



```

    "ParallelLoadThreads": number,
    "Password": "string",
    "Port": number,
    "SecretsManagerAccessRoleArn": "string",
    "SecretsManagerSecretId": "string",
    "ServerName": "string",
    "ServerTimezone": "string",
    "TargetDbType": "string",
    "Username": "string"
  },
  "NeptuneSettings": {
    "ErrorRetryDuration": number,
    "IamAuthEnabled": boolean,
    "MaxFileSize": number,
    "MaxRetryCount": number,
    "S3BucketFolder": "string",
    "S3BucketName": "string",
    "ServiceAccessRoleArn": "string"
  },
  "OracleSettings": {
    "AccessAlternateDirectly": boolean,
    "AdditionalArchivedLogDestId": number,
    "AddSupplementalLogging": boolean,
    "AllowSelectNestedTables": boolean,
    "ArchivedLogDestId": number,
    "ArchivedLogsOnly": boolean,
    "AsmPassword": "string",
    "AsmServer": "string",
    "AsmUser": "string",
    "CharLengthSemantics": "string",
    "DatabaseName": "string",
    "DirectPathNoLog": boolean,
    "DirectPathParallelLoad": boolean,
    "EnableHomogenousTablespace": boolean,
    "FailTasksOnLobTruncation": boolean,
    "NumberDatatypeScale": number,
    "OraclePathPrefix": "string",
    "ParallelAsmReadThreads": number,
    "Password": "string",
    "Port": number,
    "ReadAheadBlocks": number,
    "ReadTableSpaceName": boolean,
    "ReplacePathPrefix": boolean,
    "RetryInterval": number,
    "SecretsManagerAccessRoleArn": "string",
    "SecretsManagerOracleAsmAccessRoleArn": "string",
    "SecretsManagerOracleAsmSecretId": "string",
    "SecretsManagerSecretId": "string",
    "SecurityDbEncryption": "string",
    "SecurityDbEncryptionName": "string",
    "ServerName": "string",
    "SpatialDataOptionToGeoJsonFunctionName": "string",
    "UseAlternateFolderForOnline": boolean,
    "UsePathPrefix": "string",
    "Username": "string"
  },
  "Password": "string",
  "Port": number,
  "PostgreSQLSettings": {
    "AfterConnectScript": "string",
    "CaptureDdls": boolean,
    "DatabaseName": "string",
    "DdlArtifactsSchema": "string",
    "ExecuteTimeout": number,
    "FailTasksOnLobTruncation": boolean,
    "MaxFileSize": number,

```

```

    "Password": "string",
    "Port": number,
    "SecretsManagerAccessRoleArn": "string",
    "SecretsManagerSecretId": "string",
    "ServerName": "string",
    "SlotName": "string",
    "Username": "string"
  },
  "RedshiftSettings": {
    "AcceptAnyDate": boolean,
    "AfterConnectScript": "string",
    "BucketFolder": "string",
    "BucketName": "string",
    "CaseSensitiveNames": boolean,
    "CompUpdate": boolean,
    "ConnectionTimeout": number,
    "DatabaseName": "string",
    "DateFormat": "string",
    "EmptyAsNull": boolean,
    "EncryptionMode": "string",
    "ExplicitIds": boolean,
    "FileTransferUploadStreams": number,
    "LoadTimeout": number,
    "MaxFileSize": number,
    "Password": "string",
    "Port": number,
    "RemoveQuotes": boolean,
    "ReplaceChars": "string",
    "ReplaceInvalidChars": "string",
    "SecretsManagerAccessRoleArn": "string",
    "SecretsManagerSecretId": "string",
    "ServerName": "string",
    "ServerSideEncryptionKmsKeyId": "string",
    "ServiceAccessRoleArn": "string",
    "TimeFormat": "string",
    "TrimBlanks": boolean,
    "TruncateColumns": boolean,
    "Username": "string",
    "WriteBufferSize": number
  },
  "ResourceIdentifier": "string",
  "S3Settings": {
    "BucketFolder": "string",
    "BucketName": "string",
    "CdcInsertsAndUpdates": boolean,
    "CdcInsertsOnly": boolean,
    "CdcPath": "string",
    "CompressionType": "string",
    "CsvDelimiter": "string",
    "CsvNoSupValue": "string",
    "CsvRowDelimiter": "string",
    "DataFormat": "string",
    "DataPageSize": number,
    "DatePartitionDelimiter": "string",
    "DatePartitionEnabled": boolean,
    "DatePartitionSequence": "string",
    "DictPageSizeLimit": number,
    "EnableStatistics": boolean,
    "EncodingType": "string",
    "EncryptionMode": "string",
    "ExternalTableDefinition": "string",
    "IncludeOpForFullLoad": boolean,
    "ParquetTimestampInMillisecond": boolean,
    "ParquetVersion": "string",
    "PreserveTransactions": boolean,
    "RowGroupLength": number,

```

```
    "ServerSideEncryptionKmsKeyId": "string",
    "ServiceAccessRoleArn": "string",
    "TimestampColumnName": "string",
    "UseCsvNoSupValue": boolean
  },
  "ServerName": "string",
  "ServiceAccessRoleArn": "string",
  "SslMode": "string",
  "SybaseSettings": {
    "DatabaseName": "string",
    "Password": "string",
    "Port": number,
    "SecretsManagerAccessRoleArn": "string",
    "SecretsManagerSecretId": "string",
    "ServerName": "string",
    "Username": "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. 346).

The request accepts the following data in JSON format.

CertificateArn (p. 11)

The Amazon Resource Name (ARN) for the certificate.

Type: String

Required: No

DatabaseName (p. 11)

The name of the endpoint database. For a MySQL source or target endpoint, do not specify DatabaseName.

Type: String

Required: No

DmsTransferSettings (p. 11)

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

Possible settings include the following:

- **ServiceAccessRoleArn** - The IAM role that has permission to access the Amazon S3 bucket. The role must allow the `iam:PassRole` action.
- **BucketName** - The name of the S3 bucket to use.

Shorthand syntax for these settings is as follows:

`ServiceAccessRoleArn=string,BucketName=string`

JSON syntax for these settings is as follows: { "ServiceAccessRoleArn": "string", "BucketName": "string", }

Type: [DmsTransferSettings \(p. 247\)](#) object

Required: No

DocDbSettings (p. 11)

Provides information that defines a DocumentDB endpoint.

Type: [DocDbSettings \(p. 248\)](#) object

Required: No

DynamoDbSettings (p. 11)

Settings in JSON format for the target Amazon DynamoDB endpoint. For information about other available settings, see [Using Object Mapping to Migrate Data to DynamoDB](#) in the *AWS Database Migration Service User Guide*.

Type: [DynamoDbSettings \(p. 251\)](#) object

Required: No

ElasticsearchSettings (p. 11)

Settings in JSON format for the target Elasticsearch endpoint. For more information about the available settings, see [Extra Connection Attributes When Using Elasticsearch as a Target for AWS DMS](#) in the *AWS Database Migration Service User Guide*.

Type: [ElasticsearchSettings \(p. 252\)](#) object

Required: No

EndpointIdentifier (p. 11)

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

Type: String

Required: Yes

EndpointType (p. 11)

The type of endpoint. Valid values are `source` and `target`.

Type: String

Valid Values: `source` | `target`

Required: Yes

EngineName (p. 11)

The type of engine for the endpoint. Valid values, depending on the `EndpointType` value, include `"mysql"`, `"oracle"`, `"postgres"`, `"mariadb"`, `"aurora"`, `"aurora-postgresql"`, `"redshift"`, `"s3"`, `"db2"`, `"azuredb"`, `"sybase"`, `"dynamodb"`, `"mongodb"`, `"kinesis"`, `"kafka"`, `"elasticsearch"`, `"docdb"`, `"sqlserver"`, and `"neptune"`.

Type: String

Required: Yes

ExternalTableDefinition (p. 11)

The external table definition.

Type: String

Required: No

ExtraConnectionAttributes (p. 11)

Additional attributes associated with the connection. Each attribute is specified as a name-value pair associated by an equal sign (=). Multiple attributes are separated by a semicolon (;) with no additional white space. For information on the attributes available for connecting your source or target endpoint, see [Working with AWS DMS Endpoints](#) in the *AWS Database Migration Service User Guide*.

Type: String

Required: No

IBMDB2Settings (p. 11)

Settings in JSON format for the source IBM Db2 LUW endpoint. For information about other available settings, see [Extra connection attributes when using Db2 LUW as a source for AWS DMS](#) in the *AWS Database Migration Service User Guide*.

Type: [IBMDB2Settings \(p. 266\)](#) object

Required: No

KafkaSettings (p. 11)

Settings in JSON format for the target Apache Kafka endpoint. For more information about the available settings, see [Using Apache Kafka as a Target for AWS Database Migration Service](#) in the *AWS Database Migration Service User Guide*.

Type: [KafkaSettings \(p. 268\)](#) object

Required: No

KinesisSettings (p. 11)

Settings in JSON format for the target endpoint for Amazon Kinesis Data Streams. For more information about the available settings, see [Using Amazon Kinesis Data Streams as a Target for AWS Database Migration Service](#) in the *AWS Database Migration Service User Guide*.

Type: [KinesisSettings \(p. 271\)](#) object

Required: No

KmsKeyId (p. 11)

An AWS KMS key identifier that is used to encrypt the connection parameters for the endpoint.

If you don't specify a value for the `KmsKeyId` parameter, then AWS DMS uses 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

MicrosoftSQLServerSettings (p. 11)

Settings in JSON format for the source and target Microsoft SQL Server endpoint. For information about other available settings, see [Extra connection attributes when using SQL Server as a source for AWS DMS](#) and [Extra connection attributes when using SQL Server as a target for AWS DMS](#) in the *AWS Database Migration Service User Guide*.

Type: [MicrosoftSQLServerSettings \(p. 273\)](#) object

Required: No

MongoDbSettings (p. 11)

Settings in JSON format for the source MongoDB endpoint. For more information about the available settings, see [Using MongoDB as a Target for AWS Database Migration Service](#) in the *AWS Database Migration Service User Guide*.

Type: [MongoDbSettings \(p. 276\)](#) object

Required: No

MySQLSettings (p. 11)

Settings in JSON format for the source and target MySQL endpoint. For information about other available settings, see [Extra connection attributes when using MySQL as a source for AWS DMS](#) and [Extra connection attributes when using a MySQL-compatible database as a target for AWS DMS](#) in the *AWS Database Migration Service User Guide*.

Type: [MySQLSettings \(p. 279\)](#) object

Required: No

NeptuneSettings (p. 11)

Settings in JSON format for the target Amazon Neptune endpoint. For more information about the available settings, see [Specifying Endpoint Settings for Amazon Neptune as a Target](#) in the *AWS Database Migration Service User Guide*.

Type: [NeptuneSettings \(p. 282\)](#) object

Required: No

OracleSettings (p. 11)

Settings in JSON format for the source and target Oracle endpoint. For information about other available settings, see [Extra connection attributes when using Oracle as a source for AWS DMS](#) and [Extra connection attributes when using Oracle as a target for AWS DMS](#) in the *AWS Database Migration Service User Guide*.

Type: [OracleSettings \(p. 284\)](#) object

Required: No

Password (p. 11)

The password to be used to log in to the endpoint database.

Type: String

Required: No

Port (p. 11)

The port used by the endpoint database.

Type: Integer

Required: No

PostgreSQLSettings (p. 11)

Settings in JSON format for the source and target PostgreSQL endpoint. For information about other available settings, see [Extra connection attributes when using PostgreSQL as a source for AWS DMS](#) and [Extra connection attributes when using PostgreSQL as a target for AWS DMS](#) in the *AWS Database Migration Service User Guide*.

Type: [PostgreSQLSettings \(p. 295\)](#) object

Required: No

RedshiftSettings (p. 11)

Provides information that defines an Amazon Redshift endpoint.

Type: [RedshiftSettings \(p. 298\)](#) object

Required: No

ResourceIdentifier (p. 11)

A friendly name for the resource identifier at the end of the `EndpointArn` response parameter that is returned in the created `Endpoint` object. The value for this parameter can have up to 31 characters. It can contain only ASCII letters, digits, and hyphen ('-'). Also, it can't end with a hyphen or contain two consecutive hyphens, and can only begin with a letter, such as `Example-App-ARN1`. For example, this value might result in the `EndpointArn` value `arn:aws:dms:eu-west-1:012345678901:rep:Example-App-ARN1`. If you don't specify a `ResourceIdentifier` value, AWS DMS generates a default identifier value for the end of `EndpointArn`.

Type: String

Required: No

S3Settings (p. 11)

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

Type: [S3Settings \(p. 327\)](#) object

Required: No

ServerName (p. 11)

The name of the server where the endpoint database resides.

Type: String

Required: No

ServiceAccessRoleArn (p. 11)

The Amazon Resource Name (ARN) for the service access role that you want to use to create the endpoint. The role must allow the `iam:PassRole` action.

Type: String

Required: No

SslMode (p. 11)

The Secure Sockets Layer (SSL) mode to use for the SSL connection. The default is `none`

Type: String

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

Required: No

SybaseSettings (p. 11)

Settings in JSON format for the source and target SAP ASE endpoint. For information about other available settings, see [Extra connection attributes when using SAP ASE as a source for AWS DMS](#) and [Extra connection attributes when using SAP ASE as a target for AWS DMS](#) in the *AWS Database Migration Service User Guide*.

Type: [SybaseSettings \(p. 338\)](#) object

Required: No

Tags (p. 11)

One or more tags to be assigned to the endpoint.

Type: Array of [Tag \(p. 344\)](#) objects

Required: No

Username (p. 11)

The user name to be used to log in to the endpoint database.

Type: String

Required: No

Response Syntax

```
{
  "Endpoint": {
    "CertificateArn": "string",
    "DatabaseName": "string",
    "DmsTransferSettings": {
      "BucketName": "string",
      "ServiceAccessRoleArn": "string"
    },
    "DocDbSettings": {
      "DatabaseName": "string",
      "DocsToInvestigate": number,
      "ExtractDocId": boolean,
      "KmsKeyId": "string",
      "NestingLevel": "string",
      "Password": "string",
      "Port": number,
      "SecretsManagerAccessRoleArn": "string",
      "SecretsManagerSecretId": "string",
      "ServerName": "string",
      "Username": "string"
    },
    "DynamoDbSettings": {
      "ServiceAccessRoleArn": "string"
    },
    "ElasticsearchSettings": {
      "EndpointUri": "string",
      "ErrorRetryDuration": number,
      "FullLoadErrorPercentage": number,
      "ServiceAccessRoleArn": "string"
    },
    "EndpointArn": "string",
```



```

"EndpointIdentifier": "string",
"EndpointType": "string",
"EngineDisplayName": "string",
"EngineName": "string",
"ExternalId": "string",
"ExternalTableDefinition": "string",
"ExtraConnectionAttributes": "string",
"IBMDB2Settings": {
  "CurrentLsn": "string",
  "DatabaseName": "string",
  "MaxKBytesPerRead": number,
  "Password": "string",
  "Port": number,
  "SecretsManagerAccessRoleArn": "string",
  "SecretsManagerSecretId": "string",
  "ServerName": "string",
  "SetDataCaptureChanges": boolean,
  "Username": "string"
},
"KafkaSettings": {
  "Broker": "string",
  "IncludeControlDetails": boolean,
  "IncludeNullAndEmpty": boolean,
  "IncludePartitionValue": boolean,
  "IncludeTableAlterOperations": boolean,
  "IncludeTransactionDetails": boolean,
  "MessageFormat": "string",
  "MessageMaxBytes": number,
  "PartitionIncludeSchemaTable": boolean,
  "SaslPassword": "string",
  "SaslUsername": "string",
  "SecurityProtocol": "string",
  "SslCaCertificateArn": "string",
  "SslClientCertificateArn": "string",
  "SslClientKeyArn": "string",
  "SslClientKeyPassword": "string",
  "Topic": "string"
},
"KinesisSettings": {
  "IncludeControlDetails": boolean,
  "IncludeNullAndEmpty": boolean,
  "IncludePartitionValue": boolean,
  "IncludeTableAlterOperations": boolean,
  "IncludeTransactionDetails": boolean,
  "MessageFormat": "string",
  "PartitionIncludeSchemaTable": boolean,
  "ServiceAccessRoleArn": "string",
  "StreamArn": "string"
},
"KmsKeyId": "string",
"MicrosoftSQLServerSettings": {
  "BcpPacketSize": number,
  "ControlTablesFileGroup": "string",
  "DatabaseName": "string",
  "Password": "string",
  "Port": number,
  "QuerySingleAlwaysOnNode": boolean,
  "ReadBackupOnly": boolean,
  "SafeguardPolicy": "string",
  "SecretsManagerAccessRoleArn": "string",
  "SecretsManagerSecretId": "string",
  "ServerName": "string",
  "UseBcpFullLoad": boolean,
  "Username": "string",
  "UseThirdPartyBackupDevice": boolean
},

```

```

"MongoDbSettings": {
  "AuthMechanism": "string",
  "AuthSource": "string",
  "AuthType": "string",
  "DatabaseName": "string",
  "DocsToInvestigate": "string",
  "ExtractDocId": "string",
  "KmsKeyId": "string",
  "NestingLevel": "string",
  "Password": "string",
  "Port": number,
  "SecretsManagerAccessRoleArn": "string",
  "SecretsManagerSecretId": "string",
  "ServerName": "string",
  "Username": "string"
},
"MySQLSettings": {
  "AfterConnectScript": "string",
  "CleanSourceMetadataOnMismatch": boolean,
  "DatabaseName": "string",
  "EventsPollInterval": number,
  "MaxFileSize": number,
  "ParallelLoadThreads": number,
  "Password": "string",
  "Port": number,
  "SecretsManagerAccessRoleArn": "string",
  "SecretsManagerSecretId": "string",
  "ServerName": "string",
  "ServerTimezone": "string",
  "TargetDbType": "string",
  "Username": "string"
},
"NeptuneSettings": {
  "ErrorRetryDuration": number,
  "IamAuthEnabled": boolean,
  "MaxFileSize": number,
  "MaxRetryCount": number,
  "S3BucketFolder": "string",
  "S3BucketName": "string",
  "ServiceAccessRoleArn": "string"
},
"OracleSettings": {
  "AccessAlternateDirectly": boolean,
  "AdditionalArchivedLogDestId": number,
  "AddSupplementalLogging": boolean,
  "AllowSelectNestedTables": boolean,
  "ArchivedLogDestId": number,
  "ArchivedLogsOnly": boolean,
  "AsmPassword": "string",
  "AsmServer": "string",
  "AsmUser": "string",
  "CharLengthSemantics": "string",
  "DatabaseName": "string",
  "DirectPathNoLog": boolean,
  "DirectPathParallelLoad": boolean,
  "EnableHomogenousTablespace": boolean,
  "FailTasksOnLobTruncation": boolean,
  "NumberDatatypeScale": number,
  "OraclePathPrefix": "string",
  "ParallelAsmReadThreads": number,
  "Password": "string",
  "Port": number,
  "ReadAheadBlocks": number,
  "ReadTableSpaceName": boolean,
  "ReplacePathPrefix": boolean,
  "RetryInterval": number,

```

```

    "SecretsManagerAccessRoleArn": "string",
    "SecretsManagerOracleAsmAccessRoleArn": "string",
    "SecretsManagerOracleAsmSecretId": "string",
    "SecretsManagerSecretId": "string",
    "SecurityDbEncryption": "string",
    "SecurityDbEncryptionName": "string",
    "ServerName": "string",
    "SpatialDataOptionToGeoJsonFunctionName": "string",
    "UseAlternateFolderForOnline": boolean,
    "UsePathPrefix": "string",
    "Username": "string"
  },
  "Port": number,
  "PostgreSQLSettings": {
    "AfterConnectScript": "string",
    "CaptureDdls": boolean,
    "DatabaseName": "string",
    "DdlArtifactsSchema": "string",
    "ExecuteTimeout": number,
    "FailTasksOnLobTruncation": boolean,
    "MaxFileSize": number,
    "Password": "string",
    "Port": number,
    "SecretsManagerAccessRoleArn": "string",
    "SecretsManagerSecretId": "string",
    "ServerName": "string",
    "SlotName": "string",
    "Username": "string"
  },
  "RedshiftSettings": {
    "AcceptAnyDate": boolean,
    "AfterConnectScript": "string",
    "BucketFolder": "string",
    "BucketName": "string",
    "CaseSensitiveNames": boolean,
    "CompUpdate": boolean,
    "ConnectionTimeout": number,
    "DatabaseName": "string",
    "DateFormat": "string",
    "EmptyAsNull": boolean,
    "EncryptionMode": "string",
    "ExplicitIds": boolean,
    "FileTransferUploadStreams": number,
    "LoadTimeout": number,
    "MaxFileSize": number,
    "Password": "string",
    "Port": number,
    "RemoveQuotes": boolean,
    "ReplaceChars": "string",
    "ReplaceInvalidChars": "string",
    "SecretsManagerAccessRoleArn": "string",
    "SecretsManagerSecretId": "string",
    "ServerName": "string",
    "ServerSideEncryptionKmsKeyId": "string",
    "ServiceAccessRoleArn": "string",
    "TimeFormat": "string",
    "TrimBlanks": boolean,
    "TruncateColumns": boolean,
    "Username": "string",
    "WriteBufferSize": number
  },
  "S3Settings": {
    "BucketFolder": "string",
    "BucketName": "string",
    "CdcInsertsAndUpdates": boolean,
    "CdcInsertsOnly": boolean,

```

```

        "CdcPath": "string",
        "CompressionType": "string",
        "CsvDelimiter": "string",
        "CsvNoSupValue": "string",
        "CsvRowDelimiter": "string",
        "DataFormat": "string",
        "DataPageSize": number,
        "DatePartitionDelimiter": "string",
        "DatePartitionEnabled": boolean,
        "DatePartitionSequence": "string",
        "DictPageSizeLimit": number,
        "EnableStatistics": boolean,
        "EncodingType": "string",
        "EncryptionMode": "string",
        "ExternalTableDefinition": "string",
        "IncludeOpForFullLoad": boolean,
        "ParquetTimestampInMillisecond": boolean,
        "ParquetVersion": "string",
        "PreserveTransactions": boolean,
        "RowGroupLength": number,
        "ServerSideEncryptionKmsKeyId": "string",
        "ServiceAccessRoleArn": "string",
        "TimestampColumnName": "string",
        "UseCsvNoSupValue": boolean
    },
    "ServerName": "string",
    "ServiceAccessRoleArn": "string",
    "SslMode": "string",
    "Status": "string",
    "SybaseSettings": {
        "DatabaseName": "string",
        "Password": "string",
        "Port": number,
        "SecretsManagerAccessRoleArn": "string",
        "SecretsManagerSecretId": "string",
        "ServerName": "string",
        "Username": "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.

Endpoint (p. 20)

The endpoint that was created.

Type: [Endpoint \(p. 253\)](#) object

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 348\)](#).

AccessDeniedFault

AWS DMS was denied access to the endpoint. Check that the role is correctly configured.

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 AWS 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

S3AccessDeniedFault

Insufficient privileges are preventing access to an Amazon S3 object.

HTTP Status Code: 400

Examples

Example

This example illustrates one usage of `CreateEndpoint`.

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.cxln7iyxxllo.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",
    "EndpointArn": "arn:aws:dms:us-east-1:123456789012:endpoint:RAAR3R22XSH46S3PWL3NJAWKM",
    "ServerName": "test-source.cxln7iyxxllo.us-west-2.rds.amazonaws.com",
    "EndpointType": "SOURCE",
    "KmsKeyId": "arn:aws:kms:us-east-1:123456789012:key/4dc17316-5543-4ded-b1e3-d53a7cfb411d",
    "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 V2](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

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

```
{
  "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. 346).

The request accepts the following data in JSON format.

Enabled (p. 27)

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. 27)

A list of event categories for a source type that you want to subscribe to. For more information, see [Working with Events and Notifications](#) in the *AWS Database Migration Service User Guide*.

Type: Array of strings

Required: No

SnsTopicArn (p. 27)

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. 27)

A list of identifiers for which AWS DMS provides notification events.

If you don't specify a value, notifications are provided for all sources.

If you specify multiple values, they must be of the same type. For example, if you specify a database instance ID, then all of the other values must be database instance IDs.

Type: Array of strings

Required: No

SourceType (p. 27)

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 isn't specified, all events are returned.

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

Type: String

Required: No

SubscriptionName (p. 27)

The name of the AWS DMS event notification subscription. This name must be less than 255 characters.

Type: String

Required: Yes

Tags (p. 27)

One or more tags to be assigned to the event subscription.

Type: Array of [Tag \(p. 344\)](#) objects

Required: No

Response Syntax

```
{
  "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. 28)

The event subscription that was created.

Type: [EventSubscription \(p. 263\)](#) object

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 348\)](#).

KMSAccessDeniedFault

The ciphertext references a key that doesn't exist or that the DMS account doesn't have access to.

HTTP Status Code: 400

KMSDisabledFault

The specified master key (CMK) isn't enabled.

HTTP Status Code: 400

KMSInvalidStateFault

The state of the specified AWS KMS resource isn't valid for this request.

HTTP Status Code: 400

KMSNotFoundFault

The specified AWS KMS entity or resource can't be found.

HTTP Status Code: 400

KMSThrottlingFault

This request triggered AWS KMS request throttling.

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

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

CreateReplicationInstance

Creates the replication instance using the specified parameters.

AWS DMS requires that your account have certain roles with appropriate permissions before you can create a replication instance. For information on the required roles, see [Creating the IAM Roles to Use With the AWS CLI and AWS DMS API](#). For information on the required permissions, see [IAM Permissions Needed to Use AWS DMS](#).

Request Syntax

```
{
  "AllocatedStorage": number,
  "AutoMinorVersionUpgrade": boolean,
  "AvailabilityZone": "string",
  "DnsNameServers": "string",
  "EngineVersion": "string",
  "KmsKeyId": "string",
  "MultiAZ": boolean,
  "PreferredMaintenanceWindow": "string",
  "PubliclyAccessible": boolean,
  "ReplicationInstanceClass": "string",
  "ReplicationInstanceIdentifier": "string",
  "ReplicationSubnetGroupIdentifier": "string",
  "ResourceId": "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. 346).

The request accepts the following data in JSON format.

AllocatedStorage (p. 31)

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

Type: Integer

Required: No

AutoMinorVersionUpgrade (p. 31)

A value that indicates whether minor engine upgrades are applied automatically to the replication instance during the maintenance window. This parameter defaults to `true`.

Default: `true`

Type: Boolean

Required: No

AvailabilityZone (p. 31)

The Availability Zone where the replication instance will be created. The default value is a random, system-chosen Availability Zone in the endpoint's AWS Region, for example: `us-east-1d`

Type: String

Required: No

DnsNameServers (p. 31)

A list of custom DNS name servers supported for the replication instance to access your on-premise source or target database. This list overrides the default name servers supported by the replication instance. You can specify a comma-separated list of internet addresses for up to four on-premise DNS name servers. For example: `"1.1.1.1,2.2.2.2,3.3.3.3,4.4.4.4"`

Type: String

Required: No

EngineVersion (p. 31)

The engine version number of the replication instance.

If an engine version number is not specified when a replication instance is created, the default is the latest engine version available.

Type: String

Required: No

KmsKeyId (p. 31)

An AWS KMS key identifier that is used to encrypt the data on the replication instance.

If you don't specify a value for the `KmsKeyId` parameter, then AWS DMS uses 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. 31)

Specifies whether the replication instance is a Multi-AZ deployment. You can't set the `AvailabilityZone` parameter if the Multi-AZ parameter is set to `true`.

Type: Boolean

Required: No

PreferredMaintenanceWindow (p. 31)

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

Format: `ddd:hh24:mi-ddd:hh24:mi`

Default: A 30-minute window selected at random from an 8-hour block of time per AWS 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. 31)

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. 31)

The compute and memory capacity of the replication instance as defined for the specified replication instance class. For example to specify the instance class `dms.c4.large`, set this parameter to `"dms.c4.large"`.

For more information on the settings and capacities for the available replication instance classes, see [Selecting the right AWS DMS replication instance for your migration](#).

Type: String

Required: Yes

ReplicationInstanceIdentifier (p. 31)

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

Constraints:

- Must contain 1-63 alphanumeric characters or hyphens.
- First character must be a letter.
- Can't end with a hyphen or contain two consecutive hyphens.

Example: `myrepinstance`

Type: String

Required: Yes

ReplicationSubnetGroupIdentifier (p. 31)

A subnet group to associate with the replication instance.

Type: String

Required: No

ResourceIdentifier (p. 31)

A friendly name for the resource identifier at the end of the `EndpointArn` response parameter that is returned in the created `Endpoint` object. The value for this parameter can have up to 31 characters. It can contain only ASCII letters, digits, and hyphen ('-'). Also, it can't end with a hyphen or contain two consecutive hyphens, and can only begin with a letter, such as `Example-App-ARN1`. For example, this value might result in the `EndpointArn` value `arn:aws:dms:eu-west-1:012345678901:rep:Example-App-ARN1`. If you don't specify a `ResourceIdentifier` value, AWS DMS generates a default identifier value for the end of `EndpointArn`.

Type: String

Required: No

Tags (p. 31)

One or more tags to be assigned to the replication instance.

Type: Array of [Tag \(p. 344\)](#) objects

Required: No

VpcSecurityGroupIds (p. 31)

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",
    "DnsNameServers": "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"
  },
  "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.

ReplicationInstance (p. 34)

The replication instance that was created.

Type: [ReplicationInstance](#) (p. 305) object

Errors

For information about the errors that are common to all actions, see [Common Errors](#) (p. 348).

AccessDeniedFault

AWS DMS was denied access to the endpoint. Check that the role is correctly configured.

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 AWS 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

Examples

Example

This example illustrates one usage of `CreateReplicationInstance`.

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,
    "ReplicationInstanceArn":"arn:aws:dms:us-east-1:123456789012:rep:PWEBBEUNOLU7VEB2OHTEH4I4GQ",
    "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 V2](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

CreateReplicationSubnetGroup

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

Request Syntax

```
{
  "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 \(p. 346\)](#).

The request accepts the following data in JSON format.

ReplicationSubnetGroupDescription (p. 39)

The description for the subnet group.

Type: String

Required: Yes

ReplicationSubnetGroupIdentifier (p. 39)

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. 39)

One or more subnet IDs to be assigned to the subnet group.

Type: Array of strings

Required: Yes

Tags (p. 39)

One or more tags to be assigned to the subnet group.

Type: Array of [Tag \(p. 344\)](#) objects

Required: No

Response Syntax

```
{
  "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. 40)

The replication subnet group that was created.

Type: [ReplicationSubnetGroup \(p. 311\)](#) object

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 348\)](#).

AccessDeniedFault

AWS DMS was denied access to the endpoint. Check that the role is correctly configured.

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

Examples

Example

This example illustrates one usage of `CreateReplicationSubnetGroup`.

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-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"
    }
  },
  {
    "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 V2](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

CreateReplicationTask

Creates a replication task using the specified parameters.

Request Syntax

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

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 346).

The request accepts the following data in JSON format.

CdcStartPosition (p. 43)

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"

Note

When you use this task setting with a source PostgreSQL database, a logical replication slot should already be created and associated with the source endpoint. You can verify this by setting the `slotName` extra connection attribute to the name of this logical replication slot. For more information, see [Extra Connection Attributes When Using PostgreSQL as a Source for AWS DMS](#).

Type: String

Required: No

CdcStartTime (p. 43)

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. 43)

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. 43)

The migration type. Valid values: `full-load` | `cdc` | `full-load-and-cdc`

Type: String

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

Required: Yes

ReplicationInstanceArn (p. 43)

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

Type: String

Required: Yes

ReplicationTaskIdentifier (p. 43)

An identifier for the replication task.

Constraints:

- Must contain 1-255 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. 43)

Overall settings for the task, in JSON format. For more information, see [Specifying Task Settings for AWS Database Migration Service Tasks](#) in the *AWS Database Migration Service User Guide*.

Type: String

Required: No

ResourceIdentifier (p. 43)

A friendly name for the resource identifier at the end of the `EndpointArn` response parameter that is returned in the created `Endpoint` object. The value for this parameter can have up to 31 characters. It can contain only ASCII letters, digits, and hyphen ('-'). Also, it can't end with a hyphen or contain two consecutive hyphens, and can only begin with a letter, such as `Example-App-ARN1`. For example, this value might result in the `EndpointArn` value `arn:aws:dms:eu-west-1:012345678901:rep:Example-App-ARN1`. If you don't specify a `ResourceIdentifier` value, AWS DMS generates a default identifier value for the end of `EndpointArn`.

Type: String

Required: No

SourceEndpointArn (p. 43)

An Amazon Resource Name (ARN) that uniquely identifies the source endpoint.

Type: String

Required: Yes

TableMappings (p. 43)

The table mappings for the task, in JSON format. For more information, see [Using Table Mapping to Specify Task Settings](#) in the *AWS Database Migration Service User Guide*.

Type: String

Required: Yes

Tags (p. 43)

One or more tags to be assigned to the replication task.

Type: Array of [Tag \(p. 344\)](#) objects

Required: No

TargetEndpointArn (p. 43)

An Amazon Resource Name (ARN) that uniquely identifies the target endpoint.

Type: String

Required: Yes

TaskData (p. 43)

Supplemental information that the task requires to migrate the data for certain source and target endpoints. For more information, see [Specifying Supplemental Data for Task Settings](#) in the *AWS Database Migration Service User Guide*.

Type: String

Required: No

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,
  "FreshStartDate": number,
  "FullLoadFinishDate": number,
  "FullLoadProgressPercent": number,
  "FullLoadStartDate": number,
  "StartDate": number,
  "StopDate": number,
  "TablesErrored": number,
  "TablesLoaded": number,
  "TablesLoading": number,
  "TablesQueued": number
},
"SourceEndpointArn": "string",
"Status": "string",
"StopReason": "string",
"TableMappings": "string",
"TargetEndpointArn": "string",
"TargetReplicationInstanceArn": "string",
"TaskData": "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. 45)

The replication task that was created.

Type: [ReplicationTask](#) (p. 312) object

Errors

For information about the errors that are common to all actions, see [Common Errors](#) (p. 348).

AccessDeniedFault

AWS DMS was denied access to the endpoint. Check that the role is correctly configured.

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 AWS 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

Examples

Example

This example illustrates one usage of `CreateReplicationTask`.

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.CreateReplicationTask
{
  "ReplicationTaskIdentifier":"task1",
  "SourceEndpointArn":"arn:aws:dms:us-east-1:
    123456789012:endpoint:RZZK4EZW5UANC7Y3P4E776WHBE",
  "TargetEndpointArn":"arn:aws:dms:us-east-1:
    123456789012:endpoint:GVBUJQXJZASXWHTWCLN2WNT57E",
  "ReplicationInstanceArn":"arn:aws:dms:us-east-1:
    123456789012:rep:6USOU366XFJUWATDJGBCJS3VIQ",
  "MigrationType":"full-load",
  "TableMappings":"file:///home/apurvap/table-mappings.json",
  "ReplicationTaskSettings":"",
  "CdcStartTime":null,
  "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>
{
  "ReplicationTask":{
    "SourceEndpointArn":"arn:aws:dms:us-
east-1:123456789012:endpoint:RZZK4EZW5UANC7Y3P4E776WHBE",
    "ReplicationTaskIdentifier":"task1",
    "ReplicationInstanceArn":"arn:aws:dms:us-
east-1:123456789012:rep:6USOU366XFJUWATDJGBCJS3VIQ",
    "TableMappings":{"\n \n \"TableMappings\": [
      \n {\"Type\": \"Include\", \"SourceSchema\": \"\", \"SourceTable\": \"\"
\n }
    ],
    \"Status\": \"creating\",
    \"ReplicationTaskArn\": \"arn:aws:dms:us-
east-1:123456789012:task:OEAMB3NXSTZ6LFYZFEPPBBXPYM\",
    \"ReplicationTaskCreationDate\": 1457658407.492,
    \"MigrationType\": \"full-load\",
    \"TargetEndpointArn\": \"arn:aws:dms:us-
east-1:123456789012:endpoint:GVBUIJQXJZASXWHTWCLN2WNT57E\",
    \"ReplicationTaskSettings\": {\"TargetMetadata\":
      {\"TargetSchema\": \"\", \"SupportLobs\": true, \"FullLobMode\":
true, \"LobChunkSize\": 64, \"LimitedSizeLobMode\":
false, \"LobMaxSize\": 0}, \"FullLoadSettings\": {
        \"FullLoadEnabled\": true,
        \"TargetTablePrepMode\": \"DROP_AND_CREATE\",
        \"CreatePkAfterFullLoad\": false,
        \"StopTaskCachedChangesApplied\": false,
        \"StopTaskCachedChangesNotApplied\": false,
        \"ResumeEnabled\": false,
        \"ResumeMinTableSize\": 100000,
        \"ResumeOnlyClusteredPKTables\": true,
        \"MaxFullLoadSubTasks\": 8,
        \"TransactionConsistencyTimeout\": 600,
        \"CommitRate\": 10000
      },
      \"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 V2](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

DeleteCertificate

Deletes the specified certificate.

Request Syntax

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

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 346).

The request accepts the following data in JSON format.

CertificateArn (p. 50)

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

Type: String

Required: Yes

Response Syntax

```
{  
  "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. 50)

The Secure Sockets Layer (SSL) certificate.

Type: [Certificate](#) (p. 243) object

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 348\)](#).

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

DeleteConnection

Deletes the connection between a replication instance and an endpoint.

Request Syntax

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

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 346).

The request accepts the following data in JSON format.

EndpointArn (p. 52)

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

Type: String

Required: Yes

ReplicationInstanceArn (p. 52)

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

Type: String

Required: Yes

Response Syntax

```
{
  "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. 52)

The connection that is being deleted.

Type: [Connection](#) (p. 245) object

Errors

For information about the errors that are common to all actions, see [Common Errors](#) (p. 348).

AccessDeniedFault

AWS DMS was denied access to the endpoint. Check that the role is correctly configured.

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

Examples

Example

This example illustrates one usage of DeleteConnection.

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.DeleteConnection
{
  "ReplicationInstanceArn": "arn:aws:dms:us-
east-1:123456789012:rep:6USOU366XFJUWATDJGBCJS3VIQ",
  "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>
{
  "Connection":{
    "Status":"deleting",
    "ReplicationInstanceIdentifier":"akshay1",
    "EndpointArn":"arn:aws:dms:us-
east-1:123456789012:endpoint:WKBULDZKUDQZIHPOUSEH34EMU",
    "EndpointIdentifier":"akshay",
    "ReplicationInstanceArn":"arn:aws:dms:us-
east-1:123456789012:rep:6USOU366XFJUWATDJGBCJS3VIO"
  }
}
```

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

DeleteEndpoint

Deletes the specified endpoint.

Note

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

Request Syntax

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

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 346).

The request accepts the following data in JSON format.

EndpointArn (p. 55)

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

Type: String

Required: Yes

Response Syntax

```
{  
  "Endpoint": {  
    "CertificateArn": "string",  
    "DatabaseName": "string",  
    "DmsTransferSettings": {  
      "BucketName": "string",  
      "ServiceAccessRoleArn": "string"  
    },  
    "DocDbSettings": {  
      "DatabaseName": "string",  
      "DocsToInvestigate": number,  
      "ExtractDocId": boolean,  
      "KmsKeyId": "string",  
      "NestingLevel": "string",  
      "Password": "string",  
      "Port": number,  
      "SecretsManagerAccessRoleArn": "string",  
      "SecretsManagerSecretId": "string",  
      "ServerName": "string",  
      "Username": "string"  
    },  
    "DynamoDbSettings": {  
      "ServiceAccessRoleArn": "string"  
    },  
    "ElasticsearchSettings": {  
      "EndpointUri": "string",  
      "ErrorRetryDuration": number,  

```

```

    "FullLoadErrorPercentage": number,
    "ServiceAccessRoleArn": "string"
  },
  "EndpointArn": "string",
  "EndpointIdentifier": "string",
  "EndpointType": "string",
  "EngineDisplayName": "string",
  "EngineName": "string",
  "ExternalId": "string",
  "ExternalTableDefinition": "string",
  "ExtraConnectionAttributes": "string",
  "IBMDB2Settings": {
    "CurrentLsn": "string",
    "DatabaseName": "string",
    "MaxKBytesPerRead": number,
    "Password": "string",
    "Port": number,
    "SecretsManagerAccessRoleArn": "string",
    "SecretsManagerSecretId": "string",
    "ServerName": "string",
    "SetDataCaptureChanges": boolean,
    "Username": "string"
  },
  "KafkaSettings": {
    "Broker": "string",
    "IncludeControlDetails": boolean,
    "IncludeNullAndEmpty": boolean,
    "IncludePartitionValue": boolean,
    "IncludeTableAlterOperations": boolean,
    "IncludeTransactionDetails": boolean,
    "MessageFormat": "string",
    "MessageMaxBytes": number,
    "PartitionIncludeSchemaTable": boolean,
    "SaslPassword": "string",
    "SaslUsername": "string",
    "SecurityProtocol": "string",
    "SslCaCertificateArn": "string",
    "SslClientCertificateArn": "string",
    "SslClientKeyArn": "string",
    "SslClientKeyPassword": "string",
    "Topic": "string"
  },
  "KinesisSettings": {
    "IncludeControlDetails": boolean,
    "IncludeNullAndEmpty": boolean,
    "IncludePartitionValue": boolean,
    "IncludeTableAlterOperations": boolean,
    "IncludeTransactionDetails": boolean,
    "MessageFormat": "string",
    "PartitionIncludeSchemaTable": boolean,
    "ServiceAccessRoleArn": "string",
    "StreamArn": "string"
  },
  "KmsKeyId": "string",
  "MicrosoftSQLServerSettings": {
    "BcpPacketSize": number,
    "ControlTablesFileGroup": "string",
    "DatabaseName": "string",
    "Password": "string",
    "Port": number,
    "QuerySingleAlwaysOnNode": boolean,
    "ReadBackupOnly": boolean,
    "SafeguardPolicy": "string",
    "SecretsManagerAccessRoleArn": "string",
    "SecretsManagerSecretId": "string",
    "ServerName": "string",

```

```

    "UseBcpFullLoad": boolean,
    "Username": string,
    "UseThirdPartyBackupDevice": boolean
  },
  "MongoDbSettings": {
    "AuthMechanism": string,
    "AuthSource": string,
    "AuthType": string,
    "DatabaseName": string,
    "DocsToInvestigate": string,
    "ExtractDocId": string,
    "KmsKeyId": string,
    "NestingLevel": string,
    "Password": string,
    "Port": number,
    "SecretsManagerAccessRoleArn": string,
    "SecretsManagerSecretId": string,
    "ServerName": string,
    "Username": string
  },
  "MySQLSettings": {
    "AfterConnectScript": string,
    "CleanSourceMetadataOnMismatch": boolean,
    "DatabaseName": string,
    "EventsPollInterval": number,
    "MaxFileSize": number,
    "ParallelLoadThreads": number,
    "Password": string,
    "Port": number,
    "SecretsManagerAccessRoleArn": string,
    "SecretsManagerSecretId": string,
    "ServerName": string,
    "ServerTimezone": string,
    "TargetDbType": string,
    "Username": string
  },
  "NeptuneSettings": {
    "ErrorRetryDuration": number,
    "IamAuthEnabled": boolean,
    "MaxFileSize": number,
    "MaxRetryCount": number,
    "S3BucketFolder": string,
    "S3BucketName": string,
    "ServiceAccessRoleArn": string
  },
  "OracleSettings": {
    "AccessAlternateDirectly": boolean,
    "AdditionalArchivedLogDestId": number,
    "AddSupplementalLogging": boolean,
    "AllowSelectNestedTables": boolean,
    "ArchivedLogDestId": number,
    "ArchivedLogsOnly": boolean,
    "AsmPassword": string,
    "AsmServer": string,
    "AsmUser": string,
    "CharLengthSemantics": string,
    "DatabaseName": string,
    "DirectPathNoLog": boolean,
    "DirectPathParallelLoad": boolean,
    "EnableHomogenousTablespace": boolean,
    "FailTasksOnLobTruncation": boolean,
    "NumberDatatypeScale": number,
    "OraclePathPrefix": string,
    "ParallelAsmReadThreads": number,
    "Password": string,
    "Port": number,

```

```

    "ReadAheadBlocks": number,
    "ReadTableSpaceName": boolean,
    "ReplacePathPrefix": boolean,
    "RetryInterval": number,
    "SecretsManagerAccessRoleArn": "string",
    "SecretsManagerOracleAsmAccessRoleArn": "string",
    "SecretsManagerOracleAsmSecretId": "string",
    "SecretsManagerSecretId": "string",
    "SecurityDbEncryption": "string",
    "SecurityDbEncryptionName": "string",
    "ServerName": "string",
    "SpatialDataOptionToGeoJsonFunctionName": "string",
    "UseAlternateFolderForOnline": boolean,
    "UsePathPrefix": "string",
    "Username": "string"
  },
  "Port": number,
  "PostgreSQLSettings": {
    "AfterConnectScript": "string",
    "CaptureDdls": boolean,
    "DatabaseName": "string",
    "DdlArtifactsSchema": "string",
    "ExecuteTimeout": number,
    "FailTasksOnLobTruncation": boolean,
    "MaxFileSize": number,
    "Password": "string",
    "Port": number,
    "SecretsManagerAccessRoleArn": "string",
    "SecretsManagerSecretId": "string",
    "ServerName": "string",
    "SlotName": "string",
    "Username": "string"
  },
  "RedshiftSettings": {
    "AcceptAnyDate": boolean,
    "AfterConnectScript": "string",
    "BucketFolder": "string",
    "BucketName": "string",
    "CaseSensitiveNames": boolean,
    "CompUpdate": boolean,
    "ConnectionTimeout": number,
    "DatabaseName": "string",
    "DateFormat": "string",
    "EmptyAsNull": boolean,
    "EncryptionMode": "string",
    "ExplicitIds": boolean,
    "FileTransferUploadStreams": number,
    "LoadTimeout": number,
    "MaxFileSize": number,
    "Password": "string",
    "Port": number,
    "RemoveQuotes": boolean,
    "ReplaceChars": "string",
    "ReplaceInvalidChars": "string",
    "SecretsManagerAccessRoleArn": "string",
    "SecretsManagerSecretId": "string",
    "ServerName": "string",
    "ServerSideEncryptionKmsKeyId": "string",
    "ServiceAccessRoleArn": "string",
    "TimeFormat": "string",
    "TrimBlanks": boolean,
    "TruncateColumns": boolean,
    "Username": "string",
    "WriteBufferSize": number
  },
  "S3Settings": {

```

```

    "BucketFolder": "string",
    "BucketName": "string",
    "CdcInsertsAndUpdates": boolean,
    "CdcInsertsOnly": boolean,
    "CdcPath": "string",
    "CompressionType": "string",
    "CsvDelimiter": "string",
    "CsvNoSupValue": "string",
    "CsvRowDelimiter": "string",
    "DataFormat": "string",
    "DataPageSize": number,
    "DatePartitionDelimiter": "string",
    "DatePartitionEnabled": boolean,
    "DatePartitionSequence": "string",
    "DictPageSizeLimit": number,
    "EnableStatistics": boolean,
    "EncodingType": "string",
    "EncryptionMode": "string",
    "ExternalTableDefinition": "string",
    "IncludeOpForFullLoad": boolean,
    "ParquetTimestampInMillisecond": boolean,
    "ParquetVersion": "string",
    "PreserveTransactions": boolean,
    "RowGroupLength": number,
    "ServerSideEncryptionKmsKeyId": "string",
    "ServiceAccessRoleArn": "string",
    "TimestampColumnName": "string",
    "UseCsvNoSupValue": boolean
  },
  "ServerName": "string",
  "ServiceAccessRoleArn": "string",
  "SslMode": "string",
  "Status": "string",
  "SybaseSettings": {
    "DatabaseName": "string",
    "Password": "string",
    "Port": number,
    "SecretsManagerAccessRoleArn": "string",
    "SecretsManagerSecretId": "string",
    "ServerName": "string",
    "Username": "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.

Endpoint (p. 55)

The endpoint that was deleted.

Type: [Endpoint \(p. 253\)](#) object

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 348\)](#).

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

Examples

Example

This example illustrates one usage of DeleteEndpoint.

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-d53a7cfb411d",
    "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 V2](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

DeleteEventSubscription

Deletes an AWS DMS event subscription.

Request Syntax

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

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 346).

The request accepts the following data in JSON format.

SubscriptionName (p. 62)

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

Type: String

Required: Yes

Response Syntax

```
{  
  "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. 62)

The event subscription that was deleted.

Type: [EventSubscription](#) (p. 263) object

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 348\)](#).

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

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

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

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 346).

The request accepts the following data in JSON format.

ReplicationInstanceArn (p. 64)

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

Type: String

Required: Yes

Response Syntax

```
{  
  "ReplicationInstance": {  
    "AllocatedStorage": number,  
    "AutoMinorVersionUpgrade": boolean,  
    "AvailabilityZone": "string",  
    "DnsNameServers": "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"
},
"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.

ReplicationInstance (p. 64)

The replication instance that was deleted.

Type: [ReplicationInstance \(p. 305\)](#) object

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 348\)](#).

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

Examples

Example

This example illustrates one usage of DeleteReplicationInstance.

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":{
      "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": "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 V2](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

DeleteReplicationSubnetGroup

Deletes a subnet group.

Request Syntax

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

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters \(p. 346\)](#).

The request accepts the following data in JSON format.

ReplicationSubnetGroupIdentifier (p. 68)

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 \(p. 348\)](#).

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

Examples

Example

This example illustrates one usage of DeleteReplicationSubnetGroup.

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

DeleteReplicationTask

Deletes the specified replication task.

Request Syntax

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

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 346).

The request accepts the following data in JSON format.

ReplicationTaskArn (p. 70)

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

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,
      "FreshStartDate": number,
      "FullLoadFinishDate": number,
      "FullLoadProgressPercent": number,
      "FullLoadStartDate": number,
      "StartDate": number,
      "StopDate": number,
      "TablesErrored": number,
      "TablesLoaded": number,
      "TablesLoading": number,
      "TablesQueued": number
    },
    "SourceEndpointArn": "string",
    "Status": "string",
    "StopReason": "string",
    "TableMappings": "string",
  }
}
```

```
"TargetEndpointArn": "string",  
"TargetReplicationInstanceArn": "string",  
"TaskData": "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. 70)

The deleted replication task.

Type: [ReplicationTask](#) (p. 312) object

Errors

For information about the errors that are common to all actions, see [Common Errors](#) (p. 348).

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

DeleteReplicationTaskAssessmentRun

Deletes the record of a single premigration assessment run.

This operation removes all metadata that AWS DMS maintains about this assessment run. However, the operation leaves untouched all information about this assessment run that is stored in your Amazon S3 bucket.

Request Syntax

```
{
  "ReplicationTaskAssessmentRunArn": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters \(p. 346\)](#).

The request accepts the following data in JSON format.

ReplicationTaskAssessmentRunArn (p. 72)

Amazon Resource Name (ARN) of the premigration assessment run to be deleted.

Type: String

Required: Yes

Response Syntax

```
{
  "ReplicationTaskAssessmentRun": {
    "AssessmentProgress": {
      "IndividualAssessmentCompletedCount": number,
      "IndividualAssessmentCount": number
    },
    "AssessmentRunName": "string",
    "LastFailureMessage": "string",
    "ReplicationTaskArn": "string",
    "ReplicationTaskAssessmentRunArn": "string",
    "ReplicationTaskAssessmentRunCreationDate": number,
    "ResultEncryptionMode": "string",
    "ResultKmsKeyArn": "string",
    "ResultLocationBucket": "string",
    "ResultLocationFolder": "string",
    "ServiceAccessRoleArn": "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.

[ReplicationTaskAssessmentRun \(p. 72\)](#)

The `ReplicationTaskAssessmentRun` object for the deleted assessment run.

Type: [ReplicationTaskAssessmentRun \(p. 318\)](#) object

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 348\)](#).

AccessDeniedFault

AWS DMS was denied access to the endpoint. Check that the role is correctly configured.

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

Examples

Example

This example illustrates one usage of `DeleteReplicationTaskAssessmentRun`.

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.DeleteReplicationTaskAssessmentRun
{
  "ReplicationTaskAssessmentRunArn": "arn:aws:dms:us-west-2:123456789012:assessment-run:FCBLKM7PRVDJ3S4DJKFZYV6XJE6KDMIUHJX4O4I"
}
```

Sample Response

```
HTTP/1.1 200 OK
x-amzn-RequestId: <RequestId>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Date: <Date>
{
  "ReplicationTaskAssessmentRun": {
    "AssessmentProgress": {
      "IndividualAssessmentCompletedCount": 4,
      "IndividualAssessmentCount": 4
    },
    "AssessmentRunName": "myRun",
    "ReplicationTaskArn": "arn:aws:dms:us-west-2:123456789012:task:L6XROPGLRF25LCREVEDPT3XL5QJM5IZNUSV6A",
    "ReplicationTaskAssessmentRunArn": "arn:aws:dms:us-west-2:123456789012:assessment-run:FCBLKM7PRVDJ3S4DJKFZYV6XJE6KDMIUHJX4O4I",
    "ReplicationTaskAssessmentRunCreationDate": 1594068046.933,
    "ResultEncryptionMode": "NONE",
    "ResultLocationBucket": "myBucket",
    "ResultLocationFolder": "myFolder",
    "ServiceAccessRoleArn": "arn:aws:iam::123456789012:role/Admin",
    "Status": "deleting"
  }
}
```

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

DescribeAccountAttributes

Lists all of the AWS DMS attributes for a customer account. These attributes include AWS DMS quotas for the account and a unique account identifier in a particular DMS region. DMS quotas include a list of resource quotas supported by the account, such as the number of replication instances allowed. The description for each resource quota, includes the quota name, current usage toward that quota, and the quota's maximum value. DMS uses the unique account identifier to name each artifact used by DMS in the given region.

This command does not take any parameters.

Response Syntax

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

AccountQuotas (p. 75)

Account quota information.

Type: Array of [AccountQuota](#) (p. 241) objects

UniqueAccountIdentifier (p. 75)

A unique AWS DMS identifier for an account in a particular AWS Region. The value of this identifier has the following format: c99999999999. DMS uses this identifier to name artifacts. For example, DMS uses this identifier to name the default Amazon S3 bucket for storing task assessment reports in a given AWS Region. The format of this S3 bucket name is the following: `dms-AccountNumber-UniqueAccountIdentifier`. Here is an example name for this default S3 bucket: `dms-111122223333-c44445555666`.

Note

AWS DMS supports the `UniqueAccountIdentifier` parameter in versions 3.1.4 and later.

Type: String

Errors

For information about the errors that are common to all actions, see [Common Errors](#) (p. 348).

Examples

Example

This example illustrates one usage of DescribeAccountAttributes.

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
```

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
    }
]
"UniqueAccountIdentifier": "c44445555666"
}
```

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

DescribeApplicableIndividualAssessments

Provides a list of individual assessments that you can specify for a new premigration assessment run, given one or more parameters.

If you specify an existing migration task, this operation provides the default individual assessments you can specify for that task. Otherwise, the specified parameters model elements of a possible migration task on which to base a premigration assessment run.

To use these migration task modeling parameters, you must specify an existing replication instance, a source database engine, a target database engine, and a migration type. This combination of parameters potentially limits the default individual assessments available for an assessment run created for a corresponding migration task.

If you specify no parameters, this operation provides a list of all possible individual assessments that you can specify for an assessment run. If you specify any one of the task modeling parameters, you must specify all of them or the operation cannot provide a list of individual assessments. The only parameter that you can specify alone is for an existing migration task. The specified task definition then determines the default list of individual assessments that you can specify in an assessment run for the task.

Request Syntax

```
{  
  "Marker": "string",  
  "MaxRecords": number,  
  "MigrationType": "string",  
  "ReplicationInstanceArn": "string",  
  "ReplicationTaskArn": "string",  
  "SourceEngineName": "string",  
  "TargetEngineName": "string"  
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 346).

The request accepts the following data in JSON format.

Marker (p. 78)

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. 78)

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.

Type: Integer

Required: No

MigrationType (p. 78)

Name of the migration type that each provided individual assessment must support.

Type: String

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

Required: No

ReplicationInstanceArn (p. 78)

ARN of a replication instance on which you want to base the default list of individual assessments.

Type: String

Required: No

ReplicationTaskArn (p. 78)

Amazon Resource Name (ARN) of a migration task on which you want to base the default list of individual assessments.

Type: String

Required: No

SourceEngineName (p. 78)

Name of a database engine that the specified replication instance supports as a source.

Type: String

Required: No

TargetEngineName (p. 78)

Name of a database engine that the specified replication instance supports as a target.

Type: String

Required: No

Response Syntax

```
{
  "IndividualAssessmentNames": [ "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.

IndividualAssessmentNames (p. 79)

List of names for the individual assessments supported by the premigration assessment run that you start based on the specified request parameters. For more information on the available individual

assessments, including compatibility with different migration task configurations, see [Working with premigration assessment runs](#) in the *AWS Database Migration Service User Guide*.

Type: Array of strings

Marker (p. 79)

Pagination token returned for you to pass to a subsequent request. If you pass this token as the Marker value in a subsequent request, the response includes only records beyond the marker, up to the value specified in the request by MaxRecords.

Type: String

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 348\)](#).

AccessDeniedFault

AWS DMS was denied access to the endpoint. Check that the role is correctly configured.

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

Examples

Example

This example illustrates one usage of DescribeApplicableIndividualAssessments.

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.DescribeApplicableIndividualAssessments
{
  "SourceEngineName": "oracle",
  "TargetEngineName": "postgres",
```

```
"MigrationType": "full-load",
"ReplicationInstanceArn": "arn:aws:dms:us-east-1:123456789023:rep:LPIXGJNGKAMDWSAESJNDNECHHZMKBS5OG3H5RVB"
}
```

Sample Response

```
HTTP/1.1 200 OK
x-amzn-RequestId: <RequestId>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Date: <Date>
{
  "IndividualAssessmentNames": [
    "full-lob-not-nullable-at-target",
    "table-with-lob-but-without-primary-key-or-unique-constraint",
    "unsupported-data-types-in-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](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

DescribeCertificates

Provides a description of the certificate.

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. 346).

The request accepts the following data in JSON format.

Filters (p. 82)

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

Type: Array of [Filter](#) (p. 265) objects

Required: No

Marker (p. 82)

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. 82)

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

```
{
  "Certificates": [
```

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

Certificates (p. 82)

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

Type: Array of [Certificate \(p. 243\)](#) objects

Marker (p. 82)

The pagination token.

Type: String

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 348\)](#).

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

- [AWS SDK for Ruby V3](#)

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

```
{
  "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. 346).

The request accepts the following data in JSON format.

[Filters](#) (p. 85)

The filters applied to the connection.

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

Type: Array of [Filter](#) (p. 265) objects

Required: No

[Marker](#) (p. 85)

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. 85)

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

```
{
  "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. 86)

A description of the connections.

Type: Array of [Connection](#) (p. 245) objects

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

Errors

For information about the errors that are common to all actions, see [Common Errors](#) (p. 348).

ResourceNotFoundFault

The resource could not be found.

HTTP Status Code: 400

Examples

Example

This example illustrates one usage of `DescribeConnections`.

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:RZZK4EZW5UANC7Y3P4E776WHBE"
      ]
    }
  ],
  "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:RZZK4EZW5UANC7Y3P4E776WHBE",
      "EndpointIdentifier":"akssrc1",
      "ReplicationInstanceArn":"arn:aws:dms:us-east-1:123456789012:rep:6USOU366XFFJUWATDJGBCJS3VIQ"
    }
  ]
}
```

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 V2](#)
- [AWS SDK for JavaScript](#)

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

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. 346).

The request accepts the following data in JSON format.

Filters (p. 89)

Filters applied to the endpoints.

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

Type: Array of [Filter](#) (p. 265) objects

Required: No

Marker (p. 89)

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. 89)

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"
    },
    "DocDbSettings": {
      "DatabaseName": "string",
      "DocsToInvestigate": number,
      "ExtractDocId": boolean,
      "KmsKeyId": "string",
      "NestingLevel": "string",
      "Password": "string",
      "Port": number,
      "SecretsManagerAccessRoleArn": "string",
      "SecretsManagerSecretId": "string",
      "ServerName": "string",
      "Username": "string"
    },
    "DynamoDbSettings": {
      "ServiceAccessRoleArn": "string"
    },
    "ElasticsearchSettings": {
      "EndpointUri": "string",
      "ErrorRetryDuration": number,
      "FullLoadErrorPercentage": number,
      "ServiceAccessRoleArn": "string"
    },
    "EndpointArn": "string",
    "EndpointIdentifier": "string",
    "EndpointType": "string",
    "EngineDisplayName": "string",
    "EngineName": "string",
    "ExternalId": "string",
    "ExternalTableDefinition": "string",
    "ExtraConnectionAttributes": "string",
    "IBMDB2Settings": {
      "CurrentLsn": "string",
      "DatabaseName": "string",
      "MaxKBytesPerRead": number,
      "Password": "string",
      "Port": number,
      "SecretsManagerAccessRoleArn": "string",
      "SecretsManagerSecretId": "string",
      "ServerName": "string",
      "SetDataCaptureChanges": boolean,
      "Username": "string"
    },
    "KafkaSettings": {
      "Broker": "string",
      "IncludeControlDetails": boolean,
      "IncludeNullAndEmpty": boolean,
      "IncludePartitionValue": boolean,
      "IncludeTableAlterOperations": boolean,
      "IncludeTransactionDetails": boolean,
      "MessageFormat": "string",
      "MessageMaxBytes": number,
      "PartitionIncludeSchemaTable": boolean,
      "SaslPassword": "string",
      "SaslUsername": "string",
      "SecurityProtocol": "string",
      "SslCaCertificateArn": "string",
      "SslClientCertificateArn": "string",
      "SslClientKeyArn": "string",
```

```

        "SslClientKeyPassword": "string",
        "Topic": "string"
    },
    "KinesisSettings": {
        "IncludeControlDetails": boolean,
        "IncludeNullAndEmpty": boolean,
        "IncludePartitionValue": boolean,
        "IncludeTableAlterOperations": boolean,
        "IncludeTransactionDetails": boolean,
        "MessageFormat": "string",
        "PartitionIncludeSchemaTable": boolean,
        "ServiceAccessRoleArn": "string",
        "StreamArn": "string"
    },
    "KmsKeyId": "string",
    "MicrosoftSQLServerSettings": {
        "BcpPacketSize": number,
        "ControlTablesFileGroup": "string",
        "DatabaseName": "string",
        "Password": "string",
        "Port": number,
        "QuerySingleAlwaysOnNode": boolean,
        "ReadBackupOnly": boolean,
        "SafeguardPolicy": "string",
        "SecretsManagerAccessRoleArn": "string",
        "SecretsManagerSecretId": "string",
        "ServerName": "string",
        "UseBcpFullLoad": boolean,
        "Username": "string",
        "UseThirdPartyBackupDevice": boolean
    },
    "MongoDbSettings": {
        "AuthMechanism": "string",
        "AuthSource": "string",
        "AuthType": "string",
        "DatabaseName": "string",
        "DocsToInvestigate": "string",
        "ExtractDocId": "string",
        "KmsKeyId": "string",
        "NestingLevel": "string",
        "Password": "string",
        "Port": number,
        "SecretsManagerAccessRoleArn": "string",
        "SecretsManagerSecretId": "string",
        "ServerName": "string",
        "Username": "string"
    },
    "MySQLSettings": {
        "AfterConnectScript": "string",
        "CleanSourceMetadataOnMismatch": boolean,
        "DatabaseName": "string",
        "EventsPollInterval": number,
        "MaxFileSize": number,
        "ParallelLoadThreads": number,
        "Password": "string",
        "Port": number,
        "SecretsManagerAccessRoleArn": "string",
        "SecretsManagerSecretId": "string",
        "ServerName": "string",
        "ServerTimezone": "string",
        "TargetDbType": "string",
        "Username": "string"
    },
    "NeptuneSettings": {
        "ErrorRetryDuration": number,
        "IamAuthEnabled": boolean,

```

```

    "MaxFileSize": number,
    "MaxRetryCount": number,
    "S3BucketFolder": "string",
    "S3BucketName": "string",
    "ServiceAccessRoleArn": "string"
  },
  "OracleSettings": {
    "AccessAlternateDirectly": boolean,
    "AdditionalArchivedLogDestId": number,
    "AddSupplementalLogging": boolean,
    "AllowSelectNestedTables": boolean,
    "ArchivedLogDestId": number,
    "ArchivedLogsOnly": boolean,
    "AsmPassword": "string",
    "AsmServer": "string",
    "AsmUser": "string",
    "CharLengthSemantics": "string",
    "DatabaseName": "string",
    "DirectPathNoLog": boolean,
    "DirectPathParallelLoad": boolean,
    "EnableHomogenousTablespace": boolean,
    "FailTasksOnLobTruncation": boolean,
    "NumberDatatypeScale": number,
    "OraclePathPrefix": "string",
    "ParallelAsmReadThreads": number,
    "Password": "string",
    "Port": number,
    "ReadAheadBlocks": number,
    "ReadTableSpaceName": boolean,
    "ReplacePathPrefix": boolean,
    "RetryInterval": number,
    "SecretsManagerAccessRoleArn": "string",
    "SecretsManagerOracleAsmAccessRoleArn": "string",
    "SecretsManagerOracleAsmSecretId": "string",
    "SecretsManagerSecretId": "string",
    "SecurityDbEncryption": "string",
    "SecurityDbEncryptionName": "string",
    "ServerName": "string",
    "SpatialDataOptionToGeoJsonFunctionName": "string",
    "UseAlternateFolderForOnline": boolean,
    "UsePathPrefix": "string",
    "Username": "string"
  },
  "Port": number,
  "PostgreSQLSettings": {
    "AfterConnectScript": "string",
    "CaptureDdls": boolean,
    "DatabaseName": "string",
    "DdlArtifactsSchema": "string",
    "ExecuteTimeout": number,
    "FailTasksOnLobTruncation": boolean,
    "MaxFileSize": number,
    "Password": "string",
    "Port": number,
    "SecretsManagerAccessRoleArn": "string",
    "SecretsManagerSecretId": "string",
    "ServerName": "string",
    "SlotName": "string",
    "Username": "string"
  },
  "RedshiftSettings": {
    "AcceptAnyDate": boolean,
    "AfterConnectScript": "string",
    "BucketFolder": "string",
    "BucketName": "string",
    "CaseSensitiveNames": boolean,

```



```

    "CompUpdate": boolean,
    "ConnectionTimeout": number,
    "DatabaseName": "string",
    "DateFormat": "string",
    "EmptyAsNull": boolean,
    "EncryptionMode": "string",
    "ExplicitIds": boolean,
    "FileTransferUploadStreams": number,
    "LoadTimeout": number,
    "MaxFileSize": number,
    "Password": "string",
    "Port": number,
    "RemoveQuotes": boolean,
    "ReplaceChars": "string",
    "ReplaceInvalidChars": "string",
    "SecretsManagerAccessRoleArn": "string",
    "SecretsManagerSecretId": "string",
    "ServerName": "string",
    "ServerSideEncryptionKmsKeyId": "string",
    "ServiceAccessRoleArn": "string",
    "TimeFormat": "string",
    "TrimBlanks": boolean,
    "TruncateColumns": boolean,
    "Username": "string",
    "WriteBufferSize": number
  },
  "S3Settings": {
    "BucketFolder": "string",
    "BucketName": "string",
    "CdcInsertsAndUpdates": boolean,
    "CdcInsertsOnly": boolean,
    "CdcPath": "string",
    "CompressionType": "string",
    "CsvDelimiter": "string",
    "CsvNoSupValue": "string",
    "CsvRowDelimiter": "string",
    "DateFormat": "string",
    "DataPageSize": number,
    "DatePartitionDelimiter": "string",
    "DatePartitionEnabled": boolean,
    "DatePartitionSequence": "string",
    "DictPageSizeLimit": number,
    "EnableStatistics": boolean,
    "EncodingType": "string",
    "EncryptionMode": "string",
    "ExternalTableDefinition": "string",
    "IncludeOpForFullLoad": boolean,
    "ParquetTimestampInMillisecond": boolean,
    "ParquetVersion": "string",
    "PreserveTransactions": boolean,
    "RowGroupLength": number,
    "ServerSideEncryptionKmsKeyId": "string",
    "ServiceAccessRoleArn": "string",
    "TimestampColumnName": "string",
    "UseCsvNoSupValue": boolean
  },
  "ServerName": "string",
  "ServiceAccessRoleArn": "string",
  "SslMode": "string",
  "Status": "string",
  "SybaseSettings": {
    "DatabaseName": "string",
    "Password": "string",
    "Port": number,
    "SecretsManagerAccessRoleArn": "string",
    "SecretsManagerSecretId": "string",

```

```
        "ServerName": "string",  
        "Username": "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. 89)

Endpoint description.

Type: Array of [Endpoint \(p. 253\)](#) objects

Marker (p. 89)

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 \(p. 348\)](#).

ResourceNotFoundFault

The resource could not be found.

HTTP Status Code: 400

Examples

Example

This example illustrates one usage of `DescribeEndpoints`.

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.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:SFLP3SJIHID2WOFLWY2OKWKVEE",
      "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-c8a7adf57dcd",
      "DatabaseName":"sctest",
      "EngineName":"mysql",
      "EndpointIdentifier":"pri100",
      "Port":8193
    },
    {
      "Username":"admin",
      "Status":"active",
      "EndpointArn":"arn:aws:dms:us-east-1:123456789012:endpoint:TJTJ2JZCIH3CWFR4VC32WEJRU4",
      "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 V2](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

DescribeEndpointSettings

Returns information about the possible endpoint settings available when you create an endpoint for a specific database engine.

Request Syntax

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

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 346).

The request accepts the following data in JSON format.

EngineName (p. 97)

The database engine used for your source or target endpoint.

Type: String

Required: Yes

Marker (p. 97)

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. 97)

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.

Type: Integer

Required: No

Response Syntax

```
{  
  "EndpointSettings": [  
    {  
      "Applicability": "string",  
      "EnumValues": [ "string" ],  
      "IntValueMax": number,  
      "IntValueMin": number,  
      "Name": "string",  
    }  
  ]  
}
```

```

        "Sensitive": boolean,
        "Type": "string",
        "Units": "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.

EndpointSettings (p. 97)

Descriptions of the endpoint settings available for your source or target database engine.

Type: Array of [EndpointSetting \(p. 258\)](#) objects

Marker (p. 97)

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 \(p. 348\)](#).

Examples

Example

This example illustrates one usage of `DescribeEndpointSettings`.

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.DescribeEndpointSettings
{
  "Filters":[
    {
      "Name":"engine-name",
      "Values":[

```

```
        "sqlserver"  
      ]  
    }  
  ],  
  "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>  
{  
  "EndpointSettings": [  
    {  
      "Name": "BcpPacketSize",  
      "Type": "integer",  
      "Sensitive": false,  
      "Applicability": "TARGET_ONLY",  
      "IntValueMin": 1,  
      "IntValueMax": 100000  
    },  
    {  
      "Name": "ControlTablesFileGroup",  
      "Type": "string",  
      "Sensitive": false  
    },  
    {  
      "Name": "DatabaseName",  
      "Type": "string",  
      "Sensitive": false  
    },  
    {  
      "Name": "Password",  
      "Type": "string",  
      "Sensitive": true  
    },  
    {  
      "Name": "Port",  
      "Type": "integer",  
      "Sensitive": false  
    },  
    {  
      "Name": "QuerySingleAlwaysOnNode",  
      "Type": "boolean",  
      "Sensitive": false  
    },  
    {  
      "Name": "ReadBackupOnly",  
      "Type": "boolean",  
      "Sensitive": false,  
      "Applicability": "SOURCE_ONLY"  
    },  
    {  
      "Name": "SafeguardPolicy",  
      "Type": "enum",  
      "EnumValues": [  
        "rely-on-sql-server-replication-agent",  
        "exclusive-automatic-truncation",  
      ]  
    }  
  ]  
}
```

```
        "shared-automatic-truncation"
      ],
      "Sensitive": false,
      "Applicability": "SOURCE_ONLY"
    },
    {
      "Name": "SecretsManagerAccessRoleArn",
      "Type": "string",
      "Sensitive": false
    },
    {
      "Name": "SecretsManagerSecretId",
      "Type": "string",
      "Sensitive": false
    },
    {
      "Name": "ServerName",
      "Type": "string",
      "Sensitive": false
    },
    {
      "Name": "UseBcpFullLoad",
      "Type": "boolean",
      "Sensitive": false,
      "Applicability": "TARGET_ONLY"
    },
    {
      "Name": "UseThirdPartyBackupDevice",
      "Type": "boolean",
      "Sensitive": false
    },
    {
      "Name": "Username",
      "Type": "string",
      "Sensitive": 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 V2](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

DescribeEndpointTypes

Returns information about the type of endpoints available.

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 \(p. 346\)](#).

The request accepts the following data in JSON format.

Filters (p. 101)

Filters applied to the endpoint types.

Valid filter names: engine-name | endpoint-type

Type: Array of [Filter \(p. 265\)](#) objects

Required: No

Marker (p. 101)

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. 101)

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

```
{
  "Marker": "string",
  "SupportedEndpointTypes": [
    {
      "EndpointType": "string",
      "EngineDisplayName": "string",
      "EngineName": "string",
      "ReplicationInstanceEngineMinimumVersion": "string",
      "SupportsCDC": 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.

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

SupportedEndpointTypes (p. 102)

The types of endpoints that are supported.

Type: Array of [SupportedEndpointType](#) (p. 336) objects

Errors

For information about the errors that are common to all actions, see [Common Errors](#) (p. 348).

Examples

Example

This example illustrates one usage of `DescribeEndpointTypes`.

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.DescribeEndpointTypes
{
  "Filters":[
    {
      "Name":"endpoint-type",
      "Values":[
        "target"
      ]
    }
  ],
  "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>
{
  "SupportedEndpointTypes": [
    {
      "EngineName": "aurora",
      "SupportsCDC": true,
      "EndpointType": "target",
      "EngineDisplayName": "Amazon Aurora MySQL"
    },
    {
      "EngineName": "aurora-serverless",
      "SupportsCDC": true,
      "EndpointType": "target",
      "EngineDisplayName": "Amazon Aurora MySQL Serverless"
    },
    {
      "EngineName": "aurora-postgresql",
      "SupportsCDC": true,
      "EndpointType": "target",
      "EngineDisplayName": "Amazon Aurora PostgreSQL"
    },
    {
      "EngineName": "docdb",
      "SupportsCDC": true,
      "EndpointType": "target",
      "ReplicationInstanceEngineMinimumVersion": "3.1.1",
      "EngineDisplayName": "Amazon DocumentDB (with MongoDB compatibility)"
    },
    {
      "EngineName": "dynamodb",
      "SupportsCDC": true,
      "EndpointType": "target",
      "EngineDisplayName": "Amazon DynamoDB"
    },
    {
      "EngineName": "kinesis",
      "SupportsCDC": true,
      "EndpointType": "target",
      "ReplicationInstanceEngineMinimumVersion": "3.1.3",
      "EngineDisplayName": "Amazon Kinesis"
    }
  ]
}
```

```

    },
    {
      "EngineName": "redshift",
      "SupportsCDC": true,
      "EndpointType": "target",
      "EngineDisplayName": "Amazon Redshift"
    },
    {
      "EngineName": "s3",
      "SupportsCDC": true,
      "EndpointType": "target",
      "ServiceType": "aws",
      "EngineDisplayName": "Amazon S3"
    },
    {
      "EngineName": "elasticsearch",
      "SupportsCDC": true,
      "EndpointType": "target",
      "ReplicationInstanceEngineMinimumVersion": "3.1.1",
      "EngineDisplayName": "Elasticsearch Service"
    },
    {
      "EngineName": "kafka",
      "SupportsCDC": true,
      "EndpointType": "target",
      "ReplicationInstanceEngineMinimumVersion": "3.3.1",
      "EngineDisplayName": "Kafka"
    },
    {
      "EngineName": "mariadb",
      "SupportsCDC": true,
      "EndpointType": "target",
      "EngineDisplayName": "MariaDB"
    },
    {
      "EngineName": "sqlserver",
      "SupportsCDC": true,
      "EndpointType": "target",
      "EngineDisplayName": "Microsoft SQL Server"
    },
    {
      "EngineName": "mysql",
      "SupportsCDC": true,
      "EndpointType": "target",
      "EngineDisplayName": "MySQL"
    },
    {
      "EngineName": "oracle",
      "SupportsCDC": true,
      "EndpointType": "target",
      "EngineDisplayName": "Oracle"
    },
    {
      "EngineName": "postgres",
      "SupportsCDC": true,
      "EndpointType": "target",
      "EngineDisplayName": "PostgreSQL"
    },
    {
      "EngineName": "sybase",
      "SupportsCDC": true,
      "EndpointType": "target",
      "EngineDisplayName": "SAP Sybase ASE"
    }
  ]
}

```

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

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

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

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters \(p. 346\)](#).

The request accepts the following data in JSON format.

Filters (p. 106)

Filters applied to the event categories.

Type: Array of [Filter \(p. 265\)](#) objects

Required: No

SourceType (p. 106)

The type of AWS DMS resource that generates events.

Valid values: replication-instance | replication-task

Type: String

Required: No

Response Syntax

```
{
  "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. 106)

A list of event categories.

Type: Array of [EventCategoryGroup \(p. 262\)](#) objects

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 348\)](#).

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

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](#) in the *AWS Database Migration Service User Guide*.

Request Syntax

```
{
  "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. 346).

The request accepts the following data in JSON format.

Duration (p. 108)

The duration of the events to be listed.

Type: Integer

Required: No

EndTime (p. 108)

The end time for the events to be listed.

Type: Timestamp

Required: No

EventCategories (p. 108)

A list of event categories for the source type that you've chosen.

Type: Array of strings

Required: No

Filters (p. 108)

Filters applied to events.

Type: Array of [Filter](#) (p. 265) objects

Required: No

Marker (p. 108)

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. 108)

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. 108)

The identifier of an event source.

Type: String

Required: No

SourceType (p. 108)

The type of AWS DMS resource that generates events.

Valid values: replication-instance | replication-task

Type: String

Valid Values: replication-instance

Required: No

StartTime (p. 108)

The start time for the events to be listed.

Type: Timestamp

Required: No

Response Syntax

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

Events (p. 109)

The events described.

Type: Array of [Event \(p. 260\)](#) objects

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

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 348\)](#).

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

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

```
{
  "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. 346).

The request accepts the following data in JSON format.

Filters (p. 111)

Filters applied to event subscriptions.

Type: Array of [Filter](#) (p. 265) objects

Required: No

Marker (p. 111)

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. 111)

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

SubscriptionName (p. 111)

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

Type: String

Required: No

Response Syntax

```
{
  "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. 112)

A list of event subscriptions.

Type: Array of [EventSubscription \(p. 263\)](#) objects

Marker (p. 112)

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 \(p. 348\)](#).

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

DescribeOrderableReplicationInstances

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

Request Syntax

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

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 346).

The request accepts the following data in JSON format.

Marker (p. 114)

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. 114)

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

```
{  
  "Marker": "string",  
  "OrderableReplicationInstances": [  
    {  
      "AvailabilityZones": [ "string" ],  
      "DefaultAllocatedStorage": number,  
      "EngineVersion": "string",  
      "IncludedAllocatedStorage": number,  
      "MaxAllocatedStorage": number,  
      "MinAllocatedStorage": number,  
      "ReleaseStatus": "string",  
      "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. 114)

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. 114)

The order-able replication instances available.

Type: Array of [OrderableReplicationInstance \(p. 291\)](#) objects

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 348\)](#).

Examples

Example

This example illustrates one usage of `DescribeOrderableReplicationInstances`.

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.DescribeOrderableReplicationInstances
{
  "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>
{
  "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
    },
    {
      "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.large",
      "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
    },
    {
        "MaxAllocatedStorage": 6144,
        "AvailabilityZones": [
            "us-east-1a",
            "us-east-1b",
            "us-east-1c",
            "us-east-1d",
            "us-east-1e"
        ],
        "ReleaseStatus": "BETA",
        "DefaultAllocatedStorage": 100,
        "ReplicationInstanceClass": "dms.c4.2xlarge",
        "MinAllocatedStorage": 5,
        "EngineVersion": "3.3.0",
        "StorageType": "gp2",
        "IncludedAllocatedStorage": 100
    }
]
}

```

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

DescribePendingMaintenanceActions

For internal use only

Request Syntax

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

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 346).

The request accepts the following data in JSON format.

Filters (p. 121)

Type: Array of [Filter](#) (p. 265) objects

Required: No

Marker (p. 121)

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. 121)

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. 121)

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

Type: String

Required: No

Response Syntax

```
{
  "Marker": "string",
  "PendingMaintenanceActions": [
    {
      "PendingMaintenanceActionDetails": [
        {
          "Action": "string",
          "AutoAppliedAfterDate": number,
          "CurrentApplyDate": number,
          "Description": "string",
          "ForcedApplyDate": number,
          "OptInStatus": "string"
        }
      ],
      "ResourceIdentifier": "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. 122)

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

PendingMaintenanceActions (p. 122)

The pending maintenance action.

Type: Array of [ResourcePendingMaintenanceActions \(p. 326\)](#) objects

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 348\)](#).

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

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 \(p. 346\)](#).

The request accepts the following data in JSON format.

EndpointArn (p. 124)

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. 124)

The status of the schema.

Type: [RefreshSchemasStatus \(p. 304\)](#) object

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 348\)](#).

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

Examples

Example

This example illustrates one usage of DescribeRefreshSchemasStatus.

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:WKBULDZKUDQZIHPOUSEH34EMU"
}
```

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:WKBULDZKUDQZIHPOUSEH34EMU",
    "ReplicationInstanceArn":"arn:aws:dms:us-east-
1:123456789012:rep:6USOU366XFJUWATDJGBCJS3VIQ"
  }
}
```

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

DescribeReplicationInstances

Returns information about replication instances 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 \(p. 346\)](#).

The request accepts the following data in JSON format.

Filters (p. 127)

Filters applied to replication instances.

Valid filter names: replication-instance-arn | replication-instance-id | replication-instance-class | engine-version

Type: Array of [Filter \(p. 265\)](#) objects

Required: No

Marker (p. 127)

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. 127)

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

```
{
  "Marker": "string",
  "ReplicationInstances": [
    {
      "AllocatedStorage": number,
      "AutoMinorVersionUpgrade": boolean,
      "AvailabilityZone": "string",
      "DnsNameServers": "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"
      },
      "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. 128)

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. 128)

The replication instances described.

Type: Array of [ReplicationInstance \(p. 305\)](#) objects

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 348\)](#).

ResourceNotFoundFault

The resource could not be found.

HTTP Status Code: 400

Examples

Example

This example illustrates one usage of `DescribeReplicationInstances`.

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": [
        "arn:aws:dms:us-east-1:123456789012:rep:PWEBBEUNOLU7VEB2OHTEH4I4GQ"
      ]
    }
  ],
  "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,
      "ReplicationInstanceArn":"arn:aws:dms:us-east-1:123456789012:rep:PWEBBEUNOLU7VEB2OHTEH4I4GQ",
      "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 V2](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

DescribeReplicationInstanceTaskLogs

Returns information about the task logs for the specified task.

Request Syntax

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

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 346).

The request accepts the following data in JSON format.

Marker (p. 132)

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. 132)

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. 132)

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

Type: String

Required: Yes

Response Syntax

```
{  
  "Marker": "string",  
  "ReplicationInstanceArn": "string",  
  "ReplicationInstanceTaskLogs": [  
    {  
      "ReplicationInstanceTaskLogSize": number,  

```



```
    "ReplicationTaskArn": "string",  
    "ReplicationTaskName": "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. 132)

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. 132)

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

Type: String

ReplicationInstanceTaskLogs (p. 132)

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 \(p. 309\)](#) objects

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 348\)](#).

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

Examples

Example

This example illustrates one usage of `DescribeReplicationInstanceTaskLogs`.

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:MY34U6Z4MSY52GRTIX3O4AY"
      ]
    }
  ],
  "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>
{
  "ReplicationInstanceTaskLogs": [
    {
      "ReplicationTaskArn": "arn:aws:dms:useast-1:237565436:task:MY34U6Z4MSY52GRTIX3O4AY",
      "ReplicationTaskName": "mysql-to-ddb",
      "ReplicationInstanceTaskLogSize": 3726134
    }
  ],
  "ReplicationInstanceArn": "arn:aws:dms:us-east-1:237565436:rep:CDSFSFSFFFSSUFCAY"
}
```

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

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

DescribeReplicationSubnetGroups

Returns information about the replication subnet groups.

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 \(p. 346\)](#).

The request accepts the following data in JSON format.

Filters (p. 136)

Filters applied to replication subnet groups.

Valid filter names: replication-subnet-group-id

Type: Array of [Filter \(p. 265\)](#) objects

Required: No

Marker (p. 136)

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. 136)

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

```
{
  "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. 137)

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. 137)

A description of the replication subnet groups.

Type: Array of [ReplicationSubnetGroup \(p. 311\)](#) objects

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 348\)](#).

ResourceNotFoundFault

The resource could not be found.

HTTP Status Code: 400

Examples

Example

This example illustrates one usage of `DescribeReplicationSubnetGroups`.

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

DescribeReplicationTaskAssessmentResults

Returns the task assessment results from the Amazon S3 bucket that AWS DMS creates in your AWS account. This action always returns the latest results.

For more information about AWS DMS task assessments, see [Creating a task assessment report](#) in the [AWS Database Migration Service User Guide](#).

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. 346).

The request accepts the following data in JSON format.

Marker (p. 140)

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. 140)

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. 140)

The Amazon Resource Name (ARN) string that uniquely identifies the task. When this input parameter is specified, the API returns only one result and ignore the values of the `MaxRecords` 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. 140)

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

Type: String

Marker (p. 140)

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. 140)

The task assessment report.

Type: Array of [ReplicationTaskAssessmentResult](#) (p. 316) objects

Errors

For information about the errors that are common to all actions, see [Common Errors](#) (p. 348).

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

DescribeReplicationTaskAssessmentRuns

Returns a paginated list of premigration assessment runs based on filter settings.

These filter settings can specify a combination of premigration assessment runs, migration tasks, replication instances, and assessment run status values.

Note

This operation doesn't return information about individual assessments. For this information, see the `DescribeReplicationTaskIndividualAssessments` operation.

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. 346).

The request accepts the following data in JSON format.

Filters (p. 143)

Filters applied to the premigration assessment runs described in the form of key-value pairs.

Valid filter names: `replication-task-assessment-run-arn`, `replication-task-arn`, `replication-instance-arn`, `status`

Type: Array of [Filter](#) (p. 265) objects

Required: No

Marker (p. 143)

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. 143)

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.

Type: Integer

Required: No

Response Syntax

```
{
  "Marker": "string",
  "ReplicationTaskAssessmentRuns": [
    {
      "AssessmentProgress": {
        "IndividualAssessmentCompletedCount": number,
        "IndividualAssessmentCount": number
      },
      "AssessmentRunName": "string",
      "LastFailureMessage": "string",
      "ReplicationTaskArn": "string",
      "ReplicationTaskAssessmentRunArn": "string",
      "ReplicationTaskAssessmentRunCreationDate": number,
      "ResultEncryptionMode": "string",
      "ResultKmsKeyArn": "string",
      "ResultLocationBucket": "string",
      "ResultLocationFolder": "string",
      "ServiceAccessRoleArn": "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.

Marker (p. 144)

A pagination token returned for you to pass to a subsequent request. If you pass this token as the `Marker` value in a subsequent request, the response includes only records beyond the marker, up to the value specified in the request by `MaxRecords`.

Type: String

ReplicationTaskAssessmentRuns (p. 144)

One or more premigration assessment runs as specified by `Filters`.

Type: Array of [ReplicationTaskAssessmentRun \(p. 318\)](#) objects

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 348\)](#).

ResourceNotFoundFault

The resource could not be found.

HTTP Status Code: 400

Examples

Example

This example illustrates one usage of DescribeReplicationTaskAssessmentRuns.

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.DescribeReplicationTaskAssessmentRuns
{
  "Filters": [
    {
      "Name": "replication-task-arn",
      "Values": [
        "arn:aws:dms:us-west-2:123456789012:task:Z5GKNMVRGGFINESYJQHG4RLONJGRSRVLCBTECQ"
      ]
    }
  ]
}
```

Sample Response

```
HTTP/1.1 200 OK
x-amzn-RequestId: <RequestId>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Date: <Date>
{
  "ReplicationTaskAssessmentRuns": [
    {
      "AssessmentProgress": {
        "IndividualAssessmentCompletedCount": 3,
        "IndividualAssessmentCount": 3
      },
      "AssessmentRunName": "Assessment-run-2020-07-07-18-15-03",
      "ReplicationTaskArn": "arn:aws:dms:us-west-2:123456789012:task:Z5GKNMVRGGFINESYJQHG4RLONJGRSRVLCBTECQ",
      "ReplicationTaskAssessmentRunArn": "arn:aws:dms:us-west-2:123456789012:assessment-run:OGH64BOBSW535SPB5RFJAU7OCYEHXZTWWUGCXZA",
      "ReplicationTaskAssessmentRunCreationDate": 1594170933.203,
      "ResultEncryptionMode": "NONE",
      "ResultLocationBucket": "myBucket",
      "ResultLocationFolder": "myFolder",
      "ServiceAccessRoleArn": "arn:aws:iam::123456789012:role/Admin",
      "Status": "passed"
    }
  ]
}
```

```
}
```

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

DescribeReplicationTaskIndividualAssessments

Returns a paginated list of individual assessments based on filter settings.

These filter settings can specify a combination of premigration assessment runs, migration tasks, and assessment status values.

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. 346).

The request accepts the following data in JSON format.

Filters (p. 147)

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

Valid filter names: replication-task-assessment-run-arn, replication-task-arn, status

Type: Array of [Filter](#) (p. 265) objects

Required: No

Marker (p. 147)

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. 147)

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.

Type: Integer

Required: No

Response Syntax

```
{
```

```
"Marker": "string",
"ReplicationTaskIndividualAssessments": [
  {
    "IndividualAssessmentName": "string",
    "ReplicationTaskAssessmentRunArn": "string",
    "ReplicationTaskIndividualAssessmentArn": "string",
    "ReplicationTaskIndividualAssessmentStartDate": number,
    "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.

Marker (p. 147)

A pagination token returned for you to pass to a subsequent request. If you pass this token as the `Marker` value in a subsequent request, the response includes only records beyond the marker, up to the value specified in the request by `MaxRecords`.

Type: String

ReplicationTaskIndividualAssessments (p. 147)

One or more individual assessments as specified by `Filters`.

Type: Array of [ReplicationTaskIndividualAssessment \(p. 322\)](#) objects

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 348\)](#).

ResourceNotFoundFault

The resource could not be found.

HTTP Status Code: 400

Examples

Example

This example illustrates one usage of `DescribeReplicationTaskIndividualAssessments`.

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.DescribeReplicationTaskIndividualAssessments
{
  "Filters": [
    {
      "Name": "replication-task-assessment-run-arn",
      "Values": [
        "arn:aws:dms:us-west-2:123456789012:assessment-
run:TSUXVACQ2UUMXUS5OYQOGB6FXSAZ4LE3FXRNII",
        "arn:aws:dms:us-west-2:123456789012:assessment-
run:ZQ3KWJEUM7SW2Q2BH5BFMP5525KH56C3G5DHMTQ",
        "arn:aws:dms:us-west-2:123456789012:assessment-
run:3GOFKWZXGIT7ZWBBZOXDDBUS4VPAV63PPOQGFHQ"
      ]
    }
  ]
}
```

Sample Response

```
HTTP/1.1 200 OK
x-amzn-RequestId: <RequestId>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Date: <Date>
{
  "ReplicationTaskIndividualAssessments": [
    {
      "IndividualAssessmentName": "unsupported-data-types-in-source",
      "ReplicationTaskAssessmentRunArn": "arn:aws:dms:us-west-2:123456789012:assessment-
run:3GOFKWZXGIT7ZWBBZOXDDBUS4VPAV63PPOQGFHQ",
      "ReplicationTaskIndividualAssessmentArn": "arn:aws:dms:us-
west-2:123456789012:individual-assessment:TSUXVACQ2UUMXUS5OYQOGB6FXSAZ4LE3FXRNII",
      "ReplicationTaskIndividualAssessmentStartDate": 1594066482.995,
      "Status": "passed"
    },
    {
      "IndividualAssessmentName": "full-lob-not-nullable-at-target",
      "ReplicationTaskAssessmentRunArn": "arn:aws:dms:us-west-2:123456789012:assessment-
run:3GOFKWZXGIT7ZWBBZOXDDBUS4VPAV63PPOQGFHQ",
      "ReplicationTaskIndividualAssessmentArn": "arn:aws:dms:us-
west-2:123456789012:individual-assessment:ZQ3KWJEUM7SW2Q2BH5BFMP5525KH56C3G5DHMTQ",
      "ReplicationTaskIndividualAssessmentStartDate": 1594066482.989,
      "Status": "passed"
    },
    {
      "IndividualAssessmentName": "table-with-no-primary-key-or-unique-constraint",
      "ReplicationTaskAssessmentRunArn": "arn:aws:dms:us-west-2:123456789012:assessment-
run:3GOFKWZXGIT7ZWBBZOXDDBUS4VPAV63PPOQGFHQ",
      "ReplicationTaskIndividualAssessmentArn": "arn:aws:dms:us-
west-2:123456789012:individual-assessment:3GOFKWZXGIT7ZWBBZOXDDBUS4VPAV63PPOQGFHQ",
      "ReplicationTaskIndividualAssessmentStartDate": 1594066591.595,
      "Status": "passed"
    }
  ]
}
```

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

DescribeReplicationTasks

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

Request Syntax

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

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 346).

The request accepts the following data in JSON format.

Filters (p. 151)

Filters applied to replication tasks.

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

Type: Array of [Filter](#) (p. 265) objects

Required: No

Marker (p. 151)

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. 151)

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

WithoutSettings (p. 151)

An option to set to avoid returning information about settings. Use this to reduce overhead when setting information is too large. To use this option, choose `true`; otherwise, choose `false` (the default).

Type: Boolean

Required: No

Response Syntax

```
{
  "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,
        "FreshStartDate": number,
        "FullLoadFinishDate": number,
        "FullLoadProgressPercent": number,
        "FullLoadStartDate": number,
        "StartDate": number,
        "StopDate": number,
        "TablesErrored": number,
        "TablesLoaded": number,
        "TablesLoading": number,
        "TablesQueued": number
      },
      "SourceEndpointArn": "string",
      "Status": "string",
      "StopReason": "string",
      "TableMappings": "string",
      "TargetEndpointArn": "string",
      "TargetReplicationInstanceArn": "string",
      "TaskData": "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. 152)

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. 152)

A description of the replication tasks.

Type: Array of [ReplicationTask](#) (p. 312) objects

Errors

For information about the errors that are common to all actions, see [Common Errors](#) (p. 348).

ResourceNotFoundFault

The resource could not be found.

HTTP Status Code: 400

Examples

Example

This example illustrates one usage of DescribeReplicationTasks.

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.DescribeReplicationTasks
{
  "Filters":[
    {
      "Name":"endpoint-arn",
      "Values":[
        "arn:aws:dms:us-east-
1:123456789012:endpoint:RZZK4EZW5UANC7Y3P4E776WHBE"
      ]
    }
  ],
  "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":[
    {
      "SourceEndpointArn":"arn:aws:dms:us-east-
1:123456789012:endpoint:RZZK4EZW5UANC7Y3P4E776WHBE",
      "ReplicationTaskIdentifier":"aks145",
      "ReplicationInstanceArn":"arn:aws:dms:us-east-
1:123456789012:rep:6USOU366XFJUWATDJGBCJS3VIQ",
      "TableMappings":{" \n\t\"TableMappings\": [ {
\n\t\t\t\"Type\": \"Include\", \n\t\t\t\"SourceSchema\": \"testDB\", \n\t\t\t
\n\t\t\t\"SourceTable\": \"%\" \n\t\t}, { \n\t\t\t\"Type\": \"Include\", \n\t\t\t
\n\t\t\t\"SourceSchema\": \"testDB\", \n\t\t\t\t\"SourceTable\": \"%\" \n\t\t} ]\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:RALPZGYI3IUSJCBKKIRBEURKDY",
      "ReplicationTaskCreationDate":1449185680.107,
      "MigrationType":"full-load",
      "TargetEndpointArn":"arn:aws:dms:us-east-
1:123456789012:endpoint:GVBUJQXJZASXWHTWCLN2WNT57E",
      "ReplicationTaskSettings":{"\"TargetMetadata\":{\"TargetSchema\":\"\",
\n\"SupportLobs\":true, \"FullLobMod
e\":true, \"LobChunkSize\":64, \"LimitedSizeLobMode\":false, \"LobMaxSize\":0},\n
\n      FullLoadSettings\":{\"
        \"FullLoadEnabled\":true,
        \n
TargetTablePrepMode\": \"DO_NOTHING\",
        \"CreatePkAfterFullLoad\":false,
        \"StopTaskCachedChangesApplied\":false,
        \"StopTaskCachedChangesNotApplied\":false,
        \"ResumeEnabled\":false,
        \"ResumeMinTableSize\":100000,
        \"ResumeOnlyClusteredPKTabl
es\":true,
        \"MaxFullLoadSubTasks\":8,
        \"TransactionConsistencyTimeout\":600,
        \"Com
mitRate\":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 V2](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

DescribeSchemas

Returns information about the schema for the specified endpoint.

Request Syntax

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

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 346).

The request accepts the following data in JSON format.

EndpointArn (p. 156)

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

Type: String

Required: Yes

Marker (p. 156)

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. 156)

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

```
{  
  "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. 156)

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. 156)

The described schema.

Type: Array of strings

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 348\)](#).

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

Examples

Example

This example illustrates one usage of `DescribeSchemas`.

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.DescribeSchemas
{
```

```
    "EndpointArn": "arn:aws:dms:us-east-1:123456789012:endpoint:WKBULDZKUDQZIHPOUUSEH34EMU",
    "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 V2](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

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

```
{
  "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. 346).

The request accepts the following data in JSON format.

Filters (p. 159)

Filters applied to table statistics.

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. 265) objects

Required: No

Marker (p. 159)

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. 159)

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. 159)

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

Type: String

Required: Yes

Response Syntax

```
{
  "Marker": "string",
  "ReplicationTaskArn": "string",
  "TableStatistics": [
    {
      "Ddls": number,
      "Deletes": number,
      "FullLoadCondtnlChkFailedRows": number,
      "FullLoadEndTime": number,
      "FullLoadErrorRows": number,
      "FullLoadReloaded": boolean,
      "FullLoadRows": number,
      "FullLoadStartTime": 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. 160)

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. 160)

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

Type: String

TableStatistics (p. 160)

The table statistics.

Type: Array of [TableStatistics \(p. 340\)](#) objects

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 348\)](#).

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

Examples

Example

This example illustrates one usage of DescribeTableStatistics.

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.DescribeTableStatistics
{
  "ReplicationTaskArn": "arn:aws:dms:us-west-2:918017823489:task:WZVIPF3D4AJSNJASB42D4Z7GBE",
  "SchemaName": "",
  "TableNames": [
    ""
  ],
  "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>
{
  "ReplicationTaskArn": "arn:aws:dms:us-west-
2:918017823489:task:WZVIPF3D4AJSNJASB42D4Z7GBE",
  "TableStatistics": [
    {
      "Inserts": 3872,
      "LastUpdateTime": 1457655132.796,
      "Ddls": 1,
      "TableName": "DataInsert_5D28A14AB66AB4ED",
      "Updates": 0,
      "FullLoadRows": 0,
      "TableState": "Table completed",
      "SchemaName": "rdststdb",
      "Deletes": 0
    },
    {
      "Inserts": 0,
      "LastUpdateTime": 1457655132.796,
      "Ddls": 0,
      "TableName": "DataInsert_05CF105ABC22BB83",
      "Updates": 0,
      "FullLoadRows": 0,
      "TableState": "Table completed",
      "SchemaName": "rdststdb",
      "Deletes": 0
    },
    {
      "Inserts": 0,
      "LastUpdateTime": 1457655132.796,
      "Ddls": 0,
      "TableName": "DataInsert_BEB962DE10FB7B60",
      "Updates": 0,
      "FullLoadRows": 0,
      "TableState": "Table completed",
      "SchemaName": "rdststdb",
      "Deletes": 0
    }
  ]
}

```

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

ImportCertificate

Uploads the specified certificate.

Request Syntax

```
{  
  "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. 346).

The request accepts the following data in JSON format.

CertificateIdentifier (p. 164)

A customer-assigned name for the certificate. Identifiers must begin with a letter and must contain only ASCII letters, digits, and hyphens. They can't end with a hyphen or contain two consecutive hyphens.

Type: String

Required: Yes

CertificatePem (p. 164)

The contents of a .pem file, which contains an X.509 certificate.

Type: String

Required: No

CertificateWallet (p. 164)

The location of an imported Oracle Wallet certificate for use with SSL. Provide the name of a .sso file using the `fileb://` prefix. You can't provide the certificate inline.

Type: Base64-encoded binary data object

Required: No

Tags (p. 164)

The tags associated with the certificate.

Type: Array of [Tag](#) (p. 344) objects

Required: No

Response Syntax

```
{
  "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. 165)

The certificate to be uploaded.

Type: [Certificate \(p. 243\)](#) object

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 348\)](#).

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

ListTagsForResource

Lists all metadata tags attached to an AWS DMS resource, including replication instance, endpoint, security group, and migration task. For more information, see [Tag](#) data type description.

Request Syntax

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

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 346).

The request accepts the following data in JSON format.

ResourceArn (p. 167)

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

Type: String

Required: Yes

Response Syntax

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

Response Elements

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

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

TagList (p. 167)

A list of tags for the resource.

Type: Array of [Tag](#) (p. 344) objects

Errors

For information about the errors that are common to all actions, see [Common Errors](#) (p. 348).

ResourceNotFoundFault

The resource could not be found.

HTTP Status Code: 400

Examples

Example

This example illustrates one usage of ListTagsForResource.

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
{
  "ResourceArn": "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>
{
  "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 V2](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

ModifyEndpoint

Modifies the specified endpoint.

Note

For a MySQL source or target endpoint, don't explicitly specify the database using the `DatabaseName` request parameter on the `ModifyEndpoint` API call. Specifying `DatabaseName` when you modify a MySQL endpoint replicates all the task tables to this single database. For MySQL endpoints, you specify the database only when you specify the schema in the table-mapping rules of the AWS DMS task.

Request Syntax

```
{
  "CertificateArn": "string",
  "DatabaseName": "string",
  "DmsTransferSettings": {
    "BucketName": "string",
    "ServiceAccessRoleArn": "string"
  },
  "DocDbSettings": {
    "DatabaseName": "string",
    "DocsToInvestigate": number,
    "ExtractDocId": boolean,
    "KmsKeyId": "string",
    "NestingLevel": "string",
    "Password": "string",
    "Port": number,
    "SecretsManagerAccessRoleArn": "string",
    "SecretsManagerSecretId": "string",
    "ServerName": "string",
    "Username": "string"
  },
  "DynamoDbSettings": {
    "ServiceAccessRoleArn": "string"
  },
  "ElasticsearchSettings": {
    "EndpointUri": "string",
    "ErrorRetryDuration": number,
    "FullLoadErrorPercentage": number,
    "ServiceAccessRoleArn": "string"
  },
  "EndpointArn": "string",
  "EndpointIdentifier": "string",
  "EndpointType": "string",
  "EngineName": "string",
  "ExternalTableDefinition": "string",
  "ExtraConnectionAttributes": "string",
  "IBMDB2Settings": {
    "CurrentLsn": "string",
    "DatabaseName": "string",
    "MaxKBytesPerRead": number,
    "Password": "string",
    "Port": number,
    "SecretsManagerAccessRoleArn": "string",
    "SecretsManagerSecretId": "string",
    "ServerName": "string",
    "SetDataCaptureChanges": boolean,
    "Username": "string"
  },
  "KafkaSettings": {
    "Broker": "string",
```

```

    "IncludeControlDetails": boolean,
    "IncludeNullAndEmpty": boolean,
    "IncludePartitionValue": boolean,
    "IncludeTableAlterOperations": boolean,
    "IncludeTransactionDetails": boolean,
    "MessageFormat": "string",
    "MessageMaxBytes": number,
    "PartitionIncludeSchemaTable": boolean,
    "SaslPassword": "string",
    "SaslUsername": "string",
    "SecurityProtocol": "string",
    "SslCaCertificateArn": "string",
    "SslClientCertificateArn": "string",
    "SslClientKeyArn": "string",
    "SslClientKeyPassword": "string",
    "Topic": "string"
  },
  "KinesisSettings": {
    "IncludeControlDetails": boolean,
    "IncludeNullAndEmpty": boolean,
    "IncludePartitionValue": boolean,
    "IncludeTableAlterOperations": boolean,
    "IncludeTransactionDetails": boolean,
    "MessageFormat": "string",
    "PartitionIncludeSchemaTable": boolean,
    "ServiceAccessRoleArn": "string",
    "StreamArn": "string"
  },
  "MicrosoftSQLServerSettings": {
    "BcpPacketSize": number,
    "ControlTablesFileGroup": "string",
    "DatabaseName": "string",
    "Password": "string",
    "Port": number,
    "QuerySingleAlwaysOnNode": boolean,
    "ReadBackupOnly": boolean,
    "SafeguardPolicy": "string",
    "SecretsManagerAccessRoleArn": "string",
    "SecretsManagerSecretId": "string",
    "ServerName": "string",
    "UseBcpFullLoad": boolean,
    "Username": "string",
    "UseThirdPartyBackupDevice": boolean
  },
  "MongoDbSettings": {
    "AuthMechanism": "string",
    "AuthSource": "string",
    "AuthType": "string",
    "DatabaseName": "string",
    "DocsToInvestigate": "string",
    "ExtractDocId": "string",
    "KmsKeyId": "string",
    "NestingLevel": "string",
    "Password": "string",
    "Port": number,
    "SecretsManagerAccessRoleArn": "string",
    "SecretsManagerSecretId": "string",
    "ServerName": "string",
    "Username": "string"
  },
  "MySQLSettings": {
    "AfterConnectScript": "string",
    "CleanSourceMetadataOnMismatch": boolean,
    "DatabaseName": "string",
    "EventsPollInterval": number,
    "MaxFileSize": number,

```

```

    "ParallelLoadThreads": number,
    "Password": "string",
    "Port": number,
    "SecretsManagerAccessRoleArn": "string",
    "SecretsManagerSecretId": "string",
    "ServerName": "string",
    "ServerTimezone": "string",
    "TargetDbType": "string",
    "Username": "string"
  },
  "NeptuneSettings": {
    "ErrorRetryDuration": number,
    "IamAuthEnabled": boolean,
    "MaxFileSize": number,
    "MaxRetryCount": number,
    "S3BucketFolder": "string",
    "S3BucketName": "string",
    "ServiceAccessRoleArn": "string"
  },
  "OracleSettings": {
    "AccessAlternateDirectly": boolean,
    "AdditionalArchivedLogDestId": number,
    "AddSupplementalLogging": boolean,
    "AllowSelectNestedTables": boolean,
    "ArchivedLogDestId": number,
    "ArchivedLogsOnly": boolean,
    "AsmPassword": "string",
    "AsmServer": "string",
    "AsmUser": "string",
    "CharLengthSemantics": "string",
    "DatabaseName": "string",
    "DirectPathNoLog": boolean,
    "DirectPathParallelLoad": boolean,
    "EnableHomogenousTablespace": boolean,
    "FailTasksOnLobTruncation": boolean,
    "NumberDatatypeScale": number,
    "OraclePathPrefix": "string",
    "ParallelAsmReadThreads": number,
    "Password": "string",
    "Port": number,
    "ReadAheadBlocks": number,
    "ReadTableSpaceName": boolean,
    "ReplacePathPrefix": boolean,
    "RetryInterval": number,
    "SecretsManagerAccessRoleArn": "string",
    "SecretsManagerOracleAsmAccessRoleArn": "string",
    "SecretsManagerOracleAsmSecretId": "string",
    "SecretsManagerSecretId": "string",
    "SecurityDbEncryption": "string",
    "SecurityDbEncryptionName": "string",
    "ServerName": "string",
    "SpatialDataOptionToGeoJsonFunctionName": "string",
    "UseAlternateFolderForOnline": boolean,
    "UsePathPrefix": "string",
    "Username": "string"
  },
  "Password": "string",
  "Port": number,
  "PostgreSQLSettings": {
    "AfterConnectScript": "string",
    "CaptureDdls": boolean,
    "DatabaseName": "string",
    "DdlArtifactsSchema": "string",
    "ExecuteTimeout": number,
    "FailTasksOnLobTruncation": boolean,
    "MaxFileSize": number,

```



```

    "Password": "string",
    "Port": number,
    "SecretsManagerAccessRoleArn": "string",
    "SecretsManagerSecretId": "string",
    "ServerName": "string",
    "SlotName": "string",
    "Username": "string"
  },
  "RedshiftSettings": {
    "AcceptAnyDate": boolean,
    "AfterConnectScript": "string",
    "BucketFolder": "string",
    "BucketName": "string",
    "CaseSensitiveNames": boolean,
    "CompUpdate": boolean,
    "ConnectionTimeout": number,
    "DatabaseName": "string",
    "DateFormat": "string",
    "EmptyAsNull": boolean,
    "EncryptionMode": "string",
    "ExplicitIds": boolean,
    "FileTransferUploadStreams": number,
    "LoadTimeout": number,
    "MaxFileSize": number,
    "Password": "string",
    "Port": number,
    "RemoveQuotes": boolean,
    "ReplaceChars": "string",
    "ReplaceInvalidChars": "string",
    "SecretsManagerAccessRoleArn": "string",
    "SecretsManagerSecretId": "string",
    "ServerName": "string",
    "ServerSideEncryptionKmsKeyId": "string",
    "ServiceAccessRoleArn": "string",
    "TimeFormat": "string",
    "TrimBlanks": boolean,
    "TruncateColumns": boolean,
    "Username": "string",
    "WriteBufferSize": number
  },
  "S3Settings": {
    "BucketFolder": "string",
    "BucketName": "string",
    "CdcInsertsAndUpdates": boolean,
    "CdcInsertsOnly": boolean,
    "CdcPath": "string",
    "CompressionType": "string",
    "CsvDelimiter": "string",
    "CsvNoSupValue": "string",
    "CsvRowDelimiter": "string",
    "DateFormat": "string",
    "DataPageSize": number,
    "DatePartitionDelimiter": "string",
    "DatePartitionEnabled": boolean,
    "DatePartitionSequence": "string",
    "DictPageSizeLimit": number,
    "EnableStatistics": boolean,
    "EncodingType": "string",
    "EncryptionMode": "string",
    "ExternalTableDefinition": "string",
    "IncludeOpForFullLoad": boolean,
    "ParquetTimestampInMillisecond": boolean,
    "ParquetVersion": "string",
    "PreserveTransactions": boolean,
    "RowGroupLength": number,
    "ServerSideEncryptionKmsKeyId": "string",

```

```
    "ServiceAccessRoleArn": "string",
    "TimestampColumnName": "string",
    "UseCsvNoSupValue": boolean
  },
  "ServerName": "string",
  "ServiceAccessRoleArn": "string",
  "SslMode": "string",
  "SybaseSettings": {
    "DatabaseName": "string",
    "Password": "string",
    "Port": number,
    "SecretsManagerAccessRoleArn": "string",
    "SecretsManagerSecretId": "string",
    "ServerName": "string",
    "Username": "string"
  },
  "Username": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 346).

The request accepts the following data in JSON format.

CertificateArn (p. 170)

The Amazon Resource Name (ARN) of the certificate used for SSL connection.

Type: String

Required: No

DatabaseName (p. 170)

The name of the endpoint database. For a MySQL source or target endpoint, do not specify DatabaseName.

Type: String

Required: No

DmsTransferSettings (p. 170)

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

Attributes include the following:

- **serviceAccessRoleArn** - The AWS Identity and Access Management (IAM) role that has permission to access the Amazon S3 bucket. The role must allow the `iam:PassRole` action.
- **BucketName** - The name of the S3 bucket to use.

Shorthand syntax for these settings is as follows:

`ServiceAccessRoleArn=string ,BucketName=string`

JSON syntax for these settings is as follows: { "ServiceAccessRoleArn": "string", "BucketName": "string" }

Type: [DmsTransferSettings](#) (p. 247) object

Required: No

DocDbSettings (p. 170)

Settings in JSON format for the source DocumentDB endpoint. For more information about the available settings, see the configuration properties section in [Using DocumentDB as a Target for AWS Database Migration Service](#) in the *AWS Database Migration Service User Guide*.

Type: [DocDbSettings \(p. 248\)](#) object

Required: No

DynamoDbSettings (p. 170)

Settings in JSON format for the target Amazon DynamoDB endpoint. For information about other available settings, see [Using Object Mapping to Migrate Data to DynamoDB](#) in the *AWS Database Migration Service User Guide*.

Type: [DynamoDbSettings \(p. 251\)](#) object

Required: No

ElasticsearchSettings (p. 170)

Settings in JSON format for the target Elasticsearch endpoint. For more information about the available settings, see [Extra Connection Attributes When Using Elasticsearch as a Target for AWS DMS](#) in the *AWS Database Migration Service User Guide*.

Type: [ElasticsearchSettings \(p. 252\)](#) object

Required: No

EndpointArn (p. 170)

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

Type: String

Required: Yes

EndpointIdentifier (p. 170)

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

Type: String

Required: No

EndpointType (p. 170)

The type of endpoint. Valid values are `source` and `target`.

Type: String

Valid Values: `source` | `target`

Required: No

EngineName (p. 170)

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"`, `"kinesis"`, `"kafka"`, `"elasticsearch"`, `"documentdb"`, `"sqlserver"`, and `"neptune"`.

Type: String

Required: No

ExternalTableDefinition (p. 170)

The external table definition.

Type: String

Required: No

ExtraConnectionAttributes (p. 170)

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

Type: String

Required: No

IBMDB2Settings (p. 170)

Settings in JSON format for the source IBM Db2 LUW endpoint. For information about other available settings, see [Extra connection attributes when using Db2 LUW as a source for AWS DMS](#) in the *AWS Database Migration Service User Guide*.

Type: [IBMDB2Settings \(p. 266\)](#) object

Required: No

KafkaSettings (p. 170)

Settings in JSON format for the target Apache Kafka endpoint. For more information about the available settings, see [Using Apache Kafka as a Target for AWS Database Migration Service](#) in the *AWS Database Migration Service User Guide*.

Type: [KafkaSettings \(p. 268\)](#) object

Required: No

KinesisSettings (p. 170)

Settings in JSON format for the target endpoint for Amazon Kinesis Data Streams. For more information about the available settings, see [Using Amazon Kinesis Data Streams as a Target for AWS Database Migration Service](#) in the *AWS Database Migration Service User Guide*.

Type: [KinesisSettings \(p. 271\)](#) object

Required: No

MicrosoftSQLServerSettings (p. 170)

Settings in JSON format for the source and target Microsoft SQL Server endpoint. For information about other available settings, see [Extra connection attributes when using SQL Server as a source for AWS DMS](#) and [Extra connection attributes when using SQL Server as a target for AWS DMS](#) in the *AWS Database Migration Service User Guide*.

Type: [MicrosoftSQLServerSettings \(p. 273\)](#) object

Required: No

MongoDbSettings (p. 170)

Settings in JSON format for the source MongoDB endpoint. For more information about the available settings, see the configuration properties section in [Using MongoDB as a Target for AWS Database Migration Service](#) in the *AWS Database Migration Service User Guide*.

Type: [MongoDbSettings \(p. 276\)](#) object

Required: No

MySQLSettings (p. 170)

Settings in JSON format for the source and target MySQL endpoint. For information about other available settings, see [Extra connection attributes when using MySQL as a source for AWS DMS](#) and [Extra connection attributes when using a MySQL-compatible database as a target for AWS DMS](#) in the *AWS Database Migration Service User Guide*.

Type: [MySQLSettings \(p. 279\)](#) object

Required: No

NeptuneSettings (p. 170)

Settings in JSON format for the target Amazon Neptune endpoint. For more information about the available settings, see [Specifying Endpoint Settings for Amazon Neptune as a Target](#) in the *AWS Database Migration Service User Guide*.

Type: [NeptuneSettings \(p. 282\)](#) object

Required: No

OracleSettings (p. 170)

Settings in JSON format for the source and target Oracle endpoint. For information about other available settings, see [Extra connection attributes when using Oracle as a source for AWS DMS](#) and [Extra connection attributes when using Oracle as a target for AWS DMS](#) in the *AWS Database Migration Service User Guide*.

Type: [OracleSettings \(p. 284\)](#) object

Required: No

Password (p. 170)

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

Type: String

Required: No

Port (p. 170)

The port used by the endpoint database.

Type: Integer

Required: No

PostgreSQLSettings (p. 170)

Settings in JSON format for the source and target PostgreSQL endpoint. For information about other available settings, see [Extra connection attributes when using PostgreSQL as a source for AWS DMS](#) and [Extra connection attributes when using PostgreSQL as a target for AWS DMS](#) in the *AWS Database Migration Service User Guide*.

Type: [PostgreSQLSettings \(p. 295\)](#) object

Required: No

RedshiftSettings (p. 170)

Provides information that defines an Amazon Redshift endpoint.

Type: [RedshiftSettings \(p. 298\)](#) object

Required: No

S3Settings (p. 170)

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

Type: [S3Settings \(p. 327\)](#) object

Required: No

ServerName (p. 170)

The name of the server where the endpoint database resides.

Type: String

Required: No

ServiceAccessRoleArn (p. 170)

The Amazon Resource Name (ARN) for the IAM role you want to use to modify the endpoint. The role must allow the `iam:PassRole` action.

Type: String

Required: No

SslMode (p. 170)

The SSL mode used to connect to the endpoint. The default value is `none`.

Type: String

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

Required: No

SybaseSettings (p. 170)

Settings in JSON format for the source and target SAP ASE endpoint. For information about other available settings, see [Extra connection attributes when using SAP ASE as a source for AWS DMS](#) and [Extra connection attributes when using SAP ASE as a target for AWS DMS](#) in the *AWS Database Migration Service User Guide*.

Type: [SybaseSettings \(p. 338\)](#) object

Required: No

Username (p. 170)

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

Type: String

Required: No

Response Syntax

```
{
  "Endpoint": {
    "CertificateArn": "string",
    "DatabaseName": "string",
```

```

"DmsTransferSettings": {
  "BucketName": "string",
  "ServiceAccessRoleArn": "string"
},
"DocDbSettings": {
  "DatabaseName": "string",
  "DocsToInvestigate": number,
  "ExtractDocId": boolean,
  "KmsKeyId": "string",
  "NestingLevel": "string",
  "Password": "string",
  "Port": number,
  "SecretsManagerAccessRoleArn": "string",
  "SecretsManagerSecretId": "string",
  "ServerName": "string",
  "Username": "string"
},
"DynamoDbSettings": {
  "ServiceAccessRoleArn": "string"
},
"ElasticsearchSettings": {
  "EndpointUri": "string",
  "ErrorRetryDuration": number,
  "FullLoadErrorPercentage": number,
  "ServiceAccessRoleArn": "string"
},
"EndpointArn": "string",
"EndpointIdentifier": "string",
"EndpointType": "string",
"EngineDisplayName": "string",
"EngineName": "string",
"ExternalId": "string",
"ExternalTableDefinition": "string",
"ExtraConnectionAttributes": "string",
"IBMDB2Settings": {
  "CurrentLsn": "string",
  "DatabaseName": "string",
  "MaxKBytesPerRead": number,
  "Password": "string",
  "Port": number,
  "SecretsManagerAccessRoleArn": "string",
  "SecretsManagerSecretId": "string",
  "ServerName": "string",
  "SetDataCaptureChanges": boolean,
  "Username": "string"
},
"KafkaSettings": {
  "Broker": "string",
  "IncludeControlDetails": boolean,
  "IncludeNullAndEmpty": boolean,
  "IncludePartitionValue": boolean,
  "IncludeTableAlterOperations": boolean,
  "IncludeTransactionDetails": boolean,
  "MessageFormat": "string",
  "MessageMaxBytes": number,
  "PartitionIncludeSchemaTable": boolean,
  "SaslPassword": "string",
  "SaslUsername": "string",
  "SecurityProtocol": "string",
  "SslCaCertificateArn": "string",
  "SslClientCertificateArn": "string",
  "SslClientKeyArn": "string",
  "SslClientKeyPassword": "string",
  "Topic": "string"
},
"KinesisSettings": {

```

```

    "IncludeControlDetails": boolean,
    "IncludeNullAndEmpty": boolean,
    "IncludePartitionValue": boolean,
    "IncludeTableAlterOperations": boolean,
    "IncludeTransactionDetails": boolean,
    "MessageFormat": "string",
    "PartitionIncludeSchemaTable": boolean,
    "ServiceAccessRoleArn": "string",
    "StreamArn": "string"
  },
  "KmsKeyId": "string",
  "MicrosoftSQLServerSettings": {
    "BcpPacketSize": number,
    "ControlTablesFileGroup": "string",
    "DatabaseName": "string",
    "Password": "string",
    "Port": number,
    "QuerySingleAlwaysOnNode": boolean,
    "ReadBackupOnly": boolean,
    "SafeguardPolicy": "string",
    "SecretsManagerAccessRoleArn": "string",
    "SecretsManagerSecretId": "string",
    "ServerName": "string",
    "UseBcpFullLoad": boolean,
    "Username": "string",
    "UseThirdPartyBackupDevice": boolean
  },
  "MongoDbSettings": {
    "AuthMechanism": "string",
    "AuthSource": "string",
    "AuthType": "string",
    "DatabaseName": "string",
    "DocsToInvestigate": "string",
    "ExtractDocId": "string",
    "KmsKeyId": "string",
    "NestingLevel": "string",
    "Password": "string",
    "Port": number,
    "SecretsManagerAccessRoleArn": "string",
    "SecretsManagerSecretId": "string",
    "ServerName": "string",
    "Username": "string"
  },
  "MySQLSettings": {
    "AfterConnectScript": "string",
    "CleanSourceMetadataOnMismatch": boolean,
    "DatabaseName": "string",
    "EventsPollInterval": number,
    "MaxFileSize": number,
    "ParallelLoadThreads": number,
    "Password": "string",
    "Port": number,
    "SecretsManagerAccessRoleArn": "string",
    "SecretsManagerSecretId": "string",
    "ServerName": "string",
    "ServerTimezone": "string",
    "TargetDbType": "string",
    "Username": "string"
  },
  "NeptuneSettings": {
    "ErrorRetryDuration": number,
    "IamAuthEnabled": boolean,
    "MaxFileSize": number,
    "MaxRetryCount": number,
    "S3BucketFolder": "string",
    "S3BucketName": "string",

```



```

    "ServiceAccessRoleArn": "string"
  },
  "OracleSettings": {
    "AccessAlternateDirectly": boolean,
    "AdditionalArchivedLogDestId": number,
    "AddSupplementalLogging": boolean,
    "AllowSelectNestedTables": boolean,
    "ArchivedLogDestId": number,
    "ArchivedLogsOnly": boolean,
    "AsmPassword": "string",
    "AsmServer": "string",
    "AsmUser": "string",
    "CharLengthSemantics": "string",
    "DatabaseName": "string",
    "DirectPathNoLog": boolean,
    "DirectPathParallelLoad": boolean,
    "EnableHomogenousTablespace": boolean,
    "FailTasksOnLobTruncation": boolean,
    "NumberDatatypeScale": number,
    "OraclePathPrefix": "string",
    "ParallelAsmReadThreads": number,
    "Password": "string",
    "Port": number,
    "ReadAheadBlocks": number,
    "ReadTableSpaceName": boolean,
    "ReplacePathPrefix": boolean,
    "RetryInterval": number,
    "SecretsManagerAccessRoleArn": "string",
    "SecretsManagerOracleAsmAccessRoleArn": "string",
    "SecretsManagerOracleAsmSecretId": "string",
    "SecretsManagerSecretId": "string",
    "SecurityDbEncryption": "string",
    "SecurityDbEncryptionName": "string",
    "ServerName": "string",
    "SpatialDataOptionToGeoJsonFunctionName": "string",
    "UseAlternateFolderForOnline": boolean,
    "UsePathPrefix": "string",
    "Username": "string"
  },
  "Port": number,
  "PostgreSQLSettings": {
    "AfterConnectScript": "string",
    "CaptureDdls": boolean,
    "DatabaseName": "string",
    "DdlArtifactsSchema": "string",
    "ExecuteTimeout": number,
    "FailTasksOnLobTruncation": boolean,
    "MaxFileSize": number,
    "Password": "string",
    "Port": number,
    "SecretsManagerAccessRoleArn": "string",
    "SecretsManagerSecretId": "string",
    "ServerName": "string",
    "SlotName": "string",
    "Username": "string"
  },
  "RedshiftSettings": {
    "AcceptAnyDate": boolean,
    "AfterConnectScript": "string",
    "BucketFolder": "string",
    "BucketName": "string",
    "CaseSensitiveNames": boolean,
    "CompUpdate": boolean,
    "ConnectionTimeout": number,
    "DatabaseName": "string",
    "DateFormat": "string",

```

```

    "EmptyAsNull": boolean,
    "EncryptionMode": "string",
    "ExplicitIds": boolean,
    "FileTransferUploadStreams": number,
    "LoadTimeout": number,
    "MaxFileSize": number,
    "Password": "string",
    "Port": number,
    "RemoveQuotes": boolean,
    "ReplaceChars": "string",
    "ReplaceInvalidChars": "string",
    "SecretsManagerAccessRoleArn": "string",
    "SecretsManagerSecretId": "string",
    "ServerName": "string",
    "ServerSideEncryptionKmsKeyId": "string",
    "ServiceAccessRoleArn": "string",
    "TimeFormat": "string",
    "TrimBlanks": boolean,
    "TruncateColumns": boolean,
    "Username": "string",
    "WriteBufferSize": number
},
"S3Settings": {
    "BucketFolder": "string",
    "BucketName": "string",
    "CdcInsertsAndUpdates": boolean,
    "CdcInsertsOnly": boolean,
    "CdcPath": "string",
    "CompressionType": "string",
    "CsvDelimiter": "string",
    "CsvNoSupValue": "string",
    "CsvRowDelimiter": "string",
    "DataFormat": "string",
    "DataPageSize": number,
    "DatePartitionDelimiter": "string",
    "DatePartitionEnabled": boolean,
    "DatePartitionSequence": "string",
    "DictPageSizeLimit": number,
    "EnableStatistics": boolean,
    "EncodingType": "string",
    "EncryptionMode": "string",
    "ExternalTableDefinition": "string",
    "IncludeOpForFullLoad": boolean,
    "ParquetTimestampInMillisecond": boolean,
    "ParquetVersion": "string",
    "PreserveTransactions": boolean,
    "RowGroupLength": number,
    "ServerSideEncryptionKmsKeyId": "string",
    "ServiceAccessRoleArn": "string",
    "TimestampColumnName": "string",
    "UseCsvNoSupValue": boolean
},
"ServerName": "string",
"ServiceAccessRoleArn": "string",
"SslMode": "string",
"Status": "string",
"SybaseSettings": {
    "DatabaseName": "string",
    "Password": "string",
    "Port": number,
    "SecretsManagerAccessRoleArn": "string",
    "SecretsManagerSecretId": "string",
    "ServerName": "string",
    "Username": "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.

Endpoint (p. 178)

The modified endpoint.

Type: [Endpoint \(p. 253\)](#) object

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 348\)](#).

AccessDeniedFault

AWS DMS was denied access to the endpoint. Check that the role is correctly configured.

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 AWS 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

Examples

Example

This example illustrates one usage of `ModifyEndpoint`.

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
{
  "EndpointArn":"arn:aws:dms:us-east-1:123456789012:endpoint:RAAR3R22XSH46S3PWLC3NJAWKM",
  "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",
    "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-d53a7cfb411d",
    "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 V2](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

ModifyEventSubscription

Modifies an existing AWS DMS event notification subscription.

Request Syntax

```
{  
  "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. 346).

The request accepts the following data in JSON format.

Enabled (p. 186)

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

Type: Boolean

Required: No

EventCategories (p. 186)

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. 186)

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. 186)

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

Valid values: replication-instance | replication-task

Type: String

Required: No

SubscriptionName (p. 186)

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

Type: String

Required: Yes

Response Syntax

```
{
  "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. 187)

The modified event subscription.

Type: [EventSubscription \(p. 263\)](#) object

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 348\)](#).

KMSAccessDeniedFault

The ciphertext references a key that doesn't exist or that the DMS account doesn't have access to.

HTTP Status Code: 400

KMSDisabledFault

The specified master key (CMK) isn't enabled.

HTTP Status Code: 400

KMSInvalidStateFault

The state of the specified AWS KMS resource isn't valid for this request.

HTTP Status Code: 400

KMSNotFoundFault

The specified AWS KMS entity or resource can't be found.

HTTP Status Code: 400

KMSThrottlingFault

This request triggered AWS KMS request throttling.

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

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

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

```
{  
  "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. 346).

The request accepts the following data in JSON format.

AllocatedStorage (p. 189)

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

Type: Integer

Required: No

AllowMajorVersionUpgrade (p. 189)

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.

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. 189)

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

Type: Boolean

Required: No

AutoMinorVersionUpgrade (p. 189)

A value that indicates that minor version upgrades are applied automatically to the replication instance during the maintenance window. Changing this parameter doesn't result in an outage, except in the case described following. The change is asynchronously applied as soon as possible.

An outage does result if these factors apply:

- This parameter is set to `true` during the maintenance window.
- A newer minor version is available.
- AWS DMS has enabled automatic patching for the given engine version.

Type: Boolean

Required: No

EngineVersion (p. 189)

The engine version number of the replication instance.

When modifying a major engine version of an instance, also set `AllowMajorVersionUpgrade` to `true`.

Type: String

Required: No

MultiAZ (p. 189)

Specifies whether the replication instance is a Multi-AZ deployment. You can't set the `AvailabilityZone` parameter if the Multi-AZ parameter is set to `true`.

Type: Boolean

Required: No

PreferredMaintenanceWindow (p. 189)

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

Format: ddd:hh24:mi-ddd:hh24:mi

Valid Days: Mon | Tue | Wed | Thu | Fri | Sat | Sun

Constraints: Must be at least 30 minutes

Type: String

Required: No

ReplicationInstanceArn (p. 189)

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

Type: String

Required: Yes

ReplicationInstanceClass (p. 189)

The compute and memory capacity of the replication instance as defined for the specified replication instance class. For example to specify the instance class `dms.c4.large`, set this parameter to `"dms.c4.large"`.

For more information on the settings and capacities for the available replication instance classes, see [Selecting the right AWS DMS replication instance for your migration](#).

Type: String

Required: No

ReplicationInstanceIdentifier (p. 189)

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

Type: String

Required: No

VpcSecurityGroupIds (p. 189)

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",
    "DnsNameServers": "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"
  },
  "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.

ReplicationInstance (p. 191)

The modified replication instance.

Type: [ReplicationInstance \(p. 305\)](#) object

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 348\)](#).

AccessDeniedFault

AWS DMS was denied access to the endpoint. Check that the role is correctly configured.

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

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

Examples

Example

This example illustrates one usage of `ModifyReplicationInstance`.

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:PWEBBEUNOLU7VEB2OHTEH4I4GQ",
  "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:PWEBBEUNOLU7VEB2OHTEH4I4GQ",
    "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": "available",
    "KmsKeyId": "arn:aws:kms:us-east-1:123456789012:key/4dc17316-5543-4ded-b1e3-d53a7cfb411d",
    "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 V2](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)


```
        "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 \(p. 196\)](#)

The modified replication subnet group.

Type: [ReplicationSubnetGroup \(p. 311\)](#) object

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 348\)](#).

AccessDeniedFault

AWS DMS was denied access to the endpoint. Check that the role is correctly configured.

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

Examples

Example

This example illustrates one usage of `ModifyReplicationSubnetGroup`.

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

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 [Working with Migration Tasks](#) in the *AWS Database Migration Service User Guide*.

Request Syntax

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

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 346).

The request accepts the following data in JSON format.

CdcStartPosition (p. 200)

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"

Note

When you use this task setting with a source PostgreSQL database, a logical replication slot should already be created and associated with the source endpoint. You can verify this by setting the `slotName` extra connection attribute to the name of this logical replication slot. For more information, see [Extra Connection Attributes When Using PostgreSQL as a Source for AWS DMS](#).

Type: String

Required: No

CdcStartTime (p. 200)

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. 200)

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. 200)

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. 200)

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

Type: String

Required: Yes

ReplicationTaskIdentifier (p. 200)

The replication task identifier.

Constraints:

- Must contain 1-255 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. 200)

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

Type: String

Required: No

TableMappings (p. 200)

When using the AWS CLI or boto3, provide the path of the JSON file that contains the table mappings. Precede the path with `file://`. For example, `--table-mappings file://`

mappingfile.json. When working with the AWS DMS API, provide the JSON as the parameter value.

Type: String

Required: No

TaskData (p. 200)

Supplemental information that the task requires to migrate the data for certain source and target endpoints. For more information, see [Specifying Supplemental Data for Task Settings](#) in the *AWS Database Migration Service User Guide*.

Type: String

Required: No

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,
      "FreshStartDate": number,
      "FullLoadFinishDate": number,
      "FullLoadProgressPercent": number,
      "FullLoadStartDate": number,
      "StartDate": number,
      "StopDate": number,
      "TablesErrored": number,
      "TablesLoaded": number,
      "TablesLoading": number,
      "TablesQueued": number
    },
    "SourceEndpointArn": "string",
    "Status": "string",
    "StopReason": "string",
    "TableMappings": "string",
    "TargetEndpointArn": "string",
    "TargetReplicationInstanceArn": "string",
    "TaskData": "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. 202)

The replication task that was modified.

Type: [ReplicationTask \(p. 312\)](#) object

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 348\)](#).

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 AWS 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

Examples

Example

This example illustrates one usage of `ModifyReplicationTask`.

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.ModifyReplicationTask
{
  "ReplicationTaskIdentifier":"task1_modified",
  "ReplicationTaskArn":"arn:aws:dms:us-
  east-1:123456789012:task:RZZK4EZW5UANC7Y3P4E776WHBE"
}
```

```

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:DVBJXQXKZASYWHTCWNL4TNW76D",
    "ReplicationTaskIdentifier":"task1_modified",
    "ReplicationInstanceArn":"arn:aws:dms:us-
east-1:123456789012:rep:6USOU366XFJUWATDJGBCJS3VIQ",
    "TableMappings":{"\n \"TableMappings\": [
\n {\"n \"Type\": \"Include\", \"n \"SourceSchema\": \"\"/\"\", \"n \"SourceTable\": \"\"/\"\"
\n }\"n ]\"n\"n\",
    "Status":"creating",
    "ReplicationTaskArn":"arn:aws:dms:us-
east-1:123456789012:task:RZZK4EZW5UANC7Y3P4E776WHBE",
    "ReplicationTaskCreationDate":1457658407.492,
    "MigrationType":"full-load",
    "TargetEndpointArn":"arn:aws:dms:us-
east-1:123456789012:endpoint:GVBUIQXJZASXWHTWCLN2WNT57E",
    "ReplicationTaskSettings":{"\"TargetMetadata\":
    {\"TargetSchema\":\"\"\", \"SupportLobs\":true, \"FullLobMode\":
    true, \"LobChunkSize\":64, \"LimitedSizeLobMode\":
    false, \"LobMaxSize\":0}, \"FullLoadSettings\":{\"
    \"FullLoadEnabled\":true,
    \"TargetTablePrepMode\":\"DROP_AND_CREATE\",
    \"CreatePkAfterFullLoad\":false,
    \"StopTaskCachedChangesApplied\":false,
    \"StopTaskCachedChangesNotApplied\":false,
    \"ResumeEnabled\":false,
    \"ResumeMinTableSize\":100000,
    \"ResumeOnlyClusteredPKTables\":true,
    \"MaxFullLoadSubTasks\":8,
    \"TransactionConsistencyTimeout\":600,
    \"CommitRate\":10000
    },
    \"Logging\":{\"
    \"EnableLogging\":false
    }
  }"
}
}

```


- [AWS SDK for Ruby V3](#)

MoveReplicationTask

Moves a replication task from its current replication instance to a different target replication instance using the specified parameters. The target replication instance must be created with the same or later AWS DMS version as the current replication instance.

Request Syntax

```
{  
  "ReplicationTaskArn": "string",  
  "TargetReplicationInstanceArn": "string"  
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 346).

The request accepts the following data in JSON format.

ReplicationTaskArn (p. 206)

The Amazon Resource Name (ARN) of the task that you want to move.

Type: String

Required: Yes

TargetReplicationInstanceArn (p. 206)

The ARN of the replication instance where you want to move the task to.

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,  
      "FreshStartDate": number,  
      "FullLoadFinishDate": number,  
      "FullLoadProgressPercent": number,  
      "FullLoadStartDate": number,  
      "StartDate": number,  
    }  
  }  
}
```

```
        "StopDate": number,  
        "TablesErrored": number,  
        "TablesLoaded": number,  
        "TablesLoading": number,  
        "TablesQueued": number  
    },  
    "SourceEndpointArn": string,  
    "Status": string,  
    "StopReason": string,  
    "TableMappings": string,  
    "TargetEndpointArn": string,  
    "TargetReplicationInstanceArn": string,  
    "TaskData": 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. 206)

The replication task that was moved.

Type: [ReplicationTask \(p. 312\)](#) object

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 348\)](#).

AccessDeniedFault

AWS DMS was denied access to the endpoint. Check that the role is correctly configured.

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 AWS KMS key.

HTTP Status Code: 400

ResourceNotFoundFault

The resource could not be found.

HTTP Status Code: 400

Examples

Example

This example illustrates one usage of `MoveReplicationTask`.

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.MoveReplicationTask
{
  "ReplicationTaskArn": "arn:aws:dms:us-
east-1:123456789012:task:GBQBVYT7IIWCUUE44KI7ITKAK2OIURGWGDR4QZY",
  "TargetReplicationInstanceArn": "arn:aws:dms:us-
east-1:123456789012:rep:UMBQHEHRZ2WG23LSVP767KHNWGHXSXVTTSUXZCI"
}
```

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": {
    "ReplicationTaskIdentifier": "task-test",
    "SourceEndpointArn": "arn:aws:dms:us-
east-1:123456789012:endpoint:GDBXFEKRITMGQO2POUA6VHZPIY",
    "TargetEndpointArn": "arn:aws:dms:us-
east-1:123456789012:endpoint:DIGHLLJZKQUN3VEF2MQC7D4VNE",
    "ReplicationInstanceArn": "arn:aws:dms:us-
east-1:123456789012:rep:HBNEJHHRZ2WG23LSVP767KHNWGHXSXVTTSASHB",
    "MigrationType": "full-load-and-cdc",
    "TableMappings": "{\n  \"TableMappings\": [\n\n    {\n      \"Type\": \"Include\",
      \"SourceSchema\": \"\",
      \"SourceTable\": \"\"
    }
  ]\n}",
    "ReplicationTaskSettings": "",
    "Status": "moving",
    "ReplicationTaskCreationDate": 1595513932.394
    "ReplicationTaskArn": "arn:aws:dms:us-
east-1:123456789012:task:GBQBVYT7IIWCUUE44KI7ITKAK2OIURGWGDR4QZY",
    "TargetReplicationInstanceArn": "arn:aws:dms:us-
east-1:123456789012:rep:UMBQHEHRZ2WG23LSVP767KHNWGHXSXVTTSUXZCI"
  }
}
```

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

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. 346).

The request accepts the following data in JSON format.

ForceFailover (p. 210)

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. 210)

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

Type: String

Required: Yes

Response Syntax

```
{  
  "ReplicationInstance": {  
    "AllocatedStorage": number,  
    "AutoMinorVersionUpgrade": boolean,  
    "AvailabilityZone": "string",  
    "DnsNameServers": "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"
    },
    "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.

ReplicationInstance (p. 210)

The replication instance that is being rebooted.

Type: [ReplicationInstance \(p. 305\)](#) object

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 348\)](#).

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

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 \(p. 346\)](#).

The request accepts the following data in JSON format.

EndpointArn (p. 213)

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

Type: String

Required: Yes

ReplicationInstanceArn (p. 213)

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 \(p. 213\)](#)

The status of the refreshed schema.

Type: [RefreshSchemasStatus \(p. 304\)](#) object

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 348\)](#).

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

ReloadTables

Reloads the target database table with the source data.

Request Syntax

```
{
  "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. 346).

The request accepts the following data in JSON format.

ReloadOption (p. 215)

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. 215)

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

Type: String

Required: Yes

TablesToReload (p. 215)

The name and schema of the table to be reloaded.

Type: Array of [TableToReload](#) (p. 343) objects

Required: Yes

Response Syntax

```
{
```

```
"ReplicationTaskArn": "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.

ReplicationTaskArn (p. 215)

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. 348).

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

RemoveTagsFromResource

Removes metadata tags from an AWS DMS resource, including replication instance, endpoint, security group, and migration task. For more information, see [Tag](#) data type description.

Request Syntax

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

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 346).

The request accepts the following data in JSON format.

ResourceArn (p. 217)

An AWS DMS resource from which you want to remove tag(s). The value for this parameter is an Amazon Resource Name (ARN).

Type: String

Required: Yes

TagKeys (p. 217)

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. 348).

ResourceNotFoundFault

The resource could not be found.

HTTP Status Code: 400

Examples

Example

This example illustrates one usage of RemoveTagsFromResource.

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
{
  "ResourceArn": "arn:aws:dms:us-east-1:123456789012:rep:PWEBBEUNOLU7VEB2OHTEH4I4GQ",
  "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 V2](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

StartReplicationTask

Starts the replication task.

For more information about AWS DMS tasks, see [Working with Migration Tasks](#) in the *AWS Database Migration Service User Guide*.

Request Syntax

```
{  
  "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. 346).

The request accepts the following data in JSON format.

CdcStartPosition (p. 219)

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"

Note

When you use this task setting with a source PostgreSQL database, a logical replication slot should already be created and associated with the source endpoint. You can verify this by setting the `slotName` extra connection attribute to the name of this logical replication slot. For more information, see [Extra Connection Attributes When Using PostgreSQL as a Source for AWS DMS](#).

Type: String

Required: No

CdcStartTime (p. 219)

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. 219)

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

ReplicationTaskArn (p. 219)

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

Type: String

Required: Yes

StartReplicationTaskType (p. 219)

A 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,
      "FreshStartDate": number,
      "FullLoadFinishDate": number,
      "FullLoadProgressPercent": number,
      "FullLoadStartDate": number,
      "StartDate": number,
      "StopDate": number,
      "TablesErrored": number,
      "TablesLoaded": number,
      "TablesLoading": number,
      "TablesQueued": number
    },
    "SourceEndpointArn": "string",
    "Status": "string",
    "StopReason": "string",
```



```
"TableMappings": "string",  
"TargetEndpointArn": "string",  
"TargetReplicationInstanceArn": "string",  
"TaskData": "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. 220)

The replication task started.

Type: [ReplicationTask](#) (p. 312) object

Errors

For information about the errors that are common to all actions, see [Common Errors](#) (p. 348).

AccessDeniedFault

AWS DMS was denied access to the endpoint. Check that the role is correctly configured.

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

Examples

Example

This example illustrates one usage of `StartReplicationTask`.

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:6USOU366XFJUWATDJGBCJS3VIQ",
    "TableMappings": {
      "TableMappings": [
        {
          "Type": "Include",
          "SourceSchema": "testDB",
          "SourceTable": "%",
          "TargetSchema": "testDB",
          "TargetTable": "%",
          "TargetMetadata": {
            "TargetSchema": "",
            "SupportLobs": true,
            "FullLobMode": true,
            "LobChunkSize": 64,
            "LimitedSizeLobMode": false,
            "LobMaxSize": 0,
            "FullLoadSettings": {
              "FullLoadEnabled": true,
              "TargetTablePrepMode": "DO_NOTHING",
              "CreatePkAfterFullLoad": false,
              "StopTaskCachedChangesApplied": false,
              "StopTaskCachedChangesNotApplied": false,
              "ResumeEnabled": false,
              "ResumeMinTableSize": 100000,
              "ResumeOnlyClusteredPKTables": true,
              "MaxFullLoadSubTasks": 8,
              "TransactionConsistencyTimeout": 600,
              "CommitRate": 10000
            }
          }
        }
      ]
    },
    "ReplicationTaskStartDate": "1457658794.056",
    "Status": "starting",
    "ReplicationTaskArn": "arn:aws:dms:us-east-
1:123456789012:task:RALPZGYI3IUSJCBKKIRBEURKDY",
    "ReplicationTaskCreationDate": "1449185680.107",
    "MigrationType": "full-load",
    "TargetEndpointArn": "arn:aws:dms:us-east-
1:123456789012:endpoint:GVBUJQXJZASXWHTWCLN2WNT57E",
    "ReplicationTaskSettings": {
      "TargetMetadata": {
        "TargetSchema": "",
        "SupportLobs": true,
        "FullLobMode": true,
        "LobChunkSize": 64,
        "LimitedSizeLobMode": false,
        "LobMaxSize": 0,
        "FullLoadSettings": {
          "FullLoadEnabled": true,
          "TargetTablePrepMode": "DO_NOTHING",
          "CreatePkAfterFullLoad": false,
          "StopTaskCachedChangesApplied": false,
          "StopTaskCachedChangesNotApplied": false,
          "ResumeEnabled": false,
          "ResumeMinTableSize": 100000,
          "ResumeOnlyClusteredPKTables": true,
          "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 V2](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

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. 346).

The request accepts the following data in JSON format.

ReplicationTaskArn (p. 224)

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,
      "FreshStartDate": number,
      "FullLoadFinishDate": number,
      "FullLoadProgressPercent": number,
      "FullLoadStartDate": number,
      "StartDate": number,
      "StopDate": number,
      "TablesErrored": number,
      "TablesLoaded": number,
      "TablesLoading": number,
      "TablesQueued": number
    },
    "SourceEndpointArn": "string",
    "Status": "string",
    "StopReason": "string",
    "TableMappings": "string",
  }
}
```

```
"TargetEndpointArn": "string",  
"TargetReplicationInstanceArn": "string",  
"TaskData": "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. 224)

The assessed replication task.

Type: [ReplicationTask \(p. 312\)](#) object

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 348\)](#).

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

StartReplicationTaskAssessmentRun

Starts a new premigration assessment run for one or more individual assessments of a migration task.

The assessments that you can specify depend on the source and target database engine and the migration type defined for the given task. To run this operation, your migration task must already be created. After you run this operation, you can review the status of each individual assessment. You can also run the migration task manually after the assessment run and its individual assessments complete.

Request Syntax

```
{
  "AssessmentRunName": "string",
  "Exclude": [ "string" ],
  "IncludeOnly": [ "string" ],
  "ReplicationTaskArn": "string",
  "ResultEncryptionMode": "string",
  "ResultKmsKeyArn": "string",
  "ResultLocationBucket": "string",
  "ResultLocationFolder": "string",
  "ServiceAccessRoleArn": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 346).

The request accepts the following data in JSON format.

AssessmentRunName (p. 226)

Unique name to identify the assessment run.

Type: String

Required: Yes

Exclude (p. 226)

Space-separated list of names for specific individual assessments that you want to exclude. These names come from the default list of individual assessments that AWS DMS supports for the associated migration task. This task is specified by `ReplicationTaskArn`.

Note

You can't set a value for `Exclude` if you also set a value for `IncludeOnly` in the API operation.

To identify the names of the default individual assessments that AWS DMS supports for the associated migration task, run the `DescribeApplicableIndividualAssessments` operation using its own `ReplicationTaskArn` request parameter.

Type: Array of strings

Required: No

IncludeOnly (p. 226)

Space-separated list of names for specific individual assessments that you want to include. These names come from the default list of individual assessments that AWS DMS supports for the associated migration task. This task is specified by `ReplicationTaskArn`.

Note

You can't set a value for `IncludeOnly` if you also set a value for `Exclude` in the API operation.

To identify the names of the default individual assessments that AWS DMS supports for the associated migration task, run the `DescribeApplicableIndividualAssessments` operation using its own `ReplicationTaskArn` request parameter.

Type: Array of strings

Required: No

[ReplicationTaskArn \(p. 226\)](#)

Amazon Resource Name (ARN) of the migration task associated with the premigration assessment run that you want to start.

Type: String

Required: Yes

[ResultEncryptionMode \(p. 226\)](#)

Encryption mode that you can specify to encrypt the results of this assessment run. If you don't specify this request parameter, AWS DMS stores the assessment run results without encryption. You can specify one of the options following:

- `"SSE_S3"` – The server-side encryption provided as a default by Amazon S3.
- `"SSE_KMS"` – AWS Key Management Service (AWS KMS) encryption. This encryption can use either a custom KMS encryption key that you specify or the default KMS encryption key that DMS provides.

Type: String

Required: No

[ResultKmsKeyArn \(p. 226\)](#)

ARN of a custom KMS encryption key that you specify when you set `ResultEncryptionMode` to `"SSE_KMS"`.

Type: String

Required: No

[ResultLocationBucket \(p. 226\)](#)

Amazon S3 bucket where you want AWS DMS to store the results of this assessment run.

Type: String

Required: Yes

[ResultLocationFolder \(p. 226\)](#)

Folder within an Amazon S3 bucket where you want AWS DMS to store the results of this assessment run.

Type: String

Required: No

[ServiceAccessRoleArn \(p. 226\)](#)

ARN of the service role needed to start the assessment run. The role must allow the `iam:PassRole` action.

Type: String

Required: Yes

Response Syntax

```
{
  "ReplicationTaskAssessmentRun": {
    "AssessmentProgress": {
      "IndividualAssessmentCompletedCount": number,
      "IndividualAssessmentCount": number
    },
    "AssessmentRunName": "string",
    "LastFailureMessage": "string",
    "ReplicationTaskArn": "string",
    "ReplicationTaskAssessmentRunArn": "string",
    "ReplicationTaskAssessmentRunCreationDate": number,
    "ResultEncryptionMode": "string",
    "ResultKmsKeyArn": "string",
    "ResultLocationBucket": "string",
    "ResultLocationFolder": "string",
    "ServiceAccessRoleArn": "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.

ReplicationTaskAssessmentRun (p. 228)

The premigration assessment run that was started.

Type: [ReplicationTaskAssessmentRun \(p. 318\)](#) object

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 348\)](#).

AccessDeniedFault

AWS DMS was denied access to the endpoint. Check that the role is correctly configured.

HTTP Status Code: 400

InvalidResourceStateFault

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

HTTP Status Code: 400

KMSAccessDeniedFault

The ciphertext references a key that doesn't exist or that the DMS account doesn't have access to.

HTTP Status Code: 400

KMSDisabledFault

The specified master key (CMK) isn't enabled.

HTTP Status Code: 400

KMSFault

An AWS Key Management Service (AWS KMS) error is preventing access to AWS KMS.

HTTP Status Code: 400

KMSInvalidStateFault

The state of the specified AWS KMS resource isn't valid for this request.

HTTP Status Code: 400

KMSKeyNotAccessibleFault

AWS DMS cannot access the AWS KMS key.

HTTP Status Code: 400

KMSNotFoundFault

The specified AWS KMS entity or resource can't be found.

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

S3AccessDeniedFault

Insufficient privileges are preventing access to an Amazon S3 object.

HTTP Status Code: 400

S3ResourceNotFoundFault

A specified Amazon S3 bucket, bucket folder, or other object can't be found.

HTTP Status Code: 400

Examples

Example

This example illustrates one usage of `StartReplicationTaskAssessmentRun`.

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.StartReplicationTaskAssessmentRun
{
  "ReplicationTaskArn": "arn:aws:dms:us-west-2:123456789012:task:L6XROPGLRF25LCREVEDPT3XL5QJM5IZNUSV6Q",
  "ServiceAccessRoleArn": "arn:aws:iam::123456789012:role/Admin",
  "ResultLocationBucket": "s3-endpoint-bucket",
  "ResultLocationFolder": "",
  "AssessmentRunName": "Assessment-run-2020-07-10-18-02-12",
  "IncludeOnly": [
    "full-lob-not-nullable-at-target",
    "table-with-lob-but-without-primary-key-or-unique-constraint",
    "unsupported-data-types-in-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>
{
  "ReplicationTaskAssessmentRun": {
    "AssessmentProgress": {
      "IndividualAssessmentCompletedCount": 0,
      "IndividualAssessmentCount": 3
    },
    "AssessmentRunName": "Assessment-run-2020-07-10-18-02-12",
    "ReplicationTaskArn": "arn:aws:dms:us-west-2:123456789012:task:L6XROPGLRF25LCREVEDPT3XL5QJM5IZNUSV6Q",
    "ReplicationTaskAssessmentRunArn": "arn:aws:dms:us-west-2:123456789012:assessment-run:W22Q73FR2FBBHSBENXMNMYEWFHX6YTIQUN4OTLA",
    "ReplicationTaskAssessmentRunCreationDate": 1594429350.259,
    "ResultEncryptionMode": "NONE",
    "ResultLocationBucket": "s3-endpoint-bucket",
    "ResultLocationFolder": "",
    "ServiceAccessRoleArn": "arn:aws:iam::123456789012:role/Admin",
    "Status": "starting"
  }
}
```

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

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. 346).

The request accepts the following data in JSON format.

ReplicationTaskArn (p. 232)

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,
      "FreshStartDate": number,
      "FullLoadFinishDate": number,
      "FullLoadProgressPercent": number,
      "FullLoadStartDate": number,
      "StartDate": number,
      "StopDate": number,
      "TablesErrored": number,
      "TablesLoaded": number,
      "TablesLoading": number,
      "TablesQueued": number
    },
    "SourceEndpointArn": "string",
    "Status": "string",
    "StopReason": "string",
    "TableMappings": "string",
  }
}
```

```
"TargetEndpointArn": "string",  
"TargetReplicationInstanceArn": "string",  
"TaskData": "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. 232)

The replication task stopped.

Type: [ReplicationTask](#) (p. 312) object

Errors

For information about the errors that are common to all actions, see [Common Errors](#) (p. 348).

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

Examples

Example

This example illustrates one usage of StopReplicationTask.

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:OEAMB3NXSTZ6LFYZFEPPBBXPYM"
}
```

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",
    "ReplicationInstanceArn":"arn:aws:dms:us-east-
1:123456789012:rep:6USOU366XFJUWATDJGBCJS3VIQ",
    "TableMappings":{"\n \"TableMappings\": [\n {\n \"Type\":
\n \"Include\", \n \"SourceSchema\": \"/\", \n \"SourceTable\": \"/\", \n
\n } \n ] \n } \n",
    "ReplicationTaskStartDate":1457659049.081,
    "Status":"stopping",
    "ReplicationTaskArn":"arn:aws:dms:us-east-
1:123456789012:task:OEAMB3NXSTZ6LFYZFEPPBBXPYM",
    "ReplicationTaskCreationDate":1457658407.492,
    "MigrationType":"full-load",
    "TargetEndpointArn":"arn:aws:dms:us-east-
1:123456789012:endpoint:GVBUJQXJZASXWHTWCLN2WNT57E",
    "ReplicationTaskSettings":{"\"TargetMetadata\":{\"\"TargetSchema\":\"\",\"SupportLobs
\":true,\"FullLobMod
e\":true,\"LobChunkSize\":64,\"LimitedSizeLobMode\":false,\"LobMaxSize\":0},\
\"FullLoadSettings\":{\"
    \"FullLoadEnabled\":true,
    \
\"TargetTablePrepMode\": \"DROP_AND_CREATE\",
    \"CreatePkAfterFullLoad\":false,
    \
\"StopTaskCachedChangesApplied\":false,
    \"StopTaskCachedChangesNotApplied\":false,
    \"ResumeEnabled\":false,
    \"ResumeMinTableSize\":100000,
    \"ResumeOnlyClustered
PKTables\":true,
    \"MaxFullLoadSubTasks\":8,
    \"TransactionConsistencyTimeout\":600,
    \"CommitRate\":10000
    },
    \"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 V2](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

TestConnection

Tests the connection between the replication instance and the endpoint.

Request Syntax

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

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 346).

The request accepts the following data in JSON format.

EndpointArn (p. 236)

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

Type: String

Required: Yes

ReplicationInstanceArn (p. 236)

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

Type: String

Required: Yes

Response Syntax

```
{  
  "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. 236)

The connection tested.

Type: [Connection \(p. 245\)](#) object

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 348\)](#).

AccessDeniedFault

AWS DMS was denied access to the endpoint. Check that the role is correctly configured.

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 AWS 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

Examples

Example

This example illustrates one usage of `TestConnection`.

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.TestConnection
{
    "ReplicationInstanceArn": "arn:aws:dms:us-east-
```

```
1:123456789012:rep:6USOU366XFJUWATDJGBCJS3VIQ",
  "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>
{
  "Connection":{
    "Status":"testing",
    "ReplicationInstanceIdentifier":"akshay1",
    "EndpointArn":"arn:aws:dms:us-east-
1:123456789012:endpoint:WKBULDZKUDQZIHPOUUSEH34EMU",
    "EndpointIdentifier":"akshay",
    "ReplicationInstanceArn":"arn:aws:dms:us-east-
1:123456789012:rep:6USOU366XFJUWATDJGBCJS3VIQ"
  }
}
```

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

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. 241)
- [AvailabilityZone](#) (p. 242)
- [Certificate](#) (p. 243)
- [Connection](#) (p. 245)
- [DmsTransferSettings](#) (p. 247)
- [DocDbSettings](#) (p. 248)
- [DynamoDbSettings](#) (p. 251)
- [ElasticsearchSettings](#) (p. 252)
- [Endpoint](#) (p. 253)
- [EndpointSetting](#) (p. 258)
- [Event](#) (p. 260)
- [EventCategoryGroup](#) (p. 262)
- [EventSubscription](#) (p. 263)
- [Filter](#) (p. 265)
- [IBMDb2Settings](#) (p. 266)
- [KafkaSettings](#) (p. 268)
- [KinesisSettings](#) (p. 271)
- [MicrosoftSQLServerSettings](#) (p. 273)
- [MongoDbSettings](#) (p. 276)
- [MySQLSettings](#) (p. 279)
- [NeptuneSettings](#) (p. 282)
- [OracleSettings](#) (p. 284)
- [OrderableReplicationInstance](#) (p. 291)
- [PendingMaintenanceAction](#) (p. 293)
- [PostgreSQLSettings](#) (p. 295)
- [RedshiftSettings](#) (p. 298)
- [RefreshSchemasStatus](#) (p. 304)
- [ReplicationInstance](#) (p. 305)
- [ReplicationInstanceTaskLog](#) (p. 309)
- [ReplicationPendingModifiedValues](#) (p. 310)
- [ReplicationSubnetGroup](#) (p. 311)
- [ReplicationTask](#) (p. 312)
- [ReplicationTaskAssessmentResult](#) (p. 316)
- [ReplicationTaskAssessmentRun](#) (p. 318)
- [ReplicationTaskAssessmentRunProgress](#) (p. 321)

- [ReplicationTaskIndividualAssessment](#) (p. 322)
- [ReplicationTaskStats](#) (p. 324)
- [ResourcePendingMaintenanceActions](#) (p. 326)
- [S3Settings](#) (p. 327)
- [Subnet](#) (p. 335)
- [SupportedEndpointType](#) (p. 336)
- [SybaseSettings](#) (p. 338)
- [TableStatistics](#) (p. 340)
- [TableToReload](#) (p. 343)
- [Tag](#) (p. 344)
- [VpcSecurityGroupMembership](#) (p. 345)

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 V2](#)
- [AWS SDK for Ruby V3](#)

AvailabilityZone

The name of an Availability Zone for use during database migration. `AvailabilityZone` is an optional parameter to the [CreateReplicationInstance](#) operation, and its value relates to the AWS Region of an endpoint. For example, the availability zone of an endpoint in the us-east-1 region might be us-east-1a, us-east-1b, us-east-1c, or us-east-1d.

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 V2](#)
- [AWS SDK for Ruby V3](#)

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

A customer-assigned name for the certificate. Identifiers must begin with a letter and must contain only ASCII letters, digits, and hyphens. They can't end with a hyphen or contain two consecutive hyphens.

Type: String

Required: No

CertificateOwner

The owner of the certificate.

Type: String

Required: No

CertificatePem

The contents of a .pem file, which contains an X.509 certificate.

Type: String

Required: No

CertificateWallet

The location of an 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 V2](#)
- [AWS SDK for Ruby V3](#)

Connection

Status of the connection between an endpoint and a replication instance, including Amazon Resource Names (ARNs) and the last error message issued.

Contents

EndpointArn

The ARN string that uniquely identifies the endpoint.

Type: String

Required: No

EndpointIdentifier

The identifier of the endpoint. Identifiers must begin with a letter and must contain only ASCII letters, digits, and hyphens. They can't 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 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. This parameter can return one of the following values:

- "successful"
- "testing"
- "failed"
- "deleting"

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 V2](#)
- [AWS SDK for Ruby V3](#)

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. When specified as part of request syntax, such as for the `CreateEndpoint` and `ModifyEndpoint` actions, the role must allow the `iam:PassRole` action.

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 V2](#)
- [AWS SDK for Ruby V3](#)

DocDbSettings

Provides information that defines a DocumentDB endpoint.

Contents

DatabaseName

The database name on the DocumentDB source endpoint.

Type: String

Required: No

DocsToInvestigate

Indicates the number of documents to preview to determine the document organization. Use this setting when `NestingLevel` is set to "one".

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

Type: Integer

Required: No

ExtractDocId

Specifies the document ID. Use this setting when `NestingLevel` is set to "none".

Default value is "false".

Type: Boolean

Required: No

KmsKeyId

The AWS KMS key identifier that is used to encrypt the content on the replication instance. If you don't specify a value for the `KmsKeyId` parameter, then AWS DMS uses 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.

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 DocumentDB source endpoint.

Type: String

Required: No

Port

The port value for the DocumentDB source endpoint.

Type: Integer

Required: No

SecretsManagerAccessRoleArn

The full Amazon Resource Name (ARN) of the IAM role that specifies AWS DMS as the trusted entity and grants the required permissions to access the value in `SecretsManagerSecret`. The role must allow the `iam:PassRole` action. `SecretsManagerSecret` has the value of the AWS Secrets Manager secret that allows access to the DocumentDB endpoint.

Note

You can specify one of two sets of values for these permissions. You can specify the values for this setting and `SecretsManagerSecretId`. Or you can specify clear-text values for `UserName`, `Password`, `ServerName`, and `Port`. You can't specify both. For more information on creating this `SecretsManagerSecret` and the `SecretsManagerAccessRoleArn` and `SecretsManagerSecretId` required to access it, see [Using secrets to access AWS Database Migration Service resources](#) in the *AWS Database Migration Service User Guide*.

Type: String

Required: No

SecretsManagerSecretId

The full ARN, partial ARN, or friendly name of the `SecretsManagerSecret` that contains the DocumentDB endpoint connection details.

Type: String

Required: No

ServerName

The name of the server on the DocumentDB source endpoint.

Type: String

Required: No

Username

The user name you use to access the DocumentDB 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 V2](#)

- [AWS SDK for Ruby V3](#)

DynamoDbSettings

Provides the Amazon Resource Name (ARN) of the AWS Identity and Access Management (IAM) role used to define an Amazon DynamoDB target endpoint.

Contents

ServiceAccessRoleArn

The Amazon Resource Name (ARN) used by the service to access the IAM role. The role must allow the `iam:PassRole` action.

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 V2](#)
- [AWS SDK for Ruby V3](#)

ElasticsearchSettings

Provides information that defines an Elasticsearch endpoint.

Contents

EndpointUri

The endpoint for the Elasticsearch cluster. AWS DMS uses HTTPS if a transport protocol (http/https) is not specified.

Type: String

Required: Yes

ErrorRetryDuration

The maximum number of seconds for which DMS retries failed API requests to the Elasticsearch cluster.

Type: Integer

Required: No

FullLoadErrorPercentage

The maximum percentage of records that can fail to be written before a full load operation stops.

To avoid early failure, this counter is only effective after 1000 records are transferred. Elasticsearch also has the concept of error monitoring during the last 10 minutes of an Observation Window. If transfer of all records fail in the last 10 minutes, the full load operation stops.

Type: Integer

Required: No

ServiceAccessRoleArn

The Amazon Resource Name (ARN) used by the service to access the IAM role. The role must allow the `iam:PassRole` action.

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 V2](#)
- [AWS SDK for Ruby V3](#)

Endpoint

Describes an endpoint of a database instance in response to operations such as the following:

- `CreateEndpoint`
- `DescribeEndpoint`
- `ModifyEndpoint`

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 of source endpoint.

Possible settings include the following:

- `ServiceAccessRoleArn` - The IAM role that has permission to access the Amazon S3 bucket. The role must allow the `iam:PassRole` action.
- `BucketName` - The name of the S3 bucket to use.

Shorthand syntax for these settings is as follows:

`ServiceAccessRoleArn=string,BucketName=string,`

JSON syntax for these settings is as follows: `{ "ServiceAccessRoleArn": "string", "BucketName": "string" }`

Type: [DmsTransferSettings \(p. 247\)](#) object

Required: No

DocDbSettings

Provides information that defines a DocumentDB endpoint.

Type: [DocDbSettings \(p. 248\)](#) object

Required: No

DynamoDbSettings

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

Type: [DynamoDbSettings \(p. 251\)](#) object

Required: No

ElasticsearchSettings

The settings for the Elasticsearch source endpoint. For more information, see the `ElasticsearchSettings` structure.

Type: [ElasticsearchSettings \(p. 252\)](#) 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 and must contain only ASCII letters, digits, and hyphens. They can't end with a hyphen or contain two consecutive hyphens.

Type: String

Required: No

EndpointType

The type of endpoint. Valid values are `source` and `target`.

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"`, `"dynamodb"`, `"mongodb"`, `"kinesis"`, `"kafka"`, `"elasticsearch"`, `"documentdb"`, `"sqlserver"`, and `"neptune"`.

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

IBMDB2Settings

The settings for the IBM Db2 LUW source endpoint. For more information, see the `IBMDB2Settings` structure.

Type: [IBMDB2Settings \(p. 266\)](#) object

Required: No

KafkaSettings

The settings for the Apache Kafka target endpoint. For more information, see the `KafkaSettings` structure.

Type: [KafkaSettings \(p. 268\)](#) object

Required: No

KinesisSettings

The settings for the Amazon Kinesis target endpoint. For more information, see the `KinesisSettings` structure.

Type: [KinesisSettings \(p. 271\)](#) object

Required: No

KmsKeyId

An AWS KMS key identifier that is used to encrypt the connection parameters for the endpoint.

If you don't specify a value for the `KmsKeyId` parameter, then AWS DMS uses 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

MicrosoftSQLServerSettings

The settings for the Microsoft SQL Server source and target endpoint. For more information, see the `MicrosoftSQLServerSettings` structure.

Type: [MicrosoftSQLServerSettings \(p. 273\)](#) object

Required: No

MongoDbSettings

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

Type: [MongoDbSettings \(p. 276\)](#) object

Required: No

MySQLSettings

The settings for the MySQL source and target endpoint. For more information, see the `MySQLSettings` structure.

Type: [MySQLSettings \(p. 279\)](#) object

Required: No

NeptuneSettings

The settings for the Amazon Neptune target endpoint. For more information, see the `NeptuneSettings` structure.

Type: [NeptuneSettings \(p. 282\)](#) object

Required: No

OracleSettings

The settings for the Oracle source and target endpoint. For more information, see the `OracleSettings` structure.

Type: [OracleSettings \(p. 284\)](#) object

Required: No

Port

The port value used to access the endpoint.

Type: Integer

Required: No

PostgreSQLSettings

The settings for the PostgreSQL source and target endpoint. For more information, see the `PostgreSQLSettings` structure.

Type: [PostgreSQLSettings \(p. 295\)](#) object

Required: No

RedshiftSettings

Settings for the Amazon Redshift endpoint.

Type: [RedshiftSettings \(p. 298\)](#) object

Required: No

S3Settings

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

Type: [S3Settings \(p. 327\)](#) 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 to access the IAM role. The role must allow the `iam:PassRole` action.

Type: String

Required: No

SslMode

The SSL mode used to connect to the endpoint. 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

SybaseSettings

The settings for the SAP ASE source and target endpoint. For more information, see the `SybaseSettings` structure.

Type: [SybaseSettings \(p. 338\)](#) object

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 V2](#)
- [AWS SDK for Ruby V3](#)

EndpointSetting

Endpoint settings.

Contents

Applicability

The relevance or validity of an endpoint setting for an engine name and its endpoint type.

Type: String

Required: No

EnumValues

Enumerated values to use for this endpoint.

Type: Array of strings

Required: No

IntValueMax

The maximum value of an endpoint setting that is of type `int`.

Type: Integer

Required: No

IntValueMin

The minimum value of an endpoint setting that is of type `int`.

Type: Integer

Required: No

Name

The name that you want to give the endpoint settings.

Type: String

Required: No

Sensitive

A value that marks this endpoint setting as sensitive.

Type: Boolean

Required: No

Type

The type of endpoint. Valid values are `source` and `target`.

Type: String

Valid Values: `string` | `boolean` | `integer` | `enum`

Required: No

Units

The unit of measure for this endpoint setting.

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 V2](#)
- [AWS SDK for Ruby V3](#)

Event

Describes an identifiable significant activity that affects a replication instance or task. This object can provide the message, the available event categories, the date and source of the event, and the AWS DMS resource type.

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 an event source.

Type: String

Required: No

SourceType

The type of AWS DMS resource that generates events.

Valid values: replication-instance | endpoint | replication-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 V2](#)

- [AWS SDK for Ruby V3](#)

EventCategoryGroup

Lists categories of events subscribed to, and generated by, the applicable AWS DMS resource type. This data type appears in response to the [DescribeEventCategories](#) action.

Contents

EventCategories

A list of event categories from a source type that you've chosen.

Type: Array of strings

Required: No

SourceType

The type of AWS DMS resource that generates events.

Valid values: replication-instance | replication-server | security-group | 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 V2](#)
- [AWS SDK for Ruby V3](#)

EventSubscription

Describes an event notification subscription created by the `CreateEventSubscription` operation.

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 lists 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 | replication-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 AWS DMS 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 V2](#)
- [AWS SDK for Ruby V3](#)

Filter

Identifies the name and value of a filter object. This filter is used to limit the number and type of AWS DMS objects that are returned for a particular `Describe*` call or similar operation. Filters are used as an optional parameter for certain API operations.

Contents

Name

The name of the filter as specified for a `Describe*` or similar operation.

Type: String

Required: Yes

Values

The filter value, which can specify one or more values used to narrow the returned results.

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 V2](#)
- [AWS SDK for Ruby V3](#)

IBMDB2Settings

Provides information that defines an IBM Db2 LUW endpoint.

Contents

CurrentLsn

For ongoing replication (CDC), use CurrentLSN to specify a log sequence number (LSN) where you want the replication to start.

Type: String

Required: No

DatabaseName

Database name for the endpoint.

Type: String

Required: No

MaxKBytesPerRead

Maximum number of bytes per read, as a NUMBER value. The default is 64 KB.

Type: Integer

Required: No

Password

Endpoint connection password.

Type: String

Required: No

Port

Endpoint TCP port. The default value is 50000.

Type: Integer

Required: No

SecretsManagerAccessRoleArn

The full Amazon Resource Name (ARN) of the IAM role that specifies AWS DMS as the trusted entity and grants the required permissions to access the value in SecretsManagerSecret. The role must allow the `iam:PassRole` action. SecretsManagerSecret has the value of the AWS Secrets Manager secret that allows access to the Db2 LUW endpoint.

Note

You can specify one of two sets of values for these permissions. You can specify the values for this setting and SecretsManagerSecretId. Or you can specify clear-text values for Username, Password, ServerName, and Port. You can't specify both. For more information on creating this SecretsManagerSecret and the SecretsManagerAccessRoleArn and SecretsManagerSecretId required to access it, see [Using secrets to access AWS Database Migration Service resources](#) in the *AWS Database Migration Service User Guide*.

Type: String

Required: No

SecretsManagerSecretId

The full ARN, partial ARN, or friendly name of the `SecretsManagerSecret` that contains the Db2 LUW endpoint connection details.

Type: String

Required: No

ServerName

Fully qualified domain name of the endpoint.

Type: String

Required: No

SetDataCaptureChanges

Enables ongoing replication (CDC) as a BOOLEAN value. The default is true.

Type: Boolean

Required: No

Username

Endpoint connection user name.

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 V2](#)
- [AWS SDK for Ruby V3](#)

KafkaSettings

Provides information that describes an Apache Kafka endpoint. This information includes the output format of records applied to the endpoint and details of transaction and control table data information.

Contents

Broker

A comma-separated list of one or more broker locations in your Kafka cluster that host your Kafka instance. Specify each broker location in the form `broker-hostname-or-ip:port`. For example, `"ec2-12-345-678-901.compute-1.amazonaws.com:2345"`. For more information and examples of specifying a list of broker locations, see [Using Apache Kafka as a target for AWS Database Migration Service](#) in the *AWS Database Migration Service User Guide*.

Type: String

Required: No

IncludeControlDetails

Shows detailed control information for table definition, column definition, and table and column changes in the Kafka message output. The default is `false`.

Type: Boolean

Required: No

IncludeNullAndEmpty

Include NULL and empty columns for records migrated to the endpoint. The default is `false`.

Type: Boolean

Required: No

IncludePartitionValue

Shows the partition value within the Kafka message output unless the partition type is `schema-table-type`. The default is `false`.

Type: Boolean

Required: No

IncludeTableAlterOperations

Includes any data definition language (DDL) operations that change the table in the control data, such as `rename-table`, `drop-table`, `add-column`, `drop-column`, and `rename-column`. The default is `false`.

Type: Boolean

Required: No

IncludeTransactionDetails

Provides detailed transaction information from the source database. This information includes a commit timestamp, a log position, and values for `transaction_id`, `previous_transaction_id`, and `transaction_record_id` (the record offset within a transaction). The default is `false`.

Type: Boolean

Required: No

MessageFormat

The output format for the records created on the endpoint. The message format is `JSON` (default) or `JSON_UNFORMATTED` (a single line with no tab).

Type: String

Valid Values: `json` | `json-unformatted`

Required: No

MessageMaxBytes

The maximum size in bytes for records created on the endpoint The default is 1,000,000.

Type: Integer

Required: No

PartitionIncludeSchemaTable

Prefixes schema and table names to partition values, when the partition type is `primary-key-type`. Doing this increases data distribution among Kafka partitions. For example, suppose that a SysBench schema has thousands of tables and each table has only limited range for a primary key. In this case, the same primary key is sent from thousands of tables to the same partition, which causes throttling. The default is `false`.

Type: Boolean

Required: No

SaslPassword

The secure password you created when you first set up your MSK cluster to validate a client identity and make an encrypted connection between server and client using SASL-SSL authentication.

Type: String

Required: No

SaslUsername

The secure username you created when you first set up your MSK cluster to validate a client identity and make an encrypted connection between server and client using SASL-SSL authentication.

Type: String

Required: No

SecurityProtocol

Set secure connection to a Kafka target endpoint using Transport Layer Security (TLS). Options include `ssl-encryption`, `ssl-authentication`, and `sasl-ssl`. `sasl-ssl` requires `SaslUsername` and `SaslPassword`.

Type: String

Valid Values: `plaintext` | `ssl-authentication` | `ssl-encryption` | `sasl-ssl`

Required: No

SslCaCertificateArn

The Amazon Resource Name (ARN) for the private Certification Authority (CA) cert that AWS DMS uses to securely connect to your Kafka target endpoint.

Type: String

Required: No

SslClientCertificateArn

The Amazon Resource Name (ARN) of the client certificate used to securely connect to a Kafka target endpoint.

Type: String

Required: No

SslClientKeyArn

The Amazon Resource Name (ARN) for the client private key used to securely connect to a Kafka target endpoint.

Type: String

Required: No

SslClientKeyPassword

The password for the client private key used to securely connect to a Kafka target endpoint.

Type: String

Required: No

Topic

The topic to which you migrate the data. If you don't specify a topic, AWS DMS specifies "kafka-default-topic" as the migration topic.

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 V2](#)
- [AWS SDK for Ruby V3](#)

KinesisSettings

Provides information that describes an Amazon Kinesis Data Stream endpoint. This information includes the output format of records applied to the endpoint and details of transaction and control table data information.

Contents

IncludeControlDetails

Shows detailed control information for table definition, column definition, and table and column changes in the Kinesis message output. The default is `false`.

Type: Boolean

Required: No

IncludeNullAndEmpty

Include NULL and empty columns for records migrated to the endpoint. The default is `false`.

Type: Boolean

Required: No

IncludePartitionValue

Shows the partition value within the Kinesis message output, unless the partition type is `schema-table-type`. The default is `false`.

Type: Boolean

Required: No

IncludeTableAlterOperations

Includes any data definition language (DDL) operations that change the table in the control data, such as `rename-table`, `drop-table`, `add-column`, `drop-column`, and `rename-column`. The default is `false`.

Type: Boolean

Required: No

IncludeTransactionDetails

Provides detailed transaction information from the source database. This information includes a commit timestamp, a log position, and values for `transaction_id`, `previous_transaction_id`, and `transaction_record_id` (the record offset within a transaction). The default is `false`.

Type: Boolean

Required: No

MessageFormat

The output format for the records created on the endpoint. The message format is `JSON` (default) or `JSON_UNFORMATTED` (a single line with no tab).

Type: String

Valid Values: `json` | `json-unformatted`

Required: No

PartitionIncludeSchemaTable

Prefixes schema and table names to partition values, when the partition type is `primary-key-type`. Doing this increases data distribution among Kinesis shards. For example, suppose that a SysBench schema has thousands of tables and each table has only limited range for a primary key. In this case, the same primary key is sent from thousands of tables to the same shard, which causes throttling. The default is `false`.

Type: Boolean

Required: No

ServiceAccessRoleArn

The Amazon Resource Name (ARN) for the IAM role that AWS DMS uses to write to the Kinesis data stream. The role must allow the `iam:PassRole` action.

Type: String

Required: No

StreamArn

The Amazon Resource Name (ARN) for the Amazon Kinesis Data Streams 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 V2](#)
- [AWS SDK for Ruby V3](#)

MicrosoftSQLServerSettings

Provides information that defines a Microsoft SQL Server endpoint.

Contents

BcpPacketSize

The maximum size of the packets (in bytes) used to transfer data using BCP.

Type: Integer

Required: No

ControlTablesFileGroup

Specifies a file group for the AWS DMS internal tables. When the replication task starts, all the internal AWS DMS control tables (awsdms_ apply_exception, awsdms_apply, awsdms_changes) are created for the specified file group.

Type: String

Required: No

DatabaseName

Database name for the endpoint.

Type: String

Required: No

Password

Endpoint connection password.

Type: String

Required: No

Port

Endpoint TCP port.

Type: Integer

Required: No

QuerySingleAlwaysOnNode

Cleans and recreates table metadata information on the replication instance when a mismatch occurs. An example is a situation where running an alter DDL statement on a table might result in different information about the table cached in the replication instance.

Type: Boolean

Required: No

ReadBackupOnly

When this attribute is set to `Y`, AWS DMS only reads changes from transaction log backups and doesn't read from the active transaction log file during ongoing replication. Setting this parameter to `Y` enables you to control active transaction log file growth during full load and ongoing replication tasks. However, it can add some source latency to ongoing replication.

Type: Boolean

Required: No

SafeguardPolicy

Use this attribute to minimize the need to access the backup log and enable AWS DMS to prevent truncation using one of the following two methods.

Start transactions in the database: This is the default method. When this method is used, AWS DMS prevents TLOG truncation by mimicking a transaction in the database. As long as such a transaction is open, changes that appear after the transaction started aren't truncated. If you need Microsoft Replication to be enabled in your database, then you must choose this method.

Exclusively use sp_repldone within a single task: When this method is used, AWS DMS reads the changes and then uses sp_repldone to mark the TLOG transactions as ready for truncation. Although this method doesn't involve any transactional activities, it can only be used when Microsoft Replication isn't running. Also, when using this method, only one AWS DMS task can access the database at any given time. Therefore, if you need to run parallel AWS DMS tasks against the same database, use the default method.

Type: String

Valid Values: `rely-on-sql-server-replication-agent` | `exclusive-automatic-truncation` | `shared-automatic-truncation`

Required: No

SecretsManagerAccessRoleArn

The full Amazon Resource Name (ARN) of the IAM role that specifies AWS DMS as the trusted entity and grants the required permissions to access the value in `SecretsManagerSecret`. The role must allow the `iam:PassRole` action. `SecretsManagerSecret` has the value of the AWS Secrets Manager secret that allows access to the SQL Server endpoint.

Note

You can specify one of two sets of values for these permissions. You can specify the values for this setting and `SecretsManagerSecretId`. Or you can specify clear-text values for `UserName`, `Password`, `ServerName`, and `Port`. You can't specify both. For more information on creating this `SecretsManagerSecret` and the `SecretsManagerAccessRoleArn` and `SecretsManagerSecretId` required to access it, see [Using secrets to access AWS Database Migration Service resources](#) in the *AWS Database Migration Service User Guide*.

Type: String

Required: No

SecretsManagerSecretId

The full ARN, partial ARN, or friendly name of the `SecretsManagerSecret` that contains the SQL Server endpoint connection details.

Type: String

Required: No

ServerName

Fully qualified domain name of the endpoint.

Type: String

Required: No

UseBcpFullLoad

Use this to attribute to transfer data for full-load operations using BCP. When the target table contains an identity column that does not exist in the source table, you must disable the use BCP for loading table option.

Type: Boolean

Required: No

Username

Endpoint connection user name.

Type: String

Required: No

UseThirdPartyBackupDevice

When this attribute is set to `Y`, DMS processes third-party transaction log backups if they are created in native format.

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 V2](#)
- [AWS SDK for Ruby V3](#)

MongoDbSettings

Provides information that defines a MongoDB endpoint.

Contents

AuthMechanism

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

For the default value, in MongoDB version 2.x, "default" is "mongodb_cr". For MongoDB version 3.x or later, "default" is "scram_sha_1". This setting isn't used when AuthType is set to "no".

Type: String

Valid Values: default | mongodb_cr | scram_sha_1

Required: No

AuthSource

The MongoDB database name. This setting isn't used when AuthType is set to "no".

The default is "admin".

Type: String

Required: No

AuthType

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

When when set to "no", 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 setting 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 setting when NestingLevel is set to "none".

Default value is "false".

Type: String

Required: No

KmsKeyId

The AWS KMS key identifier that is used to encrypt the content on the replication instance. If you don't specify a value for the `KmsKeyId` parameter, then AWS DMS uses 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.

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

SecretsManagerAccessRoleArn

The full Amazon Resource Name (ARN) of the IAM role that specifies AWS DMS as the trusted entity and grants the required permissions to access the value in `SecretsManagerSecret`. The role must allow the `iam:PassRole` action. `SecretsManagerSecret` has the value of the AWS Secrets Manager secret that allows access to the MongoDB endpoint.

Note

You can specify one of two sets of values for these permissions. You can specify the values for this setting and `SecretsManagerSecretId`. Or you can specify clear-text values for `UserName`, `Password`, `ServerName`, and `Port`. You can't specify both. For more information on creating this `SecretsManagerSecret` and the `SecretsManagerAccessRoleArn` and `SecretsManagerSecretId` required to access it, see [Using secrets to access AWS Database Migration Service resources](#) in the *AWS Database Migration Service User Guide*.

Type: String

Required: No

SecretsManagerSecretId

The full ARN, partial ARN, or friendly name of the `SecretsManagerSecret` that contains the MongoDB endpoint connection details.

Type: String

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 V2](#)
- [AWS SDK for Ruby V3](#)

MySQLSettings

Provides information that defines a MySQL endpoint.

Contents

AfterConnectScript

Specifies a script to run immediately after AWS DMS connects to the endpoint. The migration task continues running regardless if the SQL statement succeeds or fails.

For this parameter, provide the code of the script itself, not the filename of a file containing the script.

Type: String

Required: No

CleanSourceMetadataOnMismatch

Adjusts the behavior of DMS when migrating from an SQL Server source database that is hosted as part of an Always On availability group cluster. If you need DMS to poll all the nodes in the Always On cluster for transaction backups, set this attribute to `false`.

Type: Boolean

Required: No

DatabaseName

Database name for the endpoint. For a MySQL source or target endpoint, don't explicitly specify the database using the `DatabaseName` request parameter on either the `CreateEndpoint` or `ModifyEndpoint` API call. Specifying `DatabaseName` when you create or modify a MySQL endpoint replicates all the task tables to this single database. For MySQL endpoints, you specify the database only when you specify the schema in the table-mapping rules of the AWS DMS task.

Type: String

Required: No

EventsPollInterval

Specifies how often to check the binary log for new changes/events when the database is idle.

Example: `eventsPollInterval=5;`

In the example, AWS DMS checks for changes in the binary logs every five seconds.

Type: Integer

Required: No

MaxFileSize

Specifies the maximum size (in KB) of any .csv file used to transfer data to a MySQL-compatible database.

Example: `maxFileSize=512`

Type: Integer

Required: No

ParallelLoadThreads

Improves performance when loading data into the MySQL-compatible target database. Specifies how many threads to use to load the data into the MySQL-compatible target database. Setting a large number of threads can have an adverse effect on database performance, because a separate connection is required for each thread.

Example: `parallelLoadThreads=1`

Type: Integer

Required: No

Password

Endpoint connection password.

Type: String

Required: No

Port

Endpoint TCP port.

Type: Integer

Required: No

SecretsManagerAccessRoleArn

The full Amazon Resource Name (ARN) of the IAM role that specifies AWS DMS as the trusted entity and grants the required permissions to access the value in `SecretsManagerSecret`. The role must allow the `iam:PassRole` action. `SecretsManagerSecret` has the value of the AWS Secrets Manager secret that allows access to the MySQL endpoint.

Note

You can specify one of two sets of values for these permissions. You can specify the values for this setting and `SecretsManagerSecretId`. Or you can specify clear-text values for `UserName`, `Password`, `ServerName`, and `Port`. You can't specify both. For more information on creating this `SecretsManagerSecret` and the `SecretsManagerAccessRoleArn` and `SecretsManagerSecretId` required to access it, see [Using secrets to access AWS Database Migration Service resources](#) in the *AWS Database Migration Service User Guide*.

Type: String

Required: No

SecretsManagerSecretId

The full ARN, partial ARN, or friendly name of the `SecretsManagerSecret` that contains the MySQL endpoint connection details.

Type: String

Required: No

ServerName

Fully qualified domain name of the endpoint.

Type: String

Required: No

ServerTimezone

Specifies the time zone for the source MySQL database.

Example: `serverTimezone=US/Pacific;`

Note: Do not enclose time zones in single quotes.

Type: String

Required: No

TargetDbType

Specifies where to migrate source tables on the target, either to a single database or multiple databases.

Example: `targetDbType=MULTIPLE_DATABASES`

Type: String

Valid Values: `specific-database` | `multiple-databases`

Required: No

Username

Endpoint connection user name.

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 V2](#)
- [AWS SDK for Ruby V3](#)

NeptuneSettings

Provides information that defines an Amazon Neptune endpoint.

Contents

ErrorRetryDuration

The number of milliseconds for AWS DMS to wait to retry a bulk-load of migrated graph data to the Neptune target database before raising an error. The default is 250.

Type: Integer

Required: No

IamAuthEnabled

If you want AWS Identity and Access Management (IAM) authorization enabled for this endpoint, set this parameter to `true`. Then attach the appropriate IAM policy document to your service role specified by `ServiceAccessRoleArn`. The default is `false`.

Type: Boolean

Required: No

MaxFileSize

The maximum size in kilobytes of migrated graph data stored in a .csv file before AWS DMS bulk-loads the data to the Neptune target database. The default is 1,048,576 KB. If the bulk load is successful, AWS DMS clears the bucket, ready to store the next batch of migrated graph data.

Type: Integer

Required: No

MaxRetryCount

The number of times for AWS DMS to retry a bulk load of migrated graph data to the Neptune target database before raising an error. The default is 5.

Type: Integer

Required: No

S3BucketFolder

A folder path where you want AWS DMS to store migrated graph data in the S3 bucket specified by `S3BucketName`.

Type: String

Required: Yes

S3BucketName

The name of the Amazon S3 bucket where AWS DMS can temporarily store migrated graph data in .csv files before bulk-loading it to the Neptune target database. AWS DMS maps the SQL source data to graph data before storing it in these .csv files.

Type: String

Required: Yes

ServiceAccessRoleArn

The Amazon Resource Name (ARN) of the service role that you created for the Neptune target endpoint. The role must allow the `iam:PassRole` action. For more information, see [Creating an IAM Service Role for Accessing Amazon Neptune as a Target](#) in the *AWS Database Migration Service User Guide*.

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 V2](#)
- [AWS SDK for Ruby V3](#)

OracleSettings

Provides information that defines an Oracle endpoint.

Contents

AccessAlternateDirectly

Set this attribute to `false` in order to use the Binary Reader to capture change data for an Amazon RDS for Oracle as the source. This tells the DMS instance to not access redo logs through any specified path prefix replacement using direct file access.

Type: Boolean

Required: No

AdditionalArchivedLogDestId

Set this attribute with `archivedLogDestId` in a primary/ standby setup. This attribute is useful in the case of a switchover. In this case, AWS DMS needs to know which destination to get archive redo logs from to read changes. This need arises because the previous primary instance is now a standby instance after switchover.

Type: Integer

Required: No

AddSupplementalLogging

Set this attribute to set up table-level supplemental logging for the Oracle database. This attribute enables PRIMARY KEY supplemental logging on all tables selected for a migration task.

If you use this option, you still need to enable database-level supplemental logging.

Type: Boolean

Required: No

AllowSelectNestedTables

Set this attribute to `true` to enable replication of Oracle tables containing columns that are nested tables or defined types.

Type: Boolean

Required: No

ArchivedLogDestId

Specifies the destination of the archived redo logs. The value should be the same as the `DEST_ID` number in the `v$archived_log` table. When working with multiple log destinations (`DEST_ID`), we recommend that you to specify an archived redo logs location identifier. Doing this improves performance by ensuring that the correct logs are accessed from the outset.

Type: Integer

Required: No

ArchivedLogsOnly

When this field is set to `Y`, AWS DMS only accesses the archived redo logs. If the archived redo logs are stored on Oracle ASM only, the AWS DMS user account needs to be granted ASM privileges.

Type: Boolean

Required: No

AsmPassword

For an Oracle source endpoint, your Oracle Automatic Storage Management (ASM) password. You can set this value from the `asm_user_password` value. You set this value as part of the comma-separated value that you set to the `Password` request parameter when you create the endpoint to access transaction logs using Binary Reader. For more information, see [Configuration for change data capture \(CDC\) on an Oracle source database](#).

Type: String

Required: No

AsmServer

For an Oracle source endpoint, your ASM server address. You can set this value from the `asm_server` value. You set `asm_server` as part of the extra connection attribute string to access an Oracle server with Binary Reader that uses ASM. For more information, see [Configuration for change data capture \(CDC\) on an Oracle source database](#).

Type: String

Required: No

AsmUser

For an Oracle source endpoint, your ASM user name. You can set this value from the `asm_user` value. You set `asm_user` as part of the extra connection attribute string to access an Oracle server with Binary Reader that uses ASM. For more information, see [Configuration for change data capture \(CDC\) on an Oracle source database](#).

Type: String

Required: No

CharLengthSemantics

Specifies whether the length of a character column is in bytes or in characters. To indicate that the character column length is in characters, set this attribute to `CHAR`. Otherwise, the character column length is in bytes.

Example: `charLengthSemantics=CHAR;`

Type: String

Valid Values: `default` | `char` | `byte`

Required: No

DatabaseName

Database name for the endpoint.

Type: String

Required: No

DirectPathNoLog

When set to `true`, this attribute helps to increase the commit rate on the Oracle target database by writing directly to tables and not writing a trail to database logs.

Type: Boolean

Required: No

DirectPathParallelLoad

When set to `true`, this attribute specifies a parallel load when `useDirectPathFullLoad` is set to `Y`. This attribute also only applies when you use the AWS DMS parallel load feature. Note that the target table cannot have any constraints or indexes.

Type: Boolean

Required: No

EnableHomogenousTablespace

Set this attribute to enable homogenous tablespace replication and create existing tables or indexes under the same tablespace on the target.

Type: Boolean

Required: No

FailTasksOnLobTruncation

When set to `true`, this attribute causes a task to fail if the actual size of an LOB column is greater than the specified `LobMaxSize`.

If a task is set to limited LOB mode and this option is set to `true`, the task fails instead of truncating the LOB data.

Type: Boolean

Required: No

NumberDatatypeScale

Specifies the number scale. You can select a scale up to 38, or you can select `FLOAT`. By default, the `NUMBER` data type is converted to precision 38, scale 10.

Example: `numberDataTypeScale=12`

Type: Integer

Required: No

OraclePathPrefix

Set this string attribute to the required value in order to use the Binary Reader to capture change data for an Amazon RDS for Oracle as the source. This value specifies the default Oracle root used to access the redo logs.

Type: String

Required: No

ParallelAsmReadThreads

Set this attribute to change the number of threads that DMS configures to perform a Change Data Capture (CDC) load using Oracle Automatic Storage Management (ASM). You can specify an integer value between 2 (the default) and 8 (the maximum). Use this attribute together with the `readAheadBlocks` attribute.

Type: Integer

Required: No

Password

Endpoint connection password.

Type: String

Required: No

Port

Endpoint TCP port.

Type: Integer

Required: No

ReadAheadBlocks

Set this attribute to change the number of read-ahead blocks that DMS configures to perform a Change Data Capture (CDC) load using Oracle Automatic Storage Management (ASM). You can specify an integer value between 1000 (the default) and 200,000 (the maximum).

Type: Integer

Required: No

ReadTableSpaceName

When set to `true`, this attribute supports tablespace replication.

Type: Boolean

Required: No

ReplacePathPrefix

Set this attribute to `true` in order to use the Binary Reader to capture change data for an Amazon RDS for Oracle as the source. This setting tells DMS instance to replace the default Oracle root with the specified `usePathPrefix` setting to access the redo logs.

Type: Boolean

Required: No

RetryInterval

Specifies the number of seconds that the system waits before resending a query.

Example: `retryInterval=6;`

Type: Integer

Required: No

SecretsManagerAccessRoleArn

The full Amazon Resource Name (ARN) of the IAM role that specifies AWS DMS as the trusted entity and grants the required permissions to access the value in `SecretsManagerSecret`. The role must allow the `iam:PassRole` action. `SecretsManagerSecret` has the value of the AWS Secrets Manager secret that allows access to the Oracle endpoint.

Note

You can specify one of two sets of values for these permissions. You can specify the values for this setting and `SecretsManagerSecretId`. Or you can specify clear-text values for `UserName`, `Password`, `ServerName`, and `Port`. You can't specify both. For more information on creating this `SecretsManagerSecret` and the

`SecretsManagerAccessRoleArn` and `SecretsManagerSecretId` required to access it, see [Using secrets to access AWS Database Migration Service resources](#) in the *AWS Database Migration Service User Guide*.

Type: String

Required: No

SecretsManagerOracleAsmAccessRoleArn

Required only if your Oracle endpoint uses Advanced Storage Manager (ASM). The full ARN of the IAM role that specifies AWS DMS as the trusted entity and grants the required permissions to access the `SecretsManagerOracleAsmSecret`. This `SecretsManagerOracleAsmSecret` has the secret value that allows access to the Oracle ASM of the endpoint.

Note

You can specify one of two sets of values for these permissions. You can specify the values for this setting and `SecretsManagerOracleAsmSecretId`. Or you can specify clear-text values for `AsmUserName`, `AsmPassword`, and `AsmServerName`. You can't specify both. For more information on creating this `SecretsManagerOracleAsmSecret` and the `SecretsManagerOracleAsmAccessRoleArn` and `SecretsManagerOracleAsmSecretId` required to access it, see [Using secrets to access AWS Database Migration Service resources](#) in the *AWS Database Migration Service User Guide*.

Type: String

Required: No

SecretsManagerOracleAsmSecretId

Required only if your Oracle endpoint uses Advanced Storage Manager (ASM). The full ARN, partial ARN, or friendly name of the `SecretsManagerOracleAsmSecret` that contains the Oracle ASM connection details for the Oracle endpoint.

Type: String

Required: No

SecretsManagerSecretId

The full ARN, partial ARN, or friendly name of the `SecretsManagerSecret` that contains the Oracle endpoint connection details.

Type: String

Required: No

SecurityDbEncryption

For an Oracle source endpoint, the transparent data encryption (TDE) password required by AWM DMS to access Oracle redo logs encrypted by TDE using Binary Reader. It is also the `TDE_Password` part of the comma-separated value you set to the `Password` request parameter when you create the endpoint. The `SecurityDbEncryption` setting is related to this `SecurityDbEncryptionName` setting. For more information, see [Supported encryption methods for using Oracle as a source for AWS DMS](#) in the *AWS Database Migration Service User Guide*.

Type: String

Required: No

SecurityDbEncryptionName

For an Oracle source endpoint, the name of a key used for the transparent data encryption (TDE) of the columns and tablespaces in an Oracle source database that is encrypted using TDE. The key

value is the value of the `SecurityDbEncryption` setting. For more information on setting the key name value of `SecurityDbEncryptionName`, see the information and example for setting the `securityDbEncryptionName` extra connection attribute in [Supported encryption methods for using Oracle as a source for AWS DMS](#) in the *AWS Database Migration Service User Guide*.

Type: String

Required: No

ServerName

Fully qualified domain name of the endpoint.

Type: String

Required: No

SpatialDataOptionToGeoJsonFunctionName

Use this attribute to convert `SDO_GEOMETRY` to `GEOJSON` format. By default, DMS calls the `SDO2GEOJSON` custom function if present and accessible. Or you can create your own custom function that mimics the operation of `SDO2GEOJSON` and set `SpatialDataOptionToGeoJsonFunctionName` to call it instead.

Type: String

Required: No

UseAlternateFolderForOnline

Set this attribute to `true` in order to use the Binary Reader to capture change data for an Amazon RDS for Oracle as the source. This tells the DMS instance to use any specified prefix replacement to access all online redo logs.

Type: Boolean

Required: No

UsePathPrefix

Set this string attribute to the required value in order to use the Binary Reader to capture change data for an Amazon RDS for Oracle as the source. This value specifies the path prefix used to replace the default Oracle root to access the redo logs.

Type: String

Required: No

Username

Endpoint connection user name.

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 V2](#)
- [AWS SDK for Ruby V3](#)

OrderableReplicationInstance

In response to the `DescribeOrderableReplicationInstances` operation, this object describes an available replication instance. This description includes the replication instance's type, engine version, and allocated storage.

Contents

AvailabilityZones

List of Availability Zones for this replication instance.

Type: Array of strings

Required: No

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

ReleaseStatus

The value returned when the specified `EngineVersion` of the replication instance is in Beta or test mode. This indicates some features might not work as expected.

Note

AWS DMS supports the `ReleaseStatus` parameter in versions 3.1.4 and later.

Type: String

Valid Values: `beta`

Required: No

ReplicationInstanceClass

The compute and memory capacity of the replication instance as defined for the specified replication instance class. For example to specify the instance class `dms.c4.large`, set this parameter to `"dms.c4.large"`.

For more information on the settings and capacities for the available replication instance classes, see [Selecting the right AWS DMS replication instance for your migration](#).

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 V2](#)
- [AWS SDK for Ruby V3](#)

PendingMaintenanceAction

Describes a maintenance action pending for an AWS DMS resource, including when and how it will be applied. This data type is a response element to the `DescribePendingMaintenanceActions` operation.

Contents

Action

The type of pending maintenance action that is available for the resource.

Type: String

Required: No

AutoAppliedAfterDate

The date of the maintenance window when the action is to be applied. The maintenance action is applied to the resource during its first maintenance window after this date. If this date is specified, any `next-maintenance` opt-in requests are ignored.

Type: Timestamp

Required: No

CurrentApplyDate

The effective date when the pending maintenance action will be applied to the resource. This date takes into account opt-in requests received from the `ApplyPendingMaintenanceAction` API operation, and also the `AutoAppliedAfterDate` and `ForcedApplyDate` parameter values. This value is blank if an opt-in request has not been received and nothing has been specified for `AutoAppliedAfterDate` or `ForcedApplyDate`.

Type: Timestamp

Required: No

Description

A description providing more detail about the maintenance action.

Type: String

Required: No

ForcedApplyDate

The date when the maintenance action will be automatically applied. The maintenance action is applied to the resource on this date regardless of the maintenance window for the resource. If this date is specified, any `immediate` opt-in requests are ignored.

Type: Timestamp

Required: No

OptInStatus

The type of opt-in request that has been received for the resource.

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 V2](#)
- [AWS SDK for Ruby V3](#)

PostgreSQLSettings

Provides information that defines a PostgreSQL endpoint.

Contents

AfterConnectScript

For use with change data capture (CDC) only, this attribute has AWS DMS bypass foreign keys and user triggers to reduce the time it takes to bulk load data.

Example: `afterConnectScript=SET session_replication_role='replica'`

Type: String

Required: No

CaptureDdls

To capture DDL events, AWS DMS creates various artifacts in the PostgreSQL database when the task starts. You can later remove these artifacts.

If this value is set to `N`, you don't have to create tables or triggers on the source database.

Type: Boolean

Required: No

DatabaseName

Database name for the endpoint.

Type: String

Required: No

DdlArtifactsSchema

The schema in which the operational DDL database artifacts are created.

Example: `ddlArtifactsSchema=xyzddlschema;`

Type: String

Required: No

ExecuteTimeout

Sets the client statement timeout for the PostgreSQL instance, in seconds. The default value is 60 seconds.

Example: `executeTimeout=100;`

Type: Integer

Required: No

FailTasksOnLobTruncation

When set to `true`, this value causes a task to fail if the actual size of a LOB column is greater than the specified `LobMaxSize`.

If task is set to Limited LOB mode and this option is set to `true`, the task fails instead of truncating the LOB data.

Type: Boolean

Required: No

MaxFileSize

Specifies the maximum size (in KB) of any .csv file used to transfer data to PostgreSQL.

Example: `maxFileSize=512`

Type: Integer

Required: No

Password

Endpoint connection password.

Type: String

Required: No

Port

Endpoint TCP port.

Type: Integer

Required: No

SecretsManagerAccessRoleArn

The full Amazon Resource Name (ARN) of the IAM role that specifies AWS DMS as the trusted entity and grants the required permissions to access the value in `SecretsManagerSecret`. The role must allow the `iam:PassRole` action. `SecretsManagerSecret` has the value of the AWS Secrets Manager secret that allows access to the PostgreSQL endpoint.

Note

You can specify one of two sets of values for these permissions. You can specify the values for this setting and `SecretsManagerSecretId`. Or you can specify clear-text values for `UserName`, `Password`, `ServerName`, and `Port`. You can't specify both. For more information on creating this `SecretsManagerSecret` and the `SecretsManagerAccessRoleArn` and `SecretsManagerSecretId` required to access it, see [Using secrets to access AWS Database Migration Service resources](#) in the *AWS Database Migration Service User Guide*.

Type: String

Required: No

SecretsManagerSecretId

The full ARN, partial ARN, or friendly name of the `SecretsManagerSecret` that contains the PostgreSQL endpoint connection details.

Type: String

Required: No

ServerName

Fully qualified domain name of the endpoint.

Type: String

Required: No

SlotName

Sets the name of a previously created logical replication slot for a CDC load of the PostgreSQL source instance.

When used with the AWS DMS API `CdcStartPosition` request parameter, this attribute also enables using native CDC start points.

Type: String

Required: No

Username

Endpoint connection user name.

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 V2](#)
- [AWS SDK for Ruby V3](#)

RedshiftSettings

Provides information that defines an Amazon Redshift endpoint.

Contents

AcceptAnyDate

A value that indicates to allow any date format, including invalid formats such as 00/00/00 00:00:00, to be loaded without generating an error. You can choose `true` or `false` (the default).

This parameter applies only to `TIMESTAMP` and `DATE` columns. Always use `ACCEPTANYDATE` with the `DATEFORMAT` parameter. If the date format for the data doesn't match the `DATEFORMAT` specification, Amazon Redshift inserts a `NULL` value into that field.

Type: Boolean

Required: No

AfterConnectScript

Code to run after connecting. This parameter should contain the code itself, not the name of a file containing the code.

Type: String

Required: No

BucketFolder

An S3 folder where the comma-separated-value (.csv) files are stored before being uploaded to the target Redshift cluster.

For full load mode, AWS DMS converts source records into .csv files and loads them to the *BucketFolder/TableID* path. AWS DMS uses the Redshift `COPY` command to upload the .csv files to the target table. The files are deleted once the `COPY` operation has finished. For more information, see [COPY](#) in the *Amazon Redshift Database Developer Guide*.

For change-data-capture (CDC) mode, AWS DMS creates a *NetChanges* table, and loads the .csv files to this *BucketFolder/NetChangesTableID* path.

Type: String

Required: No

BucketName

The name of the intermediate S3 bucket used to store .csv files before uploading data to Redshift.

Type: String

Required: No

CaseSensitiveNames

If Amazon Redshift is configured to support case sensitive schema names, set `CaseSensitiveNames` to `true`. The default is `false`.

Type: Boolean

Required: No

CompUpdate

If you set `CompUpdate` to `true` Amazon Redshift applies automatic compression if the table is empty. This applies even if the table columns already have encodings other than `RAW`. If you set `CompUpdate` to `false`, automatic compression is disabled and existing column encodings aren't changed. The default is `true`.

Type: Boolean

Required: No

ConnectionTimeout

A value that sets the amount of time to wait (in milliseconds) before timing out, beginning from when you initially establish a connection.

Type: Integer

Required: No

DatabaseName

The name of the Amazon Redshift data warehouse (service) that you are working with.

Type: String

Required: No

DateFormat

The date format that you are using. Valid values are `auto` (case-sensitive), your date format string enclosed in quotes, or `NULL`. If this parameter is left unset (`NULL`), it defaults to a format of 'YYYY-MM-DD'. Using `auto` recognizes most strings, even some that aren't supported when you use a date format string.

If your date and time values use formats different from each other, set this to `auto`.

Type: String

Required: No

EmptyAsNull

A value that specifies whether AWS DMS should migrate empty `CHAR` and `VARCHAR` fields as `NULL`. A value of `true` sets empty `CHAR` and `VARCHAR` fields to null. The default is `false`.

Type: Boolean

Required: No

EncryptionMode

The type of server-side encryption that you want to use for your data. This encryption type is part of the endpoint settings or the extra connections attributes for Amazon S3. You can choose either `SSE_S3` (the default) or `SSE_KMS`.

Note

For the `ModifyEndpoint` operation, you can change the existing value of the `EncryptionMode` parameter from `SSE_KMS` to `SSE_S3`. But you can't change the existing value from `SSE_S3` to `SSE_KMS`.

To use `SSE_S3`, create an AWS Identity and Access Management (IAM) role with a policy that allows "arn:aws:s3:::*" to use the following actions: "s3:PutObject", "s3:ListBucket"

Type: String

Valid Values: `sse-s3` | `sse-kms`

Required: No

ExplicitIds

This setting is only valid for a full-load migration task. Set `ExplicitIds` to `true` to have tables with `IDENTITY` columns override their auto-generated values with explicit values loaded from the source data files used to populate the tables. The default is `false`.

Type: Boolean

Required: No

FileTransferUploadStreams

The number of threads used to upload a single file. This parameter accepts a value from 1 through 64. It defaults to 10.

The number of parallel streams used to upload a single .csv file to an S3 bucket using S3 Multipart Upload. For more information, see [Multipart upload overview](#).

`FileTransferUploadStreams` accepts a value from 1 through 64. It defaults to 10.

Type: Integer

Required: No

LoadTimeout

The amount of time to wait (in milliseconds) before timing out of operations performed by AWS DMS on a Redshift cluster, such as Redshift COPY, INSERT, DELETE, and UPDATE.

Type: Integer

Required: No

MaxFileSize

The maximum size (in KB) of any .csv file used to load data on an S3 bucket and transfer data to Amazon Redshift. It defaults to 1048576KB (1 GB).

Type: Integer

Required: No

Password

The password for the user named in the `username` property.

Type: String

Required: No

Port

The port number for Amazon Redshift. The default value is 5439.

Type: Integer

Required: No

RemoveQuotes

A value that specifies to remove surrounding quotation marks from strings in the incoming data. All characters within the quotation marks, including delimiters, are retained. Choose `true` to remove quotation marks. The default is `false`.

Type: Boolean

Required: No

ReplaceChars

A value that specifies to replace the invalid characters specified in `ReplaceInvalidChars`, substituting the specified characters instead. The default is "?".

Type: String

Required: No

ReplaceInvalidChars

A list of characters that you want to replace. Use with `ReplaceChars`.

Type: String

Required: No

SecretsManagerAccessRoleArn

The full Amazon Resource Name (ARN) of the IAM role that specifies AWS DMS as the trusted entity and grants the required permissions to access the value in `SecretsManagerSecret`. The role must allow the `iam:PassRole` action. `SecretsManagerSecret` has the value of the AWS Secrets Manager secret that allows access to the Amazon Redshift endpoint.

Note

You can specify one of two sets of values for these permissions. You can specify the values for this setting and `SecretsManagerSecretId`. Or you can specify clear-text values for `Username`, `Password`, `ServerName`, and `Port`. You can't specify both. For more information on creating this `SecretsManagerSecret` and the `SecretsManagerAccessRoleArn` and `SecretsManagerSecretId` required to access it, see [Using secrets to access AWS Database Migration Service resources](#) in the *AWS Database Migration Service User Guide*.

Type: String

Required: No

SecretsManagerSecretId

The full ARN, partial ARN, or friendly name of the `SecretsManagerSecret` that contains the Amazon Redshift endpoint connection details.

Type: String

Required: No

ServerName

The name of the Amazon Redshift cluster you are using.

Type: String

Required: No

ServerSideEncryptionKmsKeyId

The AWS KMS key ID. If you are using `SSE_KMS` for the `EncryptionMode`, provide this key ID. The key that you use needs an attached policy that enables IAM user permissions and allows use of the key.

Type: String

Required: No

ServiceAccessRoleArn

The Amazon Resource Name (ARN) of the IAM role that has access to the Amazon Redshift service. The role must allow the `iam:PassRole` action.

Type: String

Required: No

TimeFormat

The time format that you want to use. Valid values are `auto` (case-sensitive), `'timeformat_string'`, `'epochsecs'`, or `'epochmillisecs'`. It defaults to `10`. Using `auto` recognizes most strings, even some that aren't supported when you use a time format string.

If your date and time values use formats different from each other, set this parameter to `auto`.

Type: String

Required: No

TrimBlanks

A value that specifies to remove the trailing white space characters from a VARCHAR string. This parameter applies only to columns with a VARCHAR data type. Choose `true` to remove unneeded white space. The default is `false`.

Type: Boolean

Required: No

TruncateColumns

A value that specifies to truncate data in columns to the appropriate number of characters, so that the data fits in the column. This parameter applies only to columns with a VARCHAR or CHAR data type, and rows with a size of 4 MB or less. Choose `true` to truncate data. The default is `false`.

Type: Boolean

Required: No

Username

An Amazon Redshift user name for a registered user.

Type: String

Required: No

WriteBufferSize

The size (in KB) of the in-memory file write buffer used when generating .csv files on the local disk at the DMS replication instance. The default value is `1000` (buffer size is 1000KB).

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 V2](#)
- [AWS SDK for Ruby V3](#)

RefreshSchemasStatus

Provides information that describes status of a schema at an endpoint specified by the `DescribeRefreshSchemaStatus` operation.

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 V2](#)
- [AWS SDK for Ruby V3](#)

ReplicationInstance

Provides information that defines a replication instance.

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

DnsNameServers

The DNS name servers supported for the replication instance to access your on-premise source or target database.

Type: String

Required: No

EngineVersion

The engine version number of the replication instance.

If an engine version number is not specified when a replication instance is created, the default is the latest engine version available.

When modifying a major engine version of an instance, also set `AllowMajorVersionUpgrade` to `true`.

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

An AWS KMS key identifier that is used to encrypt the data on the replication instance.

If you don't specify a value for the `KmsKeyId` parameter, then AWS DMS uses 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 whether the replication instance is a Multi-AZ deployment. You can't set the `AvailabilityZone` parameter if the Multi-AZ parameter is set to `true`.

Type: Boolean

Required: No

PendingModifiedValues

The pending modification values.

Type: [ReplicationPendingModifiedValues \(p. 310\)](#) object

Required: No

PreferredMaintenanceWindow

The maintenance window times for the replication instance. Any pending upgrades to the replication instance are performed during this time.

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 as defined for the specified replication instance class. It is a required parameter, although a default value is pre-selected in the DMS console.

For more information on the settings and capacities for the available replication instance classes, see [Selecting the right AWS DMS replication instance for your migration](#).

Type: String

Required: No

ReplicationInstanceIdentifier

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

Constraints:

- Must contain 1-63 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

One or more private IP addresses for 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

One or more public IP addresses for the replication instance.

Type: Array of strings

Required: No

ReplicationInstanceStatus

The status of the replication instance. The possible return values include:

- "available"
- "creating"

- "deleted"
- "deleting"
- "failed"
- "modifying"
- "upgrading"
- "rebooting"
- "resetting-master-credentials"
- "storage-full"
- "incompatible-credentials"
- "incompatible-network"
- "maintenance"

Type: String

Required: No

ReplicationSubnetGroup

The subnet group for the replication instance.

Type: [ReplicationSubnetGroup](#) (p. 311) 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.

Type: Array of [VpcSecurityGroupMembership](#) (p. 345) objects

Required: No

See Also

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

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

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 V2](#)
- [AWS SDK for Ruby V3](#)

ReplicationPendingModifiedValues

Provides information about the values of pending modifications to a replication instance. This data type is an object of the [ReplicationInstance](#) user-defined data type.

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 whether the replication instance is a Multi-AZ deployment. You can't 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 as defined for the specified replication instance class.

For more information on the settings and capacities for the available replication instance classes, see [Selecting the right AWS DMS replication instance for your migration](#).

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 V2](#)
- [AWS SDK for Ruby V3](#)

ReplicationSubnetGroup

Describes a subnet group in response to a request by the `DescribeReplicationSubnetGroups` operation.

Contents

ReplicationSubnetGroupDescription

A description for 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 \(p. 335\)](#) 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 V2](#)
- [AWS SDK for Ruby V3](#)

ReplicationTask

Provides information that describes a replication task created by the `CreateReplicationTask` operation.

Contents

CdcStartPosition

Indicates when you want a change data capture (CDC) operation to start. Use either `CdcStartPosition` or `CdcStartTime` to specify when you want the 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:2018-02-09T12:12:12"`

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

Type: String

Required: No

LastFailureMessage

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

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 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 1-255 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. 324) object

Required: No

SourceEndpointArn

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

Type: String

Required: No

Status

The status of the replication task. This response parameter can return one of the following values:

- "moving" – The task is being moved in response to running the [MoveReplicationTask](#) operation.
- "creating" – The task is being created in response to running the [CreateReplicationTask](#) operation.
- "deleting" – The task is being deleted in response to running the [DeleteReplicationTask](#) operation.
- "failed" – The task failed to successfully complete the database migration in response to running the [StartReplicationTask](#) operation.
- "failed-move" – The task failed to move in response to running the [MoveReplicationTask](#) operation.
- "modifying" – The task definition is being modified in response to running the [ModifyReplicationTask](#) operation.
- "ready" – The task is in a ready state where it can respond to other task operations, such as [StartReplicationTask](#) or [DeleteReplicationTask](#).
- "running" – The task is performing a database migration in response to running the [StartReplicationTask](#) operation.
- "starting" – The task is preparing to perform a database migration in response to running the [StartReplicationTask](#) operation.
- "stopped" – The task has stopped in response to running the [StopReplicationTask](#) operation.
- "stopping" – The task is preparing to stop in response to running the [StopReplicationTask](#) operation.
- "testing" – The database migration specified for this task is being tested in response to running either the [StartReplicationTaskAssessmentRun](#) or the [StartReplicationTaskAssessment](#) operation.

Note

[StartReplicationTaskAssessmentRun](#) is an improved premigration task assessment operation. The [StartReplicationTaskAssessment](#) operation assesses data type compatibility only between the source and target database of a given migration task. In contrast, [StartReplicationTaskAssessmentRun](#) enables you to specify a variety of premigration task assessments in addition to data type compatibility. These assessments include ones for the validity of primary key definitions and likely issues with database migration performance, among others.

Type: String

Required: No

StopReason

The reason the replication task was stopped. This response parameter can return one of the following values:

- "STOP_REASON_FULL_LOAD_COMPLETED" – Full-load migration completed.
- "STOP_REASON_CACHED_CHANGES_APPLIED" – Change data capture (CDC) load completed.

- "STOP_REASON_CACHED_CHANGES_NOT_APPLIED" – In a full-load and CDC migration, the full load stopped as specified before starting the CDC migration.
- "STOP_REASON_SERVER_TIME" – The migration stopped at the specified server time.

Type: String

Required: No

TableMappings

Table mappings specified in the task.

Type: String

Required: No

TargetEndpointArn

The ARN that uniquely identifies the endpoint.

Type: String

Required: No

TargetReplicationInstanceArn

The ARN of the replication instance to which this task is moved in response to running the [MoveReplicationTask](#) operation. Otherwise, this response parameter isn't a member of the `ReplicationTask` object.

Type: String

Required: No

TaskData

Supplemental information that the task requires to migrate the data for certain source and target endpoints. For more information, see [Specifying Supplemental Data for Task Settings](#) in the *AWS Database Migration Service User Guide*.

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 V2](#)
- [AWS SDK for Ruby V3](#)

ReplicationTaskAssessmentResult

The task assessment report in JSON format.

Contents

AssessmentResults

The task assessment results in JSON format.

The response object only contains this field if you provide [DescribeReplicationTaskAssessmentResults:ReplicationTaskArn](#) (p. 140) in the request.

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.

The response object only contains this field if you provide [DescribeReplicationTaskAssessmentResults:ReplicationTaskArn](#) (p. 140) in the request.

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 V2](#)
- [AWS SDK for Ruby V3](#)

ReplicationTaskAssessmentRun

Provides information that describes a premigration assessment run that you have started using the `StartReplicationTaskAssessmentRun` operation.

Some of the information appears based on other operations that can return the `ReplicationTaskAssessmentRun` object.

Contents

AssessmentProgress

Indication of the completion progress for the individual assessments specified to run.

Type: [ReplicationTaskAssessmentRunProgress](#) (p. 321) object

Required: No

AssessmentRunName

Unique name of the assessment run.

Type: String

Required: No

LastFailureMessage

Last message generated by an individual assessment failure.

Type: String

Required: No

ReplicationTaskArn

ARN of the migration task associated with this premigration assessment run.

Type: String

Required: No

ReplicationTaskAssessmentRunArn

Amazon Resource Name (ARN) of this assessment run.

Type: String

Required: No

ReplicationTaskAssessmentRunCreationDate

Date on which the assessment run was created using the `StartReplicationTaskAssessmentRun` operation.

Type: Timestamp

Required: No

ResultEncryptionMode

Encryption mode used to encrypt the assessment run results.

Type: String

Required: No

ResultKmsKeyArn

ARN of the AWS KMS encryption key used to encrypt the assessment run results.

Type: String

Required: No

ResultLocationBucket

Amazon S3 bucket where AWS DMS stores the results of this assessment run.

Type: String

Required: No

ResultLocationFolder

Folder in an Amazon S3 bucket where AWS DMS stores the results of this assessment run.

Type: String

Required: No

ServiceAccessRoleArn

ARN of the service role used to start the assessment run using the `StartReplicationTaskAssessmentRun` operation. The role must allow the `iam:PassRole` action.

Type: String

Required: No

Status

Assessment run status.

This status can have one of the following values:

- "cancelling" – The assessment run was canceled by the `CancelReplicationTaskAssessmentRun` operation.
- "deleting" – The assessment run was deleted by the `DeleteReplicationTaskAssessmentRun` operation.
- "failed" – At least one individual assessment completed with a failed status.
- "error-provisioning" – An internal error occurred while resources were provisioned (during provisioning status).
- "error-executing" – An internal error occurred while individual assessments ran (during running status).
- "invalid state" – The assessment run is in an unknown state.
- "passed" – All individual assessments have completed, and none has a failed status.
- "provisioning" – Resources required to run individual assessments are being provisioned.
- "running" – Individual assessments are being run.
- "starting" – The assessment run is starting, but resources are not yet being provisioned for individual assessments.

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 V2](#)
- [AWS SDK for Ruby V3](#)

ReplicationTaskAssessmentRunProgress

The progress values reported by the `AssessmentProgress` response element.

Contents

IndividualAssessmentCompletedCount

The number of individual assessments that have completed, successfully or not.

Type: Integer

Required: No

IndividualAssessmentCount

The number of individual assessments that are specified to run.

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 V2](#)
- [AWS SDK for Ruby V3](#)

ReplicationTaskIndividualAssessment

Provides information that describes an individual assessment from a premigration assessment run.

Contents

IndividualAssessmentName

Name of this individual assessment.

Type: String

Required: No

ReplicationTaskAssessmentRunArn

ARN of the premigration assessment run that is created to run this individual assessment.

Type: String

Required: No

ReplicationTaskIndividualAssessmentArn

Amazon Resource Name (ARN) of this individual assessment.

Type: String

Required: No

ReplicationTaskIndividualAssessmentStartDate

Date when this individual assessment was started as part of running the `StartReplicationTaskAssessmentRun` operation.

Type: Timestamp

Required: No

Status

Individual assessment status.

This status can have one of the following values:

- "cancelled"
- "error"
- "failed"
- "passed"
- "pending"
- "running"

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 V2](#)
- [AWS SDK for Ruby V3](#)

ReplicationTaskStats

In response to a request by the `DescribeReplicationTasks` operation, this object provides a collection of statistics about a replication task.

Contents

ElapsedTimeMillis

The elapsed time of the task, in milliseconds.

Type: Long

Required: No

FreshStartDate

The date the replication task was started either with a fresh start or a target reload.

Type: Timestamp

Required: No

FullLoadFinishDate

The date the replication task full load was completed.

Type: Timestamp

Required: No

FullLoadProgressPercent

The percent complete for the full load migration task.

Type: Integer

Required: No

FullLoadStartDate

The date the replication task full load was started.

Type: Timestamp

Required: No

StartDate

The date the replication task was started either with a fresh start or a resume. For more information, see [StartReplicationTaskType](#).

Type: Timestamp

Required: No

StopDate

The date the replication task was stopped.

Type: Timestamp

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 V2](#)
- [AWS SDK for Ruby V3](#)

ResourcePendingMaintenanceActions

Identifies an AWS DMS resource and any pending actions for it.

Contents

PendingMaintenanceActionDetails

Detailed information about the pending maintenance action.

Type: Array of [PendingMaintenanceAction](#) (p. 293) objects

Required: No

ResourceIdentifier

The Amazon Resource Name (ARN) of the DMS resource that the pending maintenance action applies to. For information about creating an ARN, see [Constructing an Amazon Resource Name \(ARN\) for AWS DMS](#) in the AWS DMS documentation.

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 V2](#)
- [AWS SDK for Ruby V3](#)

S3Settings

Settings for exporting data to Amazon S3.

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 isn't 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

CdcInsertsAndUpdates

A value that enables a change data capture (CDC) load to write INSERT and UPDATE operations to .csv or .parquet (columnar storage) output files. The default setting is `false`, but when `CdcInsertsAndUpdates` is set to `true` or `y`, only INSERTs and UPDATEs from the source database are migrated to the .csv or .parquet file.

For .csv file format only, how these INSERTs and UPDATEs are recorded depends on the value of the `IncludeOpForFullLoad` parameter. If `IncludeOpForFullLoad` is set to `true`, the first field of every CDC record is set to either `I` or `U` to indicate INSERT and UPDATE operations at the source. But if `IncludeOpForFullLoad` is set to `false`, CDC records are written without an indication of INSERT or UPDATE operations at the source. For more information about how these settings work together, see [Indicating Source DB Operations in Migrated S3 Data](#) in the *AWS Database Migration Service User Guide*.

Note

AWS DMS supports the use of the `CdcInsertsAndUpdates` parameter in versions 3.3.1 and later.

`CdcInsertsOnly` and `CdcInsertsAndUpdates` can't both be set to `true` for the same endpoint. Set either `CdcInsertsOnly` or `CdcInsertsAndUpdates` to `true` for the same endpoint, but not both.

Type: Boolean

Required: No

CdcInsertsOnly

A value that enables a change data capture (CDC) load to write only INSERT operations to .csv or columnar storage (.parquet) output files. By default (the `false` setting), the first field in a .csv or .parquet record contains the letter `I` (INSERT), `U` (UPDATE), or `D` (DELETE). These values indicate whether the row was inserted, updated, or deleted at the source database for a CDC load to the target.

If `CdcInsertsOnly` is set to `true` or `y`, only INSERTs from the source database are migrated to the .csv or .parquet file. For .csv format only, how these INSERTs are recorded depends on the value

of `IncludeOpForFullLoad`. If `IncludeOpForFullLoad` is set to `true`, the first field of every CDC record is set to `I` to indicate the INSERT operation at the source. If `IncludeOpForFullLoad` is set to `false`, every CDC record is written without a first field to indicate the INSERT operation at the source. For more information about how these settings work together, see [Indicating Source DB Operations in Migrated S3 Data](#) in the *AWS Database Migration Service User Guide*..

Note

AWS DMS supports the interaction described preceding between the `CdcInsertsOnly` and `IncludeOpForFullLoad` parameters in versions 3.1.4 and later.

`CdcInsertsOnly` and `CdcInsertsAndUpdates` can't both be set to `true` for the same endpoint. Set either `CdcInsertsOnly` or `CdcInsertsAndUpdates` to `true` for the same endpoint, but not both.

Type: Boolean

Required: No

CdcPath

Specifies the folder path of CDC files. For an S3 source, this setting is required if a task captures change data; otherwise, it's optional. If `CdcPath` is set, AWS DMS reads CDC files from this path and replicates the data changes to the target endpoint. For an S3 target if you set [PreserveTransactions](#) to `true`, AWS DMS verifies that you have set this parameter to a folder path on your S3 target where AWS DMS can save the transaction order for the CDC load. AWS DMS creates this CDC folder path in either your S3 target working directory or the S3 target location specified by [BucketFolder](#) and [BucketName](#).

For example, if you specify `CdcPath` as `MyChangedData`, and you specify `BucketName` as `MyTargetBucket` but do not specify `BucketFolder`, AWS DMS creates the CDC folder path following: `MyTargetBucket/MyChangedData`.

If you specify the same `CdcPath`, and you specify `BucketName` as `MyTargetBucket` and `BucketFolder` as `MyTargetData`, AWS DMS creates the CDC folder path following: `MyTargetBucket/MyTargetData/MyChangedData`.

For more information on CDC including transaction order on an S3 target, see [Capturing data changes \(CDC\) including transaction order on the S3 target](#).

Note

This setting is supported in AWS DMS versions 3.4.2 and later.

Type: String

Required: No

CompressionType

An optional parameter to use GZIP to compress the target files. Set to GZIP to compress the target files. Either set this parameter to `NONE` (the default) or don't use it to leave the files uncompressed. This parameter applies to both `.csv` and `.parquet` file formats.

Type: String

Valid Values: `none` | `gzip`

Required: No

CsvDelimiter

The delimiter used to separate columns in the `.csv` file for both source and target. The default is a comma.

Type: String

Required: No

CsvNoSupValue

This setting only applies if your Amazon S3 output files during a change data capture (CDC) load are written in .csv format. If [UseCsvNoSupValue](#) is set to true, specify a string value that you want AWS DMS to use for all columns not included in the supplemental log. If you do not specify a string value, AWS DMS uses the null value for these columns regardless of the `UseCsvNoSupValue` setting.

Note

This setting is supported in AWS DMS versions 3.4.1 and later.

Type: String

Required: No

CsvRowDelimiter

The delimiter used to separate rows in the .csv file for both source and target. The default is a carriage return (\n).

Type: String

Required: No

DataFormat

The format of the data that you want to use for output. You can choose one of the following:

- `csv` : This is a row-based file format with comma-separated values (.csv).
- `parquet` : Apache Parquet (.parquet) is a columnar storage file format that features efficient compression and provides faster query response.

Type: String

Valid Values: `csv` | `parquet`

Required: No

DataPageSize

The size of one data page in bytes. This parameter defaults to 1024 * 1024 bytes (1 MiB). This number is used for .parquet file format only.

Type: Integer

Required: No

DatePartitionDelimiter

Specifies a date separating delimiter to use during folder partitioning. The default value is `SLASH`. Use this parameter when `DatePartitionedEnabled` is set to `true`.

Type: String

Valid Values: `SLASH` | `UNDERSCORE` | `DASH` | `NONE`

Required: No

DatePartitionEnabled

When set to `true`, this parameter partitions S3 bucket folders based on transaction commit dates. The default value is `false`. For more information about date-based folder partitioning, see [Using date-based folder partitioning](#).

Type: Boolean

Required: No

DatePartitionSequence

Identifies the sequence of the date format to use during folder partitioning. The default value is `YYYYMMDD`. Use this parameter when `DatePartitionedEnabled` is set to `true`.

Type: String

Valid Values: `YYYYMMDD` | `YYYYMMDDHH` | `YYYYMM` | `MMYYYYDD` | `DDMMYYYY`

Required: No

DictPageSizeLimit

The maximum size of an encoded dictionary page of a column. If the dictionary page exceeds this, this column is stored using an encoding type of `PLAIN`. This parameter defaults to 1024 * 1024 bytes (1 MiB), the maximum size of a dictionary page before it reverts to `PLAIN` encoding. This size is used for `.parquet` file format only.

Type: Integer

Required: No

EnableStatistics

A value that enables statistics for Parquet pages and row groups. Choose `true` to enable statistics, `false` to disable. Statistics include `NULL`, `DISTINCT`, `MAX`, and `MIN` values. This parameter defaults to `true`. This value is used for `.parquet` file format only.

Type: Boolean

Required: No

EncodingType

The type of encoding you are using:

- `RLE_DICTIONARY` uses a combination of bit-packing and run-length encoding to store repeated values more efficiently. This is the default.
- `PLAIN` doesn't use encoding at all. Values are stored as they are.
- `PLAIN_DICTIONARY` builds a dictionary of the values encountered in a given column. The dictionary is stored in a dictionary page for each column chunk.

Type: String

Valid Values: `plain` | `plain-dictionary` | `rle-dictionary`

Required: No

EncryptionMode

The type of server-side encryption that you want to use for your data. This encryption type is part of the endpoint settings or the extra connections attributes for Amazon S3. You can choose either `SSE_S3` (the default) or `SSE_KMS`.

Note

For the `ModifyEndpoint` operation, you can change the existing value of the `EncryptionMode` parameter from `SSE_KMS` to `SSE_S3`. But you can't change the existing value from `SSE_S3` to `SSE_KMS`.

To use `SSE_S3`, you need an AWS Identity and Access Management (IAM) role with permission to allow `"arn:aws:s3:::dms-*"` to use the following actions:

- `s3:CreateBucket`

- `s3:ListBucket`
- `s3:DeleteBucket`
- `s3:GetBucketLocation`
- `s3:GetObject`
- `s3:PutObject`
- `s3:DeleteObject`
- `s3:GetObjectVersion`
- `s3:GetBucketPolicy`
- `s3:PutBucketPolicy`
- `s3:DeleteBucketPolicy`

Type: String

Valid Values: `sse-s3` | `sse-kms`

Required: No

ExternalTableDefinition

Specifies how tables are defined in the S3 source files only.

Type: String

Required: No

IncludeOpForFullLoad

A value that enables a full load to write INSERT operations to the comma-separated value (.csv) output files only to indicate how the rows were added to the source database.

Note

AWS DMS supports the `IncludeOpForFullLoad` parameter in versions 3.1.4 and later.

For full load, records can only be inserted. By default (the `false` setting), no information is recorded in these output files for a full load to indicate that the rows were inserted at the source database. If `IncludeOpForFullLoad` is set to `true` or `y`, the INSERT is recorded as an I annotation in the first field of the .csv file. This allows the format of your target records from a full load to be consistent with the target records from a CDC load.

Note

This setting works together with the `CdcInsertsOnly` and the `CdcInsertsAndUpdates` parameters for output to .csv files only. For more information about how these settings work together, see [Indicating Source DB Operations in Migrated S3 Data](#) in the *AWS Database Migration Service User Guide*.

Type: Boolean

Required: No

ParquetTimestampInMillisecond

A value that specifies the precision of any `TIMESTAMP` column values that are written to an Amazon S3 object file in .parquet format.

Note

AWS DMS supports the `ParquetTimestampInMillisecond` parameter in versions 3.1.4 and later.

When `ParquetTimestampInMillisecond` is set to `true` or `y`, AWS DMS writes all `TIMESTAMP` columns in a .parquet formatted file with millisecond precision. Otherwise, DMS writes them with microsecond precision.

Currently, Amazon Athena and AWS Glue can handle only millisecond precision for `TIMESTAMP` values. Set this parameter to `true` for S3 endpoint object files that are .parquet formatted only if you plan to query or process the data with Athena or AWS Glue.

Note

AWS DMS writes any `TIMESTAMP` column values written to an S3 file in .csv format with microsecond precision.

Setting `ParquetTimestampInMillisecond` has no effect on the string format of the timestamp column value that is inserted by setting the `TimestampColumnName` parameter.

Type: Boolean

Required: No

ParquetVersion

The version of the Apache Parquet format that you want to use: `parquet_1_0` (the default) or `parquet_2_0`.

Type: String

Valid Values: `parquet-1-0` | `parquet-2-0`

Required: No

PreserveTransactions

If set to `true`, AWS DMS saves the transaction order for a change data capture (CDC) load on the Amazon S3 target specified by `CdcPath`. For more information, see [Capturing data changes \(CDC\) including transaction order on the S3 target](#).

Note

This setting is supported in AWS DMS versions 3.4.2 and later.

Type: Boolean

Required: No

RowGroupLength

The number of rows in a row group. A smaller row group size provides faster reads. But as the number of row groups grows, the slower writes become. This parameter defaults to 10,000 rows. This number is used for .parquet file format only.

If you choose a value larger than the maximum, `RowGroupLength` is set to the max row group length in bytes ($64 * 1024 * 1024$).

Type: Integer

Required: No

ServerSideEncryptionKmsKeyId

If you are using `SSE_KMS` for the `EncryptionMode`, provide the AWS KMS key ID. The key that you use needs an attached policy that enables AWS Identity and Access Management (IAM) user permissions and allows use of the key.

Here is a CLI example: `aws dms create-endpoint --endpoint-identifier value --endpoint-type target --engine-name s3 --s3-settings ServiceAccessRoleArn=value,BucketFolder=value,BucketName=value,EncryptionMode=SSE_KMS,`

Type: String

Required: No

ServiceAccessRoleArn

The Amazon Resource Name (ARN) used by the service to access the IAM role. The role must allow the `iam:PassRole` action. It is a required parameter that enables AWS DMS to write and read objects from an S3 bucket.

Type: String

Required: No

TimestampColumnName

A value that when nonblank causes AWS DMS to add a column with timestamp information to the endpoint data for an Amazon S3 target.

Note

AWS DMS supports the `TimestampColumnName` parameter in versions 3.1.4 and later.

DMS includes an additional `STRING` column in the `.csv` or `.parquet` object files of your migrated data when you set `TimestampColumnName` to a nonblank value.

For a full load, each row of this timestamp column contains a timestamp for when the data was transferred from the source to the target by DMS.

For a change data capture (CDC) load, each row of the timestamp column contains the timestamp for the commit of that row in the source database.

The string format for this timestamp column value is `yyyy-MM-dd HH:mm:ss.SSSSSS`. By default, the precision of this value is in microseconds. For a CDC load, the rounding of the precision depends on the commit timestamp supported by DMS for the source database.

When the `AddColumnName` parameter is set to `true`, DMS also includes a name for the timestamp column that you set with `TimestampColumnName`.

Type: String

Required: No

UseCsvNoSupValue

This setting applies if the S3 output files during a change data capture (CDC) load are written in `.csv` format. If set to `true` for columns not included in the supplemental log, AWS DMS uses the value specified by `CsvNoSupValue`. If not set or set to `false`, AWS DMS uses the null value for these columns.

Note

This setting is supported in AWS DMS versions 3.4.1 and later.

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 V2](#)
- [AWS SDK for Ruby V3](#)

Subnet

In response to a request by the `DescribeReplicationSubnetGroups` operation, this object identifies a subnet by its given Availability Zone, subnet identifier, and status.

Contents

SubnetAvailabilityZone

The Availability Zone of the subnet.

Type: [AvailabilityZone](#) (p. 242) 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 V2](#)
- [AWS SDK for Ruby V3](#)

SupportedEndpointType

Provides information about types of supported endpoints in response to a request by the `DescribeEndpointTypes` operation. This information includes the type of endpoint, the database engine name, and whether change data capture (CDC) is supported.

Contents

EndpointType

The type of endpoint. Valid values are `source` and `target`.

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"`, `"dynamodb"`, `"mongodb"`, `"kinesis"`, `"kafka"`, `"elasticsearch"`, `"documentdb"`, `"sqlserver"`, and `"neptune"`.

Type: String

Required: No

ReplicationInstanceEngineMinimumVersion

The earliest AWS DMS engine version that supports this endpoint engine. Note that endpoint engines released with AWS DMS versions earlier than 3.1.1 do not return a value for this parameter.

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 V2](#)
- [AWS SDK for Ruby V3](#)

SybaseSettings

Provides information that defines a SAP ASE endpoint.

Contents

DatabaseName

Database name for the endpoint.

Type: String

Required: No

Password

Endpoint connection password.

Type: String

Required: No

Port

Endpoint TCP port.

Type: Integer

Required: No

SecretsManagerAccessRoleArn

The full Amazon Resource Name (ARN) of the IAM role that specifies AWS DMS as the trusted entity and grants the required permissions to access the value in `SecretsManagerSecret`. The role must allow the `iam:PassRole` action. `SecretsManagerSecret` has the value of the AWS Secrets Manager secret that allows access to the SAP ASE endpoint.

Note

You can specify one of two sets of values for these permissions. You can specify the values for this setting and `SecretsManagerSecretId`. Or you can specify clear-text values for `Username`, `Password`, `ServerName`, and `Port`. You can't specify both. For more information on creating this `SecretsManagerSecret` and the `SecretsManagerAccessRoleArn` and `SecretsManagerSecretId` required to access it, see [Using secrets to access AWS Database Migration Service resources](#) in the *AWS Database Migration Service User Guide*.

Type: String

Required: No

SecretsManagerSecretId

The full ARN, partial ARN, or friendly name of the `SecretsManagerSecret` that contains the SAP ASE endpoint connection details.

Type: String

Required: No

ServerName

Fully qualified domain name of the endpoint.

Type: String

Required: No

Username

Endpoint connection user name.

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 V2](#)
- [AWS SDK for Ruby V3](#)

TableStatistics

Provides a collection of table statistics in response to a request by the `DescribeTableStatistics` operation.

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

FullLoadCondtnlChkFailedRows

The number of rows that failed conditional checks during the full load operation (valid only for migrations where DynamoDB is the target).

Type: Long

Required: No

FullLoadEndTime

The time when the full load operation completed.

Type: Timestamp

Required: No

FullLoadErrorRows

The number of rows that failed to load during the full load operation (valid only for migrations where DynamoDB is the target).

Type: Long

Required: No

FullLoadReloaded

A value that indicates if the table was reloaded (`true`) or loaded as part of a new full load operation (`false`).

Type: Boolean

Required: No

FullLoadRows

The number of rows added during the full load operation.

Type: Long

Required: No

FullLoadStartTime

The time when the full load operation started.

Type: Timestamp

Required: No

Inserts

The number of insert actions performed on a table.

Type: Long

Required: No

LastUpdateTime

The last time a 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.

This parameter can have the following values:

- Not enabled – Validation isn't 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 don't match between the source and target.
- Suspended records – Some records in the table couldn't be validated.
- No primary key – The table couldn't be validated because it has no primary key.
- Table error – The table wasn't validated because it's in an error state and some data wasn't migrated.
- Validated – All rows in the table are validated. If the table is updated, the status can change from Validated.
- Error – The table couldn't be validated because of an unexpected error.
- Pending validation – The table is waiting validation.
- Preparing table – Preparing the table enabled in the migration task for validation.
- Pending revalidation – All rows in the table are pending validation after the table was updated.

Type: String

Required: No

ValidationStateDetails

Additional details about the state of validation.

Type: String

Required: No

ValidationSuspendedRecords

The number of records that couldn't 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 V2](#)
- [AWS SDK for Ruby V3](#)

TableToReload

Provides the name of the schema and table to be reloaded.

Contents

SchemaName

The schema name of the table to be reloaded.

Type: String

Required: Yes

TableName

The table name of the table to be reloaded.

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 V2](#)
- [AWS SDK for Ruby V3](#)

Tag

A user-defined key-value pair that describes metadata added to an AWS DMS resource and that is used by operations such as the following:

- `AddTagsToResource`
- `ListTagsForResource`
- `RemoveTagsFromResource`

Contents

Key

A key is the required name of the tag. The string value can be 1-128 Unicode characters in length and can't be prefixed with "aws:" or "dms:". The string can only contain only the set of Unicode letters, digits, white-space, '_', ':', '/', '=', '+', '-' (Java regular expressions: `"^([\\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 1-256 Unicode characters in length and can't be prefixed with "aws:" or "dms:". The string can only contain only the set of Unicode letters, digits, white-space, '_', ':', '/', '=', '+', '-' (Java regular expressions: `"^([\\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 V2](#)
- [AWS SDK for Ruby V3](#)

VpcSecurityGroupMembership

Describes the status of a security group associated with the virtual private cloud (VPC) hosting your replication and DB instances.

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 V2](#)
- [AWS SDK for Ruby V3](#)

Common Parameters

The following list contains the parameters that all actions use for signing Signature Version 4 requests with a query string. Any action-specific parameters are listed in the topic for that action. For more information about Signature Version 4, see [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'THHMMSS'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

NotAuthorized

You do not have permission to perform this action.

HTTP Status Code: 400

OptInRequired

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

HTTP Status Code: 403

RequestExpired

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

HTTP Status Code: 400

ServiceUnavailable

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

HTTP Status Code: 503

ThrottlingException

The request was denied due to request throttling.

HTTP Status Code: 400

ValidationError

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

HTTP Status Code: 400