
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 User Guide*.

This document was last published on November 26, 2018.

Actions

The following actions are supported:

- [AddTagsToResource](#) (p. 4)
- [ApplyPendingMaintenanceAction](#) (p. 6)
- [CreateEndpoint](#) (p. 8)
- [CreateEventSubscription](#) (p. 21)
- [CreateReplicationInstance](#) (p. 25)
- [CreateReplicationSubnetGroup](#) (p. 32)
- [CreateReplicationTask](#) (p. 36)
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- [StartReplicationTaskAssessment](#) (p. 179)
- [StopReplicationTask](#) (p. 181)
- [TestConnection](#) (p. 185)

AddTagsToResource

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

Request Syntax

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

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 260).

The request accepts the following data in JSON format.

ResourceArn (p. 4)

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

Type: String

Required: Yes

Tags (p. 4)

The tag to be assigned to the DMS resource.

Type: Array of [Tag](#) (p. 258) 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. 262).

ResourceNotFoundFault

The resource could not be found.

HTTP Status Code: 400

Example

Sample Request

```
POST / HTTP/1.1
Host: dms.<region>.<domain>
x-amz-Date: <Date>
Authorization: AWS4-HMAC-SHA256 Credential=<Credential>,
SignedHeaders=contenttype;date;host;user-agent;x-amz-date;x-amz-target;x-amzn-
requestid,Signature=<Signature>
User-Agent: <UserAgentString>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Connection: Keep-Alive
X-Amz-Target: AmazonDMSv20160101.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](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V2](#)

ApplyPendingMaintenanceAction

For internal use only.

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. 260).

The request accepts the following data in JSON format.

ApplyAction (p. 6)

Type: String

Required: Yes

OptInType (p. 6)

Type: String

Required: Yes

ReplicationInstanceArn (p. 6)

Type: String

Required: Yes

Response Syntax

```
{  
  "ResourcePendingMaintenanceActions": {  
    "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.

[ResourcePendingMaintenanceActions \(p. 6\)](#)

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

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 262\)](#).

ResourceNotFoundFault

The resource could not be found.

HTTP Status Code: 400

See Also

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

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

CreateEndpoint

Creates an endpoint using the provided settings.

Request Syntax

```
{
  "CertificateArn": "string",
  "DatabaseName": "string",
  "DmsTransferSettings": {
    "BucketName": "string",
    "ServiceAccessRoleArn": "string"
  },
  "DynamoDbSettings": {
    "ServiceAccessRoleArn": "string"
  },
  "ElasticsearchSettings": {
    "EndpointUri": "string",
    "ErrorRetryDuration": number,
    "FullLoadErrorPercentage": number,
    "ServiceAccessRoleArn": "string"
  },
  "EndpointIdentifier": "string",
  "EndpointType": "string",
  "EngineName": "string",
  "ExternalTableDefinition": "string",
  "ExtraConnectionAttributes": "string",
  "IBMDB2Settings": {
    "DatabaseName": "string",
    "ExecuteTimeout": number,
    "Password": "string",
    "Port": number,
    "ServerName": "string",
    "SetDataCaptureChanges": boolean,
    "Username": "string"
  },
  "KinesisSettings": {
    "MessageFormat": "string",
    "ServiceAccessRoleArn": "string",
    "StreamArn": "string"
  },
  "KmsKeyId": "string",
  "MicrosoftSQLServerSettings": {
    "ActivateSafeguard": boolean,
    "BcpPacketSize": number,
    "ConnectionTimeout": number,
    "DatabaseName": "string",
    "IgnoreDdl": boolean,
    "IgnoreMsReplicationEnablement": boolean,
    "Password": "string",
    "ReadBackupOnly": boolean,
    "SafeguardFrequency": number,
    "SafeguardPolicy": "string",
    "ServerName": "string",
    "UseBcpCdc": boolean,
    "UseBcpFullLoad": boolean,
    "Username": "string"
  },
  "MongoDbSettings": {
    "AuthMechanism": "string",
    "AuthSource": "string",
    "AuthType": "string",
    "DatabaseName": "string",
```

```

    "DocsToInvestigate": "string",
    "ExtractDocId": "string",
    "KmsKeyId": "string",
    "NestingLevel": "string",
    "Password": "string",
    "Port": number,
    "ServerName": "string",
    "Username": "string"
},
"MySQLSettings": {
    "AfterConnectScript": "string",
    "CharsetMapping": "string",
    "ConnectionTimeout": number,
    "DatabaseName": "string",
    "EventsPollInterval": number,
    "LoadUsingCsv": boolean,
    "MinPollInterval": number,
    "ParallelLoadThreads": number,
    "Password": "string",
    "Port": number,
    "ReadTimeout": number,
    "ServerName": "string",
    "ServerTimezone": "string",
    "UnloadTimeout": number,
    "Username": "string",
    "WriteTimeout": number
},
"OracleSettings": {
    "AddSupplementalLogging": boolean,
    "AlwaysReplaceEmptyString": boolean,
    "ArchivedLogDestId": number,
    "ArchivedLogsOnly": boolean,
    "AsmPassword": "string",
    "AsmServer": "string",
    "AsmUser": "string",
    "BatchSize": number,
    "CharacterSet": "string",
    "CharLengthSemantics": "string",
    "CopyOnlineRedoFromAsmToTempFolder": boolean,
    "CopyToTempFolder": "string",
    "DatabaseName": "string",
    "DirectPathParallelLoad": boolean,
    "EmptyStringValue": "string",
    "ExposeViews": boolean,
    "FailTasksOnLobTruncation": boolean,
    "NumberDatatypeScale": number,
    "Password": "string",
    "Port": number,
    "ReadTableSpaceName": boolean,
    "RetryInterval": number,
    "RetryTimeoutInMinutes": number,
    "SecurityDbEncryption": "string",
    "SecurityDbEncryptionName": "string",
    "ServerName": "string",
    "StandbyDelayTime": number,
    "UseBFile": boolean,
    "UseDirectPathFullLoad": boolean,
    "UseLogminerReader": boolean,
    "Username": "string"
},
"Password": "string",
"Port": number,
"PostgreSQLSettings": {
    "AfterConnectScript": "string",
    "CaptureDdls": boolean,
    "ConnectionTimeout": number,

```

```

    "DatabaseName": "string",
    "DdlArtifactsSchema": "string",
    "ExecuteTimeout": number,
    "FailTasksOnLobTruncation": boolean,
    "ForceLOBNullable": boolean,
    "HeartbeatEnable": boolean,
    "HeartbeatFrequency": number,
    "HeartbeatSchema": "string",
    "LoadUsingCsv": boolean,
    "Password": "string",
    "PluginName": "string",
    "Port": number,
    "ServerName": "string",
    "SlotName": "string",
    "UnboundedVarcharMaxSize": number,
    "Username": "string"
  },
  "RedshiftSettings": {
    "AcceptAnyDate": boolean,
    "AfterConnectScript": "string",
    "BucketFolder": "string",
    "BucketName": "string",
    "ConnectionTimeout": number,
    "DatabaseName": "string",
    "DateFormat": "string",
    "EmptyAsNull": boolean,
    "EncryptionMode": "string",
    "FileTransferUploadStreams": number,
    "LoadTimeout": number,
    "MaxFileSize": number,
    "Password": "string",
    "Port": number,
    "RemoveQuotes": boolean,
    "ReplaceChars": "string",
    "ReplaceInvalidChars": "string",
    "ServerName": "string",
    "ServerSideEncryptionKmsKeyId": "string",
    "ServiceAccessRoleArn": "string",
    "TimeFormat": "string",
    "TrimBlanks": boolean,
    "TruncateColumns": boolean,
    "Username": "string",
    "WriteBufferSize": number
  },
  "S3Settings": {
    "BucketFolder": "string",
    "BucketName": "string",
    "CompressionType": "string",
    "CsvDelimiter": "string",
    "CsvRowDelimiter": "string",
    "DataFormat": "string",
    "DataPageSize": number,
    "DictPageSizeLimit": number,
    "EnableStatistics": boolean,
    "EncodingType": "string",
    "EncryptionMode": "string",
    "ExternalTableDefinition": "string",
    "ParquetVersion": "string",
    "RowGroupLength": number,
    "ServerSideEncryptionKmsKeyId": "string",
    "ServiceAccessRoleArn": "string"
  },
  "ServerName": "string",
  "ServiceAccessRoleArn": "string",
  "SslMode": "string",
  "SybaseSettings": {

```

```
    "ConnectionTimeout": number,  
    "DatabaseName": "string",  
    "Password": "string",  
    "Port": number,  
    "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. 260).

The request accepts the following data in JSON format.

CertificateArn (p. 8)

The Amazon Resource Name (ARN) for the certificate.

Type: String

Required: No

DatabaseName (p. 8)

The name of the endpoint database.

Type: String

Required: No

DmsTransferSettings (p. 8)

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

Possible attributes include the following:

- `serviceAccessRoleArn` - The IAM role that has permission to access the Amazon S3 bucket.
- `bucketName` - The name of the S3 bucket to use.
- `compressionType` - An optional parameter to use GZIP to compress the target files. To use GZIP, set this value to `NONE` (the default). To keep the files uncompressed, don't use this value.

Shorthand syntax for these attributes is as follows:

`ServiceAccessRoleArn=string,BucketName=string,CompressionType=string`

JSON syntax for these attributes is as follows: { "ServiceAccessRoleArn": "string", "BucketName": "string", "CompressionType": "none"|"gzip" }

Type: [DmsTransferSettings](#) (p. 196) object

Required: No

DynamoDbSettings (p. 8)

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

Type: [DynamoDbSettings \(p. 197\)](#) object

Required: No

ElasticsearchSettings (p. 8)

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 User Guide*.

Type: [ElasticsearchSettings \(p. 198\)](#) object

Required: No

EndpointIdentifier (p. 8)

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

Type: String

Required: Yes

EndpointType (p. 8)

The type of endpoint.

Type: String

Valid Values: `source` | `target`

Required: Yes

EngineName (p. 8)

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`, and `sqlserver`.

Type: String

Required: Yes

ExternalTableDefinition (p. 8)

The external table definition.

Type: String

Required: No

ExtraConnectionAttributes (p. 8)

Additional attributes associated with the connection.

Type: String

Required: No

IBMDB2Settings (p. 8)

Type: [IBMDB2Settings \(p. 211\)](#) object

Required: No

KinesisSettings (p. 8)

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

Type: [KinesisSettings \(p. 212\)](#) object

Required: No

KmsKeyId (p. 8)

The AWS KMS key identifier to use to encrypt the connection parameters. 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. 8)

Type: [MicrosoftSQLServerSettings \(p. 213\)](#) object

Required: No

MongoDbSettings (p. 8)

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 \(p. 215\)](#) object

Required: No

MySQLSettings (p. 8)

Type: [MySQLSettings \(p. 218\)](#) object

Required: No

OracleSettings (p. 8)

Type: [OracleSettings \(p. 220\)](#) object

Required: No

Password (p. 8)

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

Type: String

Required: No

Port (p. 8)

The port used by the endpoint database.

Type: Integer

Required: No

PostgreSQLSettings (p. 8)

Type: [PostgreSQLSettings \(p. 227\)](#) object

Required: No

RedshiftSettings (p. 8)

Type: [RedshiftSettings \(p. 229\)](#) object

Required: No

S3Settings (p. 8)

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 \(p. 248\)](#) object

Required: No

ServerName (p. 8)

The name of the server where the endpoint database resides.

Type: String

Required: No

ServiceAccessRoleArn (p. 8)

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

Type: String

Required: No

SslMode (p. 8)

The Secure Sockets Layer (SSL) mode to use for the SSL connection. The SSL mode can be one of four values: `none`, `require`, `verify-ca`, `verify-full`. The default value is `none`.

Type: String

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

Required: No

SybaseSettings (p. 8)

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

Required: No

Tags (p. 8)

Tags to be added to the endpoint.

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

Required: No

Username (p. 8)

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"
    },
    "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": {
      "DatabaseName": "string",
      "ExecuteTimeout": number,
      "Password": "string",
      "Port": number,
      "ServerName": "string",
      "SetDataCaptureChanges": boolean,
      "Username": "string"
    },
    "KinesisSettings": {
      "MessageFormat": "string",
      "ServiceAccessRoleArn": "string",
      "StreamArn": "string"
    },
    "KmsKeyId": "string",
    "MicrosoftSQLServerSettings": {
      "ActivateSafeguard": boolean,
      "BcpPacketSize": number,
      "ConnectionTimeout": number,
      "DatabaseName": "string",
      "IgnoreDdl": boolean,
      "IgnoreMsReplicationEnablement": boolean,
      "Password": "string",
      "ReadBackupOnly": boolean,
      "SafeguardFrequency": number,
      "SafeguardPolicy": "string",
      "ServerName": "string",
      "UseBcpCdc": boolean,
      "UseBcpFullLoad": boolean,
      "Username": "string"
    },
    "MongoDbSettings": {
```

```

    "AuthMechanism": "string",
    "AuthSource": "string",
    "AuthType": "string",
    "DatabaseName": "string",
    "DocsToInvestigate": "string",
    "ExtractDocId": "string",
    "KmsKeyId": "string",
    "NestingLevel": "string",
    "Password": "string",
    "Port": number,
    "ServerName": "string",
    "Username": "string"
  },
  "MySQLSettings": {
    "AfterConnectScript": "string",
    "CharsetMapping": "string",
    "ConnectionTimeout": number,
    "DatabaseName": "string",
    "EventsPollInterval": number,
    "LoadUsingCsv": boolean,
    "MinPollInterval": number,
    "ParallelLoadThreads": number,
    "Password": "string",
    "Port": number,
    "ReadTimeout": number,
    "ServerName": "string",
    "ServerTimezone": "string",
    "UnloadTimeout": number,
    "Username": "string",
    "WriteTimeout": number
  },
  "OracleSettings": {
    "AddSupplementalLogging": boolean,
    "AlwaysReplaceEmptyString": boolean,
    "ArchivedLogDestId": number,
    "ArchivedLogsOnly": boolean,
    "AsmPassword": "string",
    "AsmServer": "string",
    "AsmUser": "string",
    "BatchSize": number,
    "CharacterSet": "string",
    "CharLengthSemantics": "string",
    "CopyOnlineRedoFromAsmToTempFolder": boolean,
    "CopyToTempFolder": "string",
    "DatabaseName": "string",
    "DirectPathParallelLoad": boolean,
    "EmptyStringValue": "string",
    "ExposeViews": boolean,
    "FailTasksOnLobTruncation": boolean,
    "NumberDatatypeScale": number,
    "Password": "string",
    "Port": number,
    "ReadTableSpaceName": boolean,
    "RetryInterval": number,
    "RetryTimeoutInMinutes": number,
    "SecurityDbEncryption": "string",
    "SecurityDbEncryptionName": "string",
    "ServerName": "string",
    "StandbyDelayTime": number,
    "UseBFile": boolean,
    "UseDirectPathFullLoad": boolean,
    "UseLogminerReader": boolean,
    "Username": "string"
  },
  "Port": number,
  "PostgreSQLSettings": {

```

```

    "AfterConnectScript": "string",
    "CaptureDdls": boolean,
    "ConnectionTimeout": number,
    "DatabaseName": "string",
    "DdlArtifactsSchema": "string",
    "ExecuteTimeout": number,
    "FailTasksOnLobTruncation": boolean,
    "ForceLOBNullable": boolean,
    "HeartbeatEnable": boolean,
    "HeartbeatFrequency": number,
    "HeartbeatSchema": "string",
    "LoadUsingCsv": boolean,
    "Password": "string",
    "PluginName": "string",
    "Port": number,
    "ServerName": "string",
    "SlotName": "string",
    "UnboundedVarcharMaxSize": number,
    "Username": "string"
  },
  "RedshiftSettings": {
    "AcceptAnyDate": boolean,
    "AfterConnectScript": "string",
    "BucketFolder": "string",
    "BucketName": "string",
    "ConnectionTimeout": number,
    "DatabaseName": "string",
    "DateFormat": "string",
    "EmptyAsNull": boolean,
    "EncryptionMode": "string",
    "FileTransferUploadStreams": number,
    "LoadTimeout": number,
    "MaxFileSize": number,
    "Password": "string",
    "Port": number,
    "RemoveQuotes": boolean,
    "ReplaceChars": "string",
    "ReplaceInvalidChars": "string",
    "ServerName": "string",
    "ServerSideEncryptionKmsKeyId": "string",
    "ServiceAccessRoleArn": "string",
    "TimeFormat": "string",
    "TrimBlanks": boolean,
    "TruncateColumns": boolean,
    "Username": "string",
    "WriteBufferSize": number
  },
  "S3Settings": {
    "BucketFolder": "string",
    "BucketName": "string",
    "CompressionType": "string",
    "CsvDelimiter": "string",
    "CsvRowDelimiter": "string",
    "DateFormat": "string",
    "DataPageSize": number,
    "DictPageSizeLimit": number,
    "EnableStatistics": boolean,
    "EncodingType": "string",
    "EncryptionMode": "string",
    "ExternalTableDefinition": "string",
    "ParquetVersion": "string",
    "RowGroupLength": number,
    "ServerSideEncryptionKmsKeyId": "string",
    "ServiceAccessRoleArn": "string"
  },
  "ServerName": "string",

```

```
"ServiceAccessRoleArn": "string",
"SslMode": "string",
"Status": "string",
"SybaseSettings": {
  "ConnectionTimeout": number,
  "DatabaseName": "string",
  "Password": "string",
  "Port": number,
  "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. 15)

The endpoint that was created.

Type: [Endpoint \(p. 199\)](#) object

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 262\)](#).

AccessDeniedFault

AWS DMS was denied access to the endpoint.

HTTP Status Code: 400

InvalidResourceStateFault

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

HTTP Status Code: 400

KMSKeyNotAccessibleFault

AWS DMS cannot access the KMS key.

HTTP Status Code: 400

ResourceAlreadyExistsFault

The resource you are attempting to create already exists.

HTTP Status Code: 400

ResourceNotFoundFault

The resource could not be found.

HTTP Status Code: 400

ResourceQuotaExceededFault

The quota for this resource quota has been exceeded.

HTTP Status Code: 400

Example

Sample Request

```
POST / HTTP/1.1
Host: dms.<region>.<domain>
x-amz-Date: <Date>
Authorization: AWS4-HMAC-SHA256 Credential=<Credential>,
SignedHeaders=contenttype;date;host;user-agent;x-amz-date;x-amz-target;x-amzn-
requestid,Signature=<Signature>
User-Agent: <UserAgentString>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Connection: Keep-Alive
X-Amz-Target: AmazonDMSv20160101.CreateEndpoint
{
  "EndpointIdentifier":"test-endpoint-1",
    "  EndpointType":"source",
    "  EngineName":"mysql",
  "Username":"username",
  "Password":"password",
  "ServerName":"test-source.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:RAAR3R22XSH46S3PWLC3NJAWKM",
    "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](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V2](#)

CreateEventSubscription

Creates an AWS DMS event notification subscription.

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

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

Request Syntax

```
{
  "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. 260).

The request accepts the following data in JSON format.

Enabled (p. 21)

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. 21)

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

Type: Array of strings

Required: No

SnsTopicArn (p. 21)

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. 21)

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

Type: Array of strings

Required: No

SourceType (p. 21)

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

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

Type: String

Required: No

SubscriptionName (p. 21)

The name of the AWS DMS event notification subscription.

Constraints: The name must be less than 255 characters.

Type: String

Required: Yes

Tags (p. 21)

A tag to be attached to the event subscription.

Type: Array of [Tag \(p. 258\)](#) 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. 22)

The event subscription that was created.

Type: [EventSubscription \(p. 208\)](#) object

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 262\)](#).

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

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

CreateReplicationInstance

Creates the replication instance using the specified parameters.

Request Syntax

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

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 260).

The request accepts the following data in JSON format.

AllocatedStorage (p. 25)

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

Type: Integer

Required: No

AutoMinorVersionUpgrade (p. 25)

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

Default: `true`

Type: Boolean

Required: No

AvailabilityZone (p. 25)

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

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

Example: `us-east-1d`

Type: String

Required: No

DnsNameServers (p. 25)

A list of DNS name servers supported for the replication instance.

Type: String

Required: No

EngineVersion (p. 25)

The engine version number of the replication instance.

Type: String

Required: No

KmsKeyId (p. 25)

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

MultiAZ (p. 25)

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

Type: Boolean

Required: No

PreferredMaintenanceWindow (p. 25)

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 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. 25)

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. 25)

The compute and memory capacity of the replication instance as specified by the replication instance class.

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

Type: String

Required: Yes

ReplicationInstanceIdentifier (p. 25)

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

Constraints:

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

Example: `myrepinstance`

Type: String

Required: Yes

ReplicationSubnetGroupIdentifier (p. 25)

A subnet group to associate with the replication instance.

Type: String

Required: No

Tags (p. 25)

Tags to be associated with the replication instance.

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

Required: No

VpcSecurityGroupIds (p. 25)

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. 27)

The replication instance that was created.

Type: [ReplicationInstance \(p. 233\)](#) object

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 262\)](#).

AccessDeniedFault

AWS DMS was denied access to the endpoint.

HTTP Status Code: 400

InsufficientResourceCapacityFault

There are not enough resources allocated to the database migration.

HTTP Status Code: 400

InvalidResourceStateFault

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

HTTP Status Code: 400

InvalidSubnet

The subnet provided is invalid.

HTTP Status Code: 400

KMSKeyNotAccessibleFault

AWS DMS cannot access the KMS key.

HTTP Status Code: 400

ReplicationSubnetGroupDoesNotCoverEnoughAZs

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

HTTP Status Code: 400

ResourceAlreadyExistsFault

The resource you are attempting to create already exists.

HTTP Status Code: 400

ResourceNotFoundFault

The resource could not be found.

HTTP Status Code: 400

ResourceQuotaExceededFault

The quota for this resource quota has been exceeded.

HTTP Status Code: 400

StorageQuotaExceededFault

The storage quota has been exceeded.

HTTP Status Code: 400

Example

Sample Request


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

Sample Response

```
HTTP/1.1 200 OK
x-amzn-RequestId: <RequestId>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Date: <Date>
{
  "ReplicationInstance":{
    "PubliclyAccessible":true,
    "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](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V2](#)

CreateReplicationSubnetGroup

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

Request Syntax

```
{
  "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. 260).

The request accepts the following data in JSON format.

ReplicationSubnetGroupDescription (p. 32)

The description for the subnet group.

Type: String

Required: Yes

ReplicationSubnetGroupIdentifier (p. 32)

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. 32)

The EC2 subnet IDs for the subnet group.

Type: Array of strings

Required: Yes

Tags (p. 32)

The tag to be assigned to the subnet group.

Type: Array of [Tag](#) (p. 258) 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. 33)

The replication subnet group that was created.

Type: [ReplicationSubnetGroup \(p. 239\)](#) object

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 262\)](#).

AccessDeniedFault

AWS DMS was denied access to the endpoint.

HTTP Status Code: 400

InvalidSubnet

The subnet provided is invalid.

HTTP Status Code: 400

ReplicationSubnetGroupDoesNotCoverEnoughAZs

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

HTTP Status Code: 400

ResourceAlreadyExistsFault

The resource you are attempting to create already exists.

HTTP Status Code: 400

ResourceNotFoundFault

The resource could not be found.

HTTP Status Code: 400

ResourceQuotaExceededFault

The quota for this resource quota has been exceeded.

HTTP Status Code: 400

Example

Sample Request

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

Sample Response

```
HTTP/1.1 200 OK
x-amzn-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](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V2](#)

CreateReplicationTask

Creates a replication task using the specified parameters.

Request Syntax

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

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 260).

The request accepts the following data in JSON format.

CdcStartPosition (p. 36)

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

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

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

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

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

Type: String

Required: No

CdcStartTime (p. 36)

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. 36)

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

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

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

Type: String

Required: No

MigrationType (p. 36)

The migration type.

Type: String

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

Required: Yes

ReplicationInstanceArn (p. 36)

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

Type: String

Required: Yes

ReplicationTaskIdentifier (p. 36)

The replication task identifier.

Constraints:

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

Type: String

Required: Yes

ReplicationTaskSettings (p. 36)

Settings for the task, such as target metadata settings. For a complete list of task settings, see [Task Settings for AWS Database Migration Service Tasks](#) in the *AWS Database Migration User Guide*.

Type: String

Required: No

SourceEndpointArn (p. 36)

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

Type: String

Required: Yes

TableMappings (p. 36)

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

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

Type: String

Required: Yes

Tags (p. 36)

Tags to be added to the replication instance.

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

Required: No

TargetEndpointArn (p. 36)

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

Type: String

Required: Yes

Response Syntax

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

Response Elements

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

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

ReplicationTask (p. 38)

The replication task that was created.

Type: [ReplicationTask](#) (p. 240) object

Errors

For information about the errors that are common to all actions, see [Common Errors](#) (p. 262).

AccessDeniedFault

AWS DMS was denied access to the endpoint.

HTTP Status Code: 400

InvalidResourceStateFault

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

HTTP Status Code: 400

KMSKeyNotAccessibleFault

AWS DMS cannot access the KMS key.

HTTP Status Code: 400

ResourceAlreadyExistsFault

The resource you are attempting to create already exists.

HTTP Status Code: 400

ResourceNotFoundFault

The resource could not be found.

HTTP Status Code: 400

ResourceQuotaExceededFault

The quota for this resource quota has been exceeded.

HTTP Status Code: 400

Example

Sample Request

```
POST / HTTP/1.1
Host: dms.<region>.<domain>
x-amz-Date: <Date>
Authorization: AWS4-HMAC-SHA256 Credential=<Credential>,
  SignedHeaders=contenttype;date;host;user-agent;x-amz-date;x-amz-target;x-amzn-
  requestid,Signature=<Signature>
User-Agent: <UserAgentString>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Connection: Keep-Alive
X-Amz-Target: AmazonDMSv20160101.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 \"TableMappings\": [
  \n {\n \"Type\": \"Include\", \n \"SourceSchema\": \"/\", \n \"SourceTable\": \"/\", \n
  }\n ]\n}\n\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:GVBUJQXJZASXWHTWCLN2WNT57E",
    "ReplicationTaskSettings":{"\"TargetMetadata\":
      {\n\"TargetSchema\": \"\", \n\"SupportLobs\":true, \n\"FullLobMode\":
      true, \n\"LobChunkSize\":64, \n\"LimitedSizeLobMode\":
      false, \n\"LobMaxSize\":0}, \n\"FullLoadSettings\":{
        \n\"FullLoadEnabled\":true,
        \n\"TargetTablePrepMode\": \"DROP_AND_CREATE\",
        \n\"CreatePkAfterFullLoad\":false,
        \n\"StopTaskCachedChangesApplied\":false,
        \n\"StopTaskCachedChangesNotApplied\":false,
        \n\"ResumeEnabled\":false,
        \n\"ResumeMinTableSize\":100000,
        \n\"ResumeOnlyClusteredPKTables\":true,
        \n\"MaxFullLoadSubTasks\":8,
        \n\"TransactionConsistencyTimeout\":600,
        \n\"CommitRate\":10000
      },
      \n\"Logging\":{
        \n\"EnableLogging\":false
      }
    }
  }
}
```

See Also

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

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

DeleteCertificate

Deletes the specified certificate.

Request Syntax

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

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 260).

The request accepts the following data in JSON format.

CertificateArn (p. 42)

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. 42)

The Secure Sockets Layer (SSL) certificate.

Type: [Certificate](#) (p. 192) object

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 262\)](#).

InvalidResourceStateFault

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

HTTP Status Code: 400

ResourceNotFoundFault

The resource could not be found.

HTTP Status Code: 400

See Also

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

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

DeleteEndpoint

Deletes the specified endpoint.

Note

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

Request Syntax

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

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 260).

The request accepts the following data in JSON format.

EndpointArn (p. 44)

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"
    },
    "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": {
```

```

    "DatabaseName": "string",
    "ExecuteTimeout": number,
    "Password": "string",
    "Port": number,
    "ServerName": "string",
    "SetDataCaptureChanges": boolean,
    "Username": "string"
  },
  "KinesisSettings": {
    "MessageFormat": "string",
    "ServiceAccessRoleArn": "string",
    "StreamArn": "string"
  },
  "KmsKeyId": "string",
  "MicrosoftSQLServerSettings": {
    "ActivateSafeguard": boolean,
    "BcpPacketSize": number,
    "ConnectionTimeout": number,
    "DatabaseName": "string",
    "IgnoreDdl": boolean,
    "IgnoreMsReplicationEnablement": boolean,
    "Password": "string",
    "ReadBackupOnly": boolean,
    "SafeguardFrequency": number,
    "SafeguardPolicy": "string",
    "ServerName": "string",
    "UseBcpCdc": boolean,
    "UseBcpFullLoad": boolean,
    "Username": "string"
  },
  "MongoDbSettings": {
    "AuthMechanism": "string",
    "AuthSource": "string",
    "AuthType": "string",
    "DatabaseName": "string",
    "DocsToInvestigate": "string",
    "ExtractDocId": "string",
    "KmsKeyId": "string",
    "NestingLevel": "string",
    "Password": "string",
    "Port": number,
    "ServerName": "string",
    "Username": "string"
  },
  "MySQLSettings": {
    "AfterConnectScript": "string",
    "CharsetMapping": "string",
    "ConnectionTimeout": number,
    "DatabaseName": "string",
    "EventsPollInterval": number,
    "LoadUsingCsv": boolean,
    "MinPollInterval": number,
    "ParallelLoadThreads": number,
    "Password": "string",
    "Port": number,
    "ReadTimeout": number,
    "ServerName": "string",
    "ServerTimezone": "string",
    "UnloadTimeout": number,
    "Username": "string",
    "WriteTimeout": number
  },
  "OracleSettings": {
    "AddSupplementalLogging": boolean,
    "AlwaysReplaceEmptyString": boolean,
    "ArchivedLogDestId": number,

```



```

    "ArchivedLogsOnly": boolean,
    "AsmPassword": "string",
    "AsmServer": "string",
    "AsmUser": "string",
    "BatchSize": number,
    "CharacterSet": "string",
    "CharLengthSemantics": "string",
    "CopyOnlineRedoFromAsmToTempFolder": boolean,
    "CopyToTempFolder": "string",
    "DatabaseName": "string",
    "DirectPathParallelLoad": boolean,
    "EmptyStringValue": "string",
    "ExposeViews": boolean,
    "FailTasksOnLobTruncation": boolean,
    "NumberDatatypeScale": number,
    "Password": "string",
    "Port": number,
    "ReadTableSpaceName": boolean,
    "RetryInterval": number,
    "RetryTimeoutInMinutes": number,
    "SecurityDbEncryption": "string",
    "SecurityDbEncryptionName": "string",
    "ServerName": "string",
    "StandbyDelayTime": number,
    "UseBFile": boolean,
    "UseDirectPathFullLoad": boolean,
    "UseLogminerReader": boolean,
    "Username": "string"
  },
  "Port": number,
  "PostgreSQLSettings": {
    "AfterConnectScript": "string",
    "CaptureDdls": boolean,
    "ConnectionTimeout": number,
    "DatabaseName": "string",
    "DdlArtifactsSchema": "string",
    "ExecuteTimeout": number,
    "FailTasksOnLobTruncation": boolean,
    "ForceLOBNullable": boolean,
    "HeartbeatEnable": boolean,
    "HeartbeatFrequency": number,
    "HeartbeatSchema": "string",
    "LoadUsingCsv": boolean,
    "Password": "string",
    "PluginName": "string",
    "Port": number,
    "ServerName": "string",
    "SlotName": "string",
    "UnboundedVarcharMaxSize": number,
    "Username": "string"
  },
  "RedshiftSettings": {
    "AcceptAnyDate": boolean,
    "AfterConnectScript": "string",
    "BucketFolder": "string",
    "BucketName": "string",
    "ConnectionTimeout": number,
    "DatabaseName": "string",
    "DateFormat": "string",
    "EmptyAsNull": boolean,
    "EncryptionMode": "string",
    "FileTransferUploadStreams": number,
    "LoadTimeout": number,
    "MaxFileSize": number,
    "Password": "string",
    "Port": number,

```

```

        "RemoveQuotes": boolean,
        "ReplaceChars": "string",
        "ReplaceInvalidChars": "string",
        "ServerName": "string",
        "ServerSideEncryptionKmsKeyId": "string",
        "ServiceAccessRoleArn": "string",
        "TimeFormat": "string",
        "TrimBlanks": boolean,
        "TruncateColumns": boolean,
        "Username": "string",
        "WriteBufferSize": number
    },
    "S3Settings": {
        "BucketFolder": "string",
        "BucketName": "string",
        "CompressionType": "string",
        "CsvDelimiter": "string",
        "CsvRowDelimiter": "string",
        "DataFormat": "string",
        "DataPageSize": number,
        "DictPageSizeLimit": number,
        "EnableStatistics": boolean,
        "EncodingType": "string",
        "EncryptionMode": "string",
        "ExternalTableDefinition": "string",
        "ParquetVersion": "string",
        "RowGroupLength": number,
        "ServerSideEncryptionKmsKeyId": "string",
        "ServiceAccessRoleArn": "string"
    },
    "ServerName": "string",
    "ServiceAccessRoleArn": "string",
    "SslMode": "string",
    "Status": "string",
    "SybaseSettings": {
        "ConnectionTimeout": number,
        "DatabaseName": "string",
        "Password": "string",
        "Port": number,
        "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. 44)

The endpoint that was deleted.

Type: [Endpoint \(p. 199\)](#) object

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 262\)](#).

InvalidResourceStateFault

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

HTTP Status Code: 400

ResourceNotFoundFault

The resource could not be found.

HTTP Status Code: 400

Example

Sample Request

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

Sample Response

```
HTTP/1.1 200 OK
x-amzn-RequestId: <RequestId>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Date: <Date>
{
  "Endpoint":{
    "Username":"username",
    "Status":"deleting",
    "EndpointArn":"arn:aws:dms:us-east-
1:123456789012:endpoint:RAAR3R22XSH46S3PWLC3NJAWKM",
    "ServerName":"apurvap-source.cxln7iyxx1lo.us-west-
2.rds.amazonaws.com",
    "EndpointType":"TARGET",
    "KmsKeyId":"arn:aws:kms:us-east-1:123456789012:key/4dc17316-5543-
4ded-b1e3-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](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V2](#)

DeleteEventSubscription

Deletes an AWS DMS event subscription.

Request Syntax

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

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 260).

The request accepts the following data in JSON format.

SubscriptionName (p. 50)

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. 50)

The event subscription that was deleted.

Type: [EventSubscription](#) (p. 208) object

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 262\)](#).

InvalidResourceStateFault

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

HTTP Status Code: 400

ResourceNotFoundFault

The resource could not be found.

HTTP Status Code: 400

See Also

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

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

DeleteReplicationInstance

Deletes the specified replication instance.

Note

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

Request Syntax

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

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 260).

The request accepts the following data in JSON format.

ReplicationInstanceArn (p. 52)

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. 52)

The replication instance that was deleted.

Type: [ReplicationInstance \(p. 233\)](#) object

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 262\)](#).

InvalidResourceStateFault

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

HTTP Status Code: 400

ResourceNotFoundFault

The resource could not be found.

HTTP Status Code: 400

Example

Sample Request


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

Sample Response

```
HTTP/1.1 200 OK
x-amzn-RequestId: <RequestId>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Date: <Date>
{
  "ReplicationInstance":{
    "AvailabilityZone":"us-east-1c",
    "ReplicationInstancePrivateIpAddress":"172.31.15.23",
    "ReplicationInstanceArn":"arn:aws:dms:us-east-
1:123456789012:rep:PWEBBEUNOLU7VEB2OHTEH4I4GQ",
    "ReplicationInstanceClass":"dms.t2.small",
    "ReplicationSubnetGroup":{
      "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](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V2](#)

DeleteReplicationSubnetGroup

Deletes a subnet group.

Request Syntax

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

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 260).

The request accepts the following data in JSON format.

ReplicationSubnetGroupIdentifier (p. 56)

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. 262).

InvalidResourceStateFault

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

HTTP Status Code: 400

ResourceNotFoundFault

The resource could not be found.

HTTP Status Code: 400

Example

Sample Request

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

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

Sample Response

Empty

See Also

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

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

DeleteReplicationTask

Deletes the specified replication task.

Request Syntax

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

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 260).

The request accepts the following data in JSON format.

ReplicationTaskArn (p. 58)

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,  
      "FullLoadProgressPercent": number,  
      "TablesErrored": number,  
      "TablesLoaded": number,  
      "TablesLoading": number,  
      "TablesQueued": number  
    },  
    "SourceEndpointArn": "string",  
    "Status": "string",  
    "StopReason": "string",  
    "TableMappings": "string",  
    "TargetEndpointArn": "string"  
  }  
}
```

Response Elements

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

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

ReplicationTask (p. 58)

The deleted replication task.

Type: [ReplicationTask \(p. 240\)](#) object

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 262\)](#).

InvalidResourceStateFault

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

HTTP Status Code: 400

ResourceNotFoundFault

The resource could not be found.

HTTP Status Code: 400

See Also

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

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

DescribeAccountAttributes

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

This command does not take any parameters.

Response Syntax

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

Response Elements

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

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

AccountQuotas (p. 60)

Account quota information.

Type: Array of [AccountQuota \(p. 190\)](#) objects

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 262\)](#).

Example

Sample Request

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

Sample Response

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

See Also

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

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

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

DescribeCertificates

Provides a description of the certificate.

Request Syntax

```
{
  "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. 260).

The request accepts the following data in JSON format.

Filters (p. 63)

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

Type: Array of [Filter](#) (p. 210) objects

Required: No

Marker (p. 63)

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. 63)

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. 63)

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

Type: Array of [Certificate \(p. 192\)](#) objects

Marker (p. 63)

The pagination token.

Type: String

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 262\)](#).

ResourceNotFoundFault

The resource could not be found.

HTTP Status Code: 400

See Also

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

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

- [AWS SDK for Ruby V2](#)

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. 260).

The request accepts the following data in JSON format.

[Filters](#) (p. 66)

The filters applied to the connection.

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

Type: Array of [Filter](#) (p. 210) objects

Required: No

[Marker](#) (p. 66)

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. 66)

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. 67)

A description of the connections.

Type: Array of [Connection \(p. 194\)](#) objects

Marker (p. 67)

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 \(p. 262\)](#).

ResourceNotFoundFault

The resource could not be found.

HTTP Status Code: 400

Example

Sample Request

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

```
SignedHeaders=contenttype;date;host;user-agent;x-amz-date;x-amz-target;x-amzn-requestid,Signature=<Signature>
User-Agent: <UserAgentString>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Connection: Keep-Alive
X-Amz-Target: AmazonDMSv20160101.DescribeConnections
{
  "Filters":[
    {
      "Name":"endpoint-arn",
      "Values":[
        "arn:aws:dms:us-east-1:123456789012:endpoint: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: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](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)

- [AWS SDK for Ruby V2](#)

DescribeEndpoints

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

Request Syntax

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

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters \(p. 260\)](#).

The request accepts the following data in JSON format.

Filters (p. 70)

Filters applied to the describe action.

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

Type: Array of [Filter \(p. 210\)](#) objects

Required: No

Marker (p. 70)

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. 70)

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

Default: 100

Constraints: Minimum 20, maximum 100.

Type: Integer

Required: No

Response Syntax

```
{
```

```

"Endpoints": [
  {
    "CertificateArn": "string",
    "DatabaseName": "string",
    "DmsTransferSettings": {
      "BucketName": "string",
      "ServiceAccessRoleArn": "string"
    },
    "DynamoDbSettings": {
      "ServiceAccessRoleArn": "string"
    },
    "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": {
      "DatabaseName": "string",
      "ExecuteTimeout": number,
      "Password": "string",
      "Port": number,
      "ServerName": "string",
      "SetDataCaptureChanges": boolean,
      "Username": "string"
    },
    "KinesisSettings": {
      "MessageFormat": "string",
      "ServiceAccessRoleArn": "string",
      "StreamArn": "string"
    },
    "KmsKeyId": "string",
    "MicrosoftSQLServerSettings": {
      "ActivateSafeguard": boolean,
      "BcpPacketSize": number,
      "ConnectionTimeout": number,
      "DatabaseName": "string",
      "IgnoreDdl": boolean,
      "IgnoreMsReplicationEnablement": boolean,
      "Password": "string",
      "ReadBackupOnly": boolean,
      "SafeguardFrequency": number,
      "SafeguardPolicy": "string",
      "ServerName": "string",
      "UseBcpCdc": boolean,
      "UseBcpFullLoad": boolean,
      "Username": "string"
    },
    "MongoDbSettings": {
      "AuthMechanism": "string",
      "AuthSource": "string",
      "AuthType": "string",
      "DatabaseName": "string",
      "DocsToInvestigate": "string",
      "ExtractDocId": "string",
      "KmsKeyId": "string",
      "NestingLevel": "string",
      "Password": "string",

```

```

    "Port": number,
    "ServerName": "string",
    "Username": "string"
  },
  "MySQLSettings": {
    "AfterConnectScript": "string",
    "CharsetMapping": "string",
    "ConnectionTimeout": number,
    "DatabaseName": "string",
    "EventsPollInterval": number,
    "LoadUsingCsv": boolean,
    "MinPollInterval": number,
    "ParallelLoadThreads": number,
    "Password": "string",
    "Port": number,
    "ReadTimeout": number,
    "ServerName": "string",
    "ServerTimezone": "string",
    "UnloadTimeout": number,
    "Username": "string",
    "WriteTimeout": number
  },
  "OracleSettings": {
    "AddSupplementalLogging": boolean,
    "AlwaysReplaceEmptyString": boolean,
    "ArchivedLogDestId": number,
    "ArchivedLogsOnly": boolean,
    "AsmPassword": "string",
    "AsmServer": "string",
    "AsmUser": "string",
    "BatchSize": number,
    "CharacterSet": "string",
    "CharLengthSemantics": "string",
    "CopyOnlineRedoFromAsmToTempFolder": boolean,
    "CopyToTempFolder": "string",
    "DatabaseName": "string",
    "DirectPathParallelLoad": boolean,
    "EmptyStringValue": "string",
    "ExposeViews": boolean,
    "FailTasksOnLobTruncation": boolean,
    "NumberDatatypeScale": number,
    "Password": "string",
    "Port": number,
    "ReadTableSpaceName": boolean,
    "RetryInterval": number,
    "RetryTimeoutInMinutes": number,
    "SecurityDbEncryption": "string",
    "SecurityDbEncryptionName": "string",
    "ServerName": "string",
    "StandbyDelayTime": number,
    "UseBFile": boolean,
    "UseDirectPathFullLoad": boolean,
    "UseLogminerReader": boolean,
    "Username": "string"
  },
  "Port": number,
  "PostgreSQLSettings": {
    "AfterConnectScript": "string",
    "CaptureDdls": boolean,
    "ConnectionTimeout": number,
    "DatabaseName": "string",
    "DdlArtifactsSchema": "string",
    "ExecuteTimeout": number,
    "FailTasksOnLobTruncation": boolean,
    "ForceLOBNullable": boolean,
    "HeartbeatEnable": boolean,

```

```

    "HeartbeatFrequency": number,
    "HeartbeatSchema": "string",
    "LoadUsingCsv": boolean,
    "Password": "string",
    "PluginName": "string",
    "Port": number,
    "ServerName": "string",
    "SlotName": "string",
    "UnboundedVarcharMaxSize": number,
    "Username": "string"
  },
  "RedshiftSettings": {
    "AcceptAnyDate": boolean,
    "AfterConnectScript": "string",
    "BucketFolder": "string",
    "BucketName": "string",
    "ConnectionTimeout": number,
    "DatabaseName": "string",
    "DateFormat": "string",
    "EmptyAsNull": boolean,
    "EncryptionMode": "string",
    "FileTransferUploadStreams": number,
    "LoadTimeout": number,
    "MaxFileSize": number,
    "Password": "string",
    "Port": number,
    "RemoveQuotes": boolean,
    "ReplaceChars": "string",
    "ReplaceInvalidChars": "string",
    "ServerName": "string",
    "ServerSideEncryptionKmsKeyId": "string",
    "ServiceAccessRoleArn": "string",
    "TimeFormat": "string",
    "TrimBlanks": boolean,
    "TruncateColumns": boolean,
    "Username": "string",
    "WriteBufferSize": number
  },
  "S3Settings": {
    "BucketFolder": "string",
    "BucketName": "string",
    "CompressionType": "string",
    "CsvDelimiter": "string",
    "CsvRowDelimiter": "string",
    "DateFormat": "string",
    "DataPageSize": number,
    "DictPageSizeLimit": number,
    "EnableStatistics": boolean,
    "EncodingType": "string",
    "EncryptionMode": "string",
    "ExternalTableDefinition": "string",
    "ParquetVersion": "string",
    "RowGroupLength": number,
    "ServerSideEncryptionKmsKeyId": "string",
    "ServiceAccessRoleArn": "string"
  },
  "ServerName": "string",
  "ServiceAccessRoleArn": "string",
  "SslMode": "string",
  "Status": "string",
  "SybaseSettings": {
    "ConnectionTimeout": number,
    "DatabaseName": "string",
    "Password": "string",
    "Port": number,
    "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. 70)

Endpoint description.

Type: Array of [Endpoint \(p. 199\)](#) objects

Marker (p. 70)

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 \(p. 262\)](#).

ResourceNotFoundFault

The resource could not be found.

HTTP Status Code: 400

Example

Sample Request

```
POST / HTTP/1.1
Host: dms.<region>.<domain>
x-amz-Date: <Date>
Authorization: AWS4-HMAC-SHA256
Credential=<Credential>,
SignedHeaders=contenttype;date;host;user-agent;x-amz-date;x-amz-target;x-amzn-requestid,Signature=<Signature>
User-Agent: <UserAgentString>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Connection: Keep-Alive
X-Amz-Target: AmazonDMSv20160101.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": "sbtest",
      "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](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V2](#)

DescribeEndpointSettings

Request Syntax

```
{  
  "EngineName": "string"  
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 260).

The request accepts the following data in JSON format.

EngineName (p. 77)

Type: String

Required: No

Response Syntax

```
{  
  "EndpointSettings": [  
    {  
      "EnumValues": [ "string" ],  
      "Name": "string",  
      "Sensitive": boolean,  
      "Type": "string",  
      "Units": "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. 77)

Type: Array of [EndpointSetting](#) (p. 204) objects

Errors

For information about the errors that are common to all actions, see [Common Errors](#) (p. 262).

See Also

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

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

DescribeEndpointTypes

Returns information about the type of endpoints available.

Request Syntax

```
{
  "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. 260).

The request accepts the following data in JSON format.

Filters (p. 79)

Filters applied to the describe action.

Valid filter names: engine-name | endpoint-type

Type: Array of [Filter](#) (p. 210) objects

Required: No

Marker (p. 79)

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. 79)

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",
    "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. 79)

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. 79)

The type of endpoints that are supported.

Type: Array of [SupportedEndpointType](#) (p. 252) objects

Errors

For information about the errors that are common to all actions, see [Common Errors](#) (p. 262).

Example

Sample Request

```

POST / HTTP/1.1
Host: dms.<region>.<domain>
x-amz-Date: <Date>
Authorization: AWS4-HMAC-SHA256
Credential=<Credential>,
SignedHeaders=contenttype;date;host;user-
agent;x-amz-date;x-amz-target;x-amzn-
requestid,Signature=<Signature>
User-Agent: <UserAgentString>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Connection: Keep-Alive
X-Amz-Target: AmazonDMSv20160101.DescribeEndpointTypes
{
  "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>
{
  "SupportedEndpointTypes":[
    {
      "EngineName":"mysql",
      "SupportsCDC":true,
      "EndpointType":"source"
    },
    {
      "EngineName":"oracle",
      "SupportsCDC":true,
      "EndpointType":"source"
    },
    {
      "EngineName":"postgres",
      "SupportsCDC":true,
      "EndpointType":"source"
    },
    {
      "EngineName":"aurora",
      "SupportsCDC":true,
      "EndpointType":"source"
    },
    {
      "EngineName":"mariadb",
      "SupportsCDC":true,
      "EndpointType":"source"
    },
    {
      "EngineName":"sqlserver",
      "SupportsCDC":true,
      "EndpointType":"source"
    }
  ]
}
```

See Also

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

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

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

DescribeEventCategories

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

Request Syntax

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

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 260).

The request accepts the following data in JSON format.

Filters (p. 83)

Filters applied to the action.

Type: Array of [Filter](#) (p. 210) objects

Required: No

SourceType (p. 83)

The type of AWS DMS resource that generates events.

Valid values: replication-instance | migration-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. 83)

A list of event categories.

Type: Array of [EventCategoryGroup \(p. 207\)](#) objects

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 262\)](#).

See Also

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

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

DescribeEvents

Lists events for a given source identifier and source type. You can also specify a start and end time. For more information on AWS DMS events, see [Working with Events and Notifications](#) in the *AWS Database Migration 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. 260).

The request accepts the following data in JSON format.

Duration (p. 85)

The duration of the events to be listed.

Type: Integer

Required: No

EndTime (p. 85)

The end time for the events to be listed.

Type: Timestamp

Required: No

EventCategories (p. 85)

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

Type: Array of strings

Required: No

Filters (p. 85)

Filters applied to the action.

Type: Array of [Filter](#) (p. 210) 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

SourceIdentifier (p. 85)

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

Type: String

Required: No

SourceType (p. 85)

The type of AWS DMS resource that generates events.

Valid values: replication-instance | migration-task

Type: String

Valid Values: replication-instance

Required: No

StartTime (p. 85)

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. 86)

The events described.

Type: Array of [Event \(p. 205\)](#) 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 \(p. 262\)](#).

See Also

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

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

DescribeEventSubscriptions

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

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

Request Syntax

```
{
  "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. 260).

The request accepts the following data in JSON format.

Filters (p. 88)

Filters applied to the action.

Type: Array of [Filter](#) (p. 210) objects

Required: No

Marker (p. 88)

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. 88)

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. 88)

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. 89)

A list of event subscriptions.

Type: Array of [EventSubscription \(p. 208\)](#) 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 \(p. 262\)](#).

ResourceNotFoundFault

The resource could not be found.

HTTP Status Code: 400

See Also

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

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

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. 260).

The request accepts the following data in JSON format.

Marker (p. 91)

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

Type: String

Required: No

MaxRecords (p. 91)

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

Default: 100

Constraints: Minimum 20, maximum 100.

Type: Integer

Required: No

Response Syntax

```
{  
  "Marker": "string",  
  "OrderableReplicationInstances": [  
    {  
      "AvailabilityZones": [ "string" ],  
      "DefaultAllocatedStorage": number,  
      "EngineVersion": "string",  
      "IncludedAllocatedStorage": number,  
      "MaxAllocatedStorage": number,  
      "MinAllocatedStorage": number,  
      "ReplicationInstanceClass": "string",  
      "StorageType": "string"  
    }  
  ]  
}
```

```
}
```

Response Elements

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

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

Marker (p. 91)

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

Type: String

OrderableReplicationInstances (p. 91)

The order-able replication instances available.

Type: Array of [OrderableReplicationInstance \(p. 223\)](#) objects

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 262\)](#).

Example

Sample Request

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

See Also

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

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

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. 260).

The request accepts the following data in JSON format.

Filters (p. 97)

Type: Array of [Filter](#) (p. 210) objects

Required: No

Marker (p. 97)

Type: String

Required: No

MaxRecords (p. 97)

Type: Integer

Required: No

ReplicationInstanceArn (p. 97)

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. 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

PendingMaintenanceActions (p. 97)

The pending maintenance action.

Type: Array of [ResourcePendingMaintenanceActions \(p. 247\)](#) objects

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 262\)](#).

ResourceNotFoundFault

The resource could not be found.

HTTP Status Code: 400

See Also

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

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

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 \(p. 260\)](#).

The request accepts the following data in JSON format.

EndpointArn (p. 99)

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. 99)

The status of the schema.

Type: [RefreshSchemasStatus \(p. 232\)](#) object

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 262\)](#).

InvalidResourceStateFault

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

HTTP Status Code: 400

ResourceNotFoundFault

The resource could not be found.

HTTP Status Code: 400

Example

Sample Request

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

Sample Response

```
HTTP/1.1 200 OK
x-amzn-RequestId: <RequestId>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Date: <Date>
{
  "RefreshSchemasStatus":{
    "Status":"successful",
    "LastRefreshDate":1457659238.93,
    "EndpointArn":"arn:aws:dms:us-east-
1:123456789012:endpoint:WKBULDZKUDQZIHPOUUSEH34EMU",
    "ReplicationInstanceArn":"arn:aws:dms:us-east-
1:123456789012:rep: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](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V2](#)

DescribeReplicationInstances

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

Request Syntax

```
{  
  "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 \(p. 260\)](#).

The request accepts the following data in JSON format.

Filters (p. 102)

Filters applied to the describe action.

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

Type: Array of [Filter \(p. 210\)](#) objects

Required: No

Marker (p. 102)

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

Type: String

Required: No

MaxRecords (p. 102)

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

Default: 100

Constraints: Minimum 20, maximum 100.

Type: Integer

Required: No

Response Syntax

```
{
  "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. 103)

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

Type: String

ReplicationInstances (p. 103)

The replication instances described.

Type: Array of [ReplicationInstance \(p. 233\)](#) objects

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 262\)](#).

ResourceNotFoundFault

The resource could not be found.

HTTP Status Code: 400

Example

Sample Request

```
POST / HTTP/1.1
Host: dms.<region>.<domain>
x-amz-Date: <Date>
Authorization: AWS4-HMAC-SHA256
Credential=<Credential>,
SignedHeaders=contenttype;date;host;user-agent;x-amz-date;x-amz-target;x-amzn-requestid,Signature=<Signature>
User-Agent: <UserAgentString>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Connection: Keep-Alive
X-Amz-Target: AmazonDMSv20160101.DescribeReplicationInstances
{
  "Filters": [
    {
      "Name": "rep-instance-arn",
      "Values": [
        "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](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V2](#)


```
{
  "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. 107)

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. 107)

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

Type: String

ReplicationInstanceTaskLogs (p. 107)

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 \(p. 237\)](#) objects

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 262\)](#).

InvalidResourceStateFault

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

HTTP Status Code: 400

ResourceNotFoundFault

The resource could not be found.

HTTP Status Code: 400

Example

Sample Request

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

```
x-amz-Date: <Date>
Authorization: AWS4-HMAC-SHA256
Credential=<Credential>,
SignedHeaders=contenttype;date;host;user-agent;x-amz-date;x-amz-target;x-amzn-requestid,Signature=<Signature>
User-Agent: <UserAgentString>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Connection: Keep-Alive
X-Amz-Target: AmazonDMSv20160101.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](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)

- [AWS SDK for Ruby V2](#)

DescribeReplicationSubnetGroups

Returns information about the replication subnet groups.

Request Syntax

```
{
  "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. 260).

The request accepts the following data in JSON format.

Filters (p. 111)

Filters applied to the describe action.

Type: Array of [Filter](#) (p. 210) 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

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. 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

ReplicationSubnetGroups (p. 111)

A description of the replication subnet groups.

Type: Array of [ReplicationSubnetGroup \(p. 239\)](#) objects

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 262\)](#).

ResourceNotFoundFault

The resource could not be found.

HTTP Status Code: 400

Example

Sample Request

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

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

Sample Response

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

See Also

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

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

DescribeReplicationTaskAssessmentResults

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

Request Syntax

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

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 260).

The request accepts the following data in JSON format.

Marker (p. 115)

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. 115)

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. 115)

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

Type: String

Required: No

Response Syntax

```
{  
  "BucketName": "string",  
  "Marker": "string",  
}
```

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

Response Elements

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

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

BucketName (p. 115)

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

Type: String

Marker (p. 115)

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. 115)

The task assessment report.

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

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 262\)](#).

ResourceNotFoundFault

The resource could not be found.

HTTP Status Code: 400

See Also

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

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

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

DescribeReplicationTasks

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

Request Syntax

```
{  
  "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. 260).

The request accepts the following data in JSON format.

Filters (p. 118)

Filters applied to the describe action.

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

Type: Array of [Filter](#) (p. 210) objects

Required: No

Marker (p. 118)

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. 118)

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. 118)

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,
        "FullLoadProgressPercent": number,
        "TablesErrored": number,
        "TablesLoaded": number,
        "TablesLoading": number,
        "TablesQueued": number
      },
      "SourceEndpointArn": "string",
      "Status": "string",
      "StopReason": "string",
      "TableMappings": "string",
      "TargetEndpointArn": "string"
    }
  ]
}
```

Response Elements

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

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

Marker (p. 119)

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. 119)

A description of the replication tasks.

Type: Array of [ReplicationTask \(p. 240\)](#) objects

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 262\)](#).


```

        "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:GVBUIQXJZASXWHTWCLN2WNT57E",
        "ReplicationTaskSettings":{"TargetMetadata":{"TargetSchema":"","TargetTable":"SupportLobs","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](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V2](#)

DescribeSchemas

Returns information about the schema for the specified endpoint.

Request Syntax

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

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 260).

The request accepts the following data in JSON format.

EndpointArn (p. 122)

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

Type: String

Required: Yes

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

Required: No

MaxRecords (p. 122)

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. 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

Schemas (p. 122)

The described schema.

Type: Array of strings

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 262\)](#).

InvalidResourceStateFault

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

HTTP Status Code: 400

ResourceNotFoundFault

The resource could not be found.

HTTP Status Code: 400

Example

Sample Request

```
POST / HTTP/1.1
Host: dms.<region>.<domain>
x-amz-Date: <Date>
Authorization: AWS4-HMAC-SHA256
Credential=<Credential>,
SignedHeaders=contenttype;date;host;user-
agent;x-amz-date;x-amz-target;x-amzn-
requestid,Signature=<Signature>
User-Agent: <UserAgentString>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Connection: Keep-Alive
X-Amz-Target: AmazonDMSv20160101.DescribeSchemas
{
  "EndpointArn": "arn:aws:dms:us-east-
1:123456789012:endpoint:WKBULDZKUDQZIHPOUSEH34EMU",
  "MaxRecords": 0,
  "Marker": ""
}
```

```
}
```

Sample Response

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

See Also

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

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

DescribeTableStatistics

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

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

Request Syntax

```
{
  "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. 260).

The request accepts the following data in JSON format.

Filters (p. 125)

Filters applied to the describe table statistics action.

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

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

Type: Array of [Filter](#) (p. 210) objects

Required: No

Marker (p. 125)

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. 125)

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. 125)

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,
      "FullLoadErrorRows": number,
      "FullLoadRows": number,
      "Inserts": number,
      "LastUpdateTime": number,
      "SchemaName": "string",
      "TableName": "string",
      "TableState": "string",
      "Updates": number,
      "ValidationFailedRecords": number,
      "ValidationPendingRecords": number,
      "ValidationState": "string",
      "ValidationStateDetails": "string",
      "ValidationSuspendedRecords": number
    }
  ]
}
```

Response Elements

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

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

Marker (p. 126)

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. 126)

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

Type: String

TableStatistics (p. 126)

The table statistics.

Type: Array of [TableStatistics](#) (p. 254) objects

Errors

For information about the errors that are common to all actions, see [Common Errors](#) (p. 262).

InvalidResourceStateFault

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

HTTP Status Code: 400

ResourceNotFoundFault

The resource could not be found.

HTTP Status Code: 400

Example

Sample Request

```
POST / HTTP/1.1
Host: dms.<region>.<domain>
x-amz-Date: <Date>
Authorization: AWS4-HMAC-SHA256
Credential=<Credential>,
SignedHeaders=contenttype;date;host;user-
agent;x-amz-date;x-amz-target;x-amzn-
requestid,Signature=<Signature>
User-Agent: <UserAgentString>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Connection: Keep-Alive
X-Amz-Target: AmazonDMSv20160101.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](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V2](#)

ImportCertificate

Uploads the specified certificate.

Request Syntax

```
{
  "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. 260).

The request accepts the following data in JSON format.

CertificateIdentifier (p. 129)

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

Type: String

Required: Yes

CertificatePem (p. 129)

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

Type: String

Required: No

CertificateWallet (p. 129)

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

Type: Base64-encoded binary data object

Required: No

Tags (p. 129)

The tags associated with the certificate.

Type: Array of [Tag](#) (p. 258) 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. 129)

The certificate to be uploaded.

Type: [Certificate \(p. 192\)](#) object

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 262\)](#).

InvalidCertificateFault

The certificate was not valid.

HTTP Status Code: 400

ResourceAlreadyExistsFault

The resource you are attempting to create already exists.

HTTP Status Code: 400

ResourceQuotaExceededFault

The quota for this resource quota has been exceeded.

HTTP Status Code: 400

See Also

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

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

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

ListTagsForResource

Lists all tags for an AWS DMS resource.

Request Syntax

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

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 260).

The request accepts the following data in JSON format.

ResourceArn (p. 132)

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. 132)

A list of tags for the resource.

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

Errors

For information about the errors that are common to all actions, see [Common Errors](#) (p. 262).

ResourceNotFoundFault

The resource could not be found.

HTTP Status Code: 400

Example

Sample Request

```
POST / HTTP/1.1
Host: dms.<region>.<domain>
x-amz-Date: <Date>
Authorization: AWS4-HMAC-SHA256
Credential=<Credential>,
SignedHeaders=contenttype;date;host;user-
agent;x-amz-date;x-amz-target;x-amzn-
requestid,Signature=<Signature>
User-Agent: <UserAgentString>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Connection: Keep-Alive
X-Amz-Target: AmazonDMSv20160101.ListTagsForResource
{
  "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](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V2](#)

ModifyEndpoint

Modifies the specified endpoint.

Request Syntax

```
{
  "CertificateArn": "string",
  "DatabaseName": "string",
  "DmsTransferSettings": {
    "BucketName": "string",
    "ServiceAccessRoleArn": "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": {
    "DatabaseName": "string",
    "ExecuteTimeout": number,
    "Password": "string",
    "Port": number,
    "ServerName": "string",
    "SetDataCaptureChanges": boolean,
    "Username": "string"
  },
  "KinesisSettings": {
    "MessageFormat": "string",
    "ServiceAccessRoleArn": "string",
    "StreamArn": "string"
  },
  "MicrosoftSQLServerSettings": {
    "ActivateSafeguard": boolean,
    "BcpPacketSize": number,
    "ConnectionTimeout": number,
    "DatabaseName": "string",
    "IgnoreDdl": boolean,
    "IgnoreMsReplicationEnablement": boolean,
    "Password": "string",
    "ReadBackupOnly": boolean,
    "SafeguardFrequency": number,
    "SafeguardPolicy": "string",
    "ServerName": "string",
    "UseBcpCdc": boolean,
    "UseBcpFullLoad": boolean,
    "Username": "string"
  },
  "MongoDbSettings": {
    "AuthMechanism": "string",
    "AuthSource": "string",
    "AuthType": "string",
    "DatabaseName": "string",
```

```

    "DocsToInvestigate": "string",
    "ExtractDocId": "string",
    "KmsKeyId": "string",
    "NestingLevel": "string",
    "Password": "string",
    "Port": number,
    "ServerName": "string",
    "Username": "string"
  },
  "MySQLSettings": {
    "AfterConnectScript": "string",
    "CharsetMapping": "string",
    "ConnectionTimeout": number,
    "DatabaseName": "string",
    "EventsPollInterval": number,
    "LoadUsingCsv": boolean,
    "MinPollInterval": number,
    "ParallelLoadThreads": number,
    "Password": "string",
    "Port": number,
    "ReadTimeout": number,
    "ServerName": "string",
    "ServerTimezone": "string",
    "UnloadTimeout": number,
    "Username": "string",
    "WriteTimeout": number
  },
  "OracleSettings": {
    "AddSupplementalLogging": boolean,
    "AlwaysReplaceEmptyString": boolean,
    "ArchivedLogDestId": number,
    "ArchivedLogsOnly": boolean,
    "AsmPassword": "string",
    "AsmServer": "string",
    "AsmUser": "string",
    "BatchSize": number,
    "CharacterSet": "string",
    "CharLengthSemantics": "string",
    "CopyOnlineRedoFromAsmToTempFolder": boolean,
    "CopyToTempFolder": "string",
    "DatabaseName": "string",
    "DirectPathParallelLoad": boolean,
    "EmptyStringValue": "string",
    "ExposeViews": boolean,
    "FailTasksOnLobTruncation": boolean,
    "NumberDatatypeScale": number,
    "Password": "string",
    "Port": number,
    "ReadTableSpaceName": boolean,
    "RetryInterval": number,
    "RetryTimeoutInMinutes": number,
    "SecurityDbEncryption": "string",
    "SecurityDbEncryptionName": "string",
    "ServerName": "string",
    "StandbyDelayTime": number,
    "UseBFile": boolean,
    "UseDirectPathFullLoad": boolean,
    "UseLogminerReader": boolean,
    "Username": "string"
  },
  "Password": "string",
  "Port": number,
  "PostgreSQLSettings": {
    "AfterConnectScript": "string",
    "CaptureDdls": boolean,
    "ConnectionTimeout": number,

```

```

    "DatabaseName": "string",
    "DdlArtifactsSchema": "string",
    "ExecuteTimeout": number,
    "FailTasksOnLobTruncation": boolean,
    "ForceLOBNullable": boolean,
    "HeartbeatEnable": boolean,
    "HeartbeatFrequency": number,
    "HeartbeatSchema": "string",
    "LoadUsingCsv": boolean,
    "Password": "string",
    "PluginName": "string",
    "Port": number,
    "ServerName": "string",
    "SlotName": "string",
    "UnboundedVarcharMaxSize": number,
    "Username": "string"
},
"RedshiftSettings": {
    "AcceptAnyDate": boolean,
    "AfterConnectScript": "string",
    "BucketFolder": "string",
    "BucketName": "string",
    "ConnectionTimeout": number,
    "DatabaseName": "string",
    "DateFormat": "string",
    "EmptyAsNull": boolean,
    "EncryptionMode": "string",
    "FileTransferUploadStreams": number,
    "LoadTimeout": number,
    "MaxFileSize": number,
    "Password": "string",
    "Port": number,
    "RemoveQuotes": boolean,
    "ReplaceChars": "string",
    "ReplaceInvalidChars": "string",
    "ServerName": "string",
    "ServerSideEncryptionKmsKeyId": "string",
    "ServiceAccessRoleArn": "string",
    "TimeFormat": "string",
    "TrimBlanks": boolean,
    "TruncateColumns": boolean,
    "Username": "string",
    "WriteBufferSize": number
},
"S3Settings": {
    "BucketFolder": "string",
    "BucketName": "string",
    "CompressionType": "string",
    "CsvDelimiter": "string",
    "CsvRowDelimiter": "string",
    "DataFormat": "string",
    "DataPageSize": number,
    "DictPageSizeLimit": number,
    "EnableStatistics": boolean,
    "EncodingType": "string",
    "EncryptionMode": "string",
    "ExternalTableDefinition": "string",
    "ParquetVersion": "string",
    "RowGroupLength": number,
    "ServerSideEncryptionKmsKeyId": "string",
    "ServiceAccessRoleArn": "string"
},
"ServerName": "string",
"ServiceAccessRoleArn": "string",
"SslMode": "string",
"SybaseSettings": {

```

```
    "ConnectionTimeout": number,  
    "DatabaseName": "string",  
    "Password": "string",  
    "Port": number,  
    "ServerName": "string",  
    "Username": "string"  
  },  
  "Username": "string"  
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 260).

The request accepts the following data in JSON format.

CertificateArn (p. 135)

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

Type: String

Required: No

DatabaseName (p. 135)

The name of the endpoint database.

Type: String

Required: No

DmsTransferSettings (p. 135)

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

Attributes include the following:

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

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

JSON syntax:

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

Type: [DmsTransferSettings](#) (p. 196) object

Required: No

DynamoDbSettings (p. 135)

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

Type: [DynamoDbSettings](#) (p. 197) object

Required: No

ElasticsearchSettings (p. 135)

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 User Guide*.

Type: [ElasticsearchSettings \(p. 198\)](#) object

Required: No

EndpointArn (p. 135)

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

Type: String

Required: Yes

EndpointIdentifier (p. 135)

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

Type: String

Required: No

EndpointType (p. 135)

The type of endpoint.

Type: String

Valid Values: `source` | `target`

Required: No

EngineName (p. 135)

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

Type: String

Required: No

ExternalTableDefinition (p. 135)

The external table definition.

Type: String

Required: No

ExtraConnectionAttributes (p. 135)

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

Type: String

Required: No

IBMDB2Settings (p. 135)

Type: [IBMDB2Settings \(p. 211\)](#) object

Required: No

KinesisSettings (p. 135)

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

Type: [KinesisSettings \(p. 212\)](#) object

Required: No

MicrosoftSQLServerSettings (p. 135)

Type: [MicrosoftSQLServerSettings \(p. 213\)](#) object

Required: No

MongoDbSettings (p. 135)

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 \(p. 215\)](#) object

Required: No

MySQLSettings (p. 135)

Type: [MySQLSettings \(p. 218\)](#) object

Required: No

OracleSettings (p. 135)

Type: [OracleSettings \(p. 220\)](#) object

Required: No

Password (p. 135)

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

Type: String

Required: No

Port (p. 135)

The port used by the endpoint database.

Type: Integer

Required: No

PostgreSQLSettings (p. 135)

Type: [PostgreSQLSettings \(p. 227\)](#) object

Required: No

RedshiftSettings (p. 135)

Type: [RedshiftSettings \(p. 229\)](#) object

Required: No

S3Settings (p. 135)

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 \(p. 248\)](#) object

Required: No

ServerName (p. 135)

The name of the server where the endpoint database resides.

Type: String

Required: No

ServiceAccessRoleArn (p. 135)

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

Type: String

Required: No

SslMode (p. 135)

The SSL mode to be used.

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

The default value is none.

Type: String

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

Required: No

SybaseSettings (p. 135)

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

Required: No

Username (p. 135)

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"
},
"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": {
  "DatabaseName": "string",
  "ExecuteTimeout": number,
  "Password": "string",
  "Port": number,
  "ServerName": "string",
  "SetDataCaptureChanges": boolean,
  "Username": "string"
},
"KinesisSettings": {
  "MessageFormat": "string",
  "ServiceAccessRoleArn": "string",
  "StreamArn": "string"
},
"KmsKeyId": "string",
"MicrosoftSQLServerSettings": {
  "ActivateSafeguard": boolean,
  "BcpPacketSize": number,
  "ConnectionTimeout": number,
  "DatabaseName": "string",
  "IgnoreDdl": boolean,
  "IgnoreMsReplicationEnablement": boolean,
  "Password": "string",
  "ReadBackupOnly": boolean,
  "SafeguardFrequency": number,
  "SafeguardPolicy": "string",
  "ServerName": "string",
  "UseBcpCdc": boolean,
  "UseBcpFullLoad": boolean,
  "Username": "string"
},
"MongoDbSettings": {
  "AuthMechanism": "string",
  "AuthSource": "string",
  "AuthType": "string",
  "DatabaseName": "string",
  "DocsToInvestigate": "string",
  "ExtractDocId": "string",
  "KmsKeyId": "string",
  "NestingLevel": "string",
  "Password": "string",
  "Port": number,
  "ServerName": "string",
  "Username": "string"
},

```

```

"MySQLSettings": {
  "AfterConnectScript": "string",
  "CharsetMapping": "string",
  "ConnectionTimeout": number,
  "DatabaseName": "string",
  "EventsPollInterval": number,
  "LoadUsingCsv": boolean,
  "MinPollInterval": number,
  "ParallelLoadThreads": number,
  "Password": "string",
  "Port": number,
  "ReadTimeout": number,
  "ServerName": "string",
  "ServerTimezone": "string",
  "UnloadTimeout": number,
  "Username": "string",
  "WriteTimeout": number
},
"OracleSettings": {
  "AddSupplementalLogging": boolean,
  "AlwaysReplaceEmptyString": boolean,
  "ArchivedLogDestId": number,
  "ArchivedLogsOnly": boolean,
  "AsmPassword": "string",
  "AsmServer": "string",
  "AsmUser": "string",
  "BatchSize": number,
  "CharacterSet": "string",
  "CharLengthSemantics": "string",
  "CopyOnlineRedoFromAsmToTempFolder": boolean,
  "CopyToTempFolder": "string",
  "DatabaseName": "string",
  "DirectPathParallelLoad": boolean,
  "EmptyStringValue": "string",
  "ExposeViews": boolean,
  "FailTasksOnLobTruncation": boolean,
  "NumberDatatypeScale": number,
  "Password": "string",
  "Port": number,
  "ReadTableSpaceName": boolean,
  "RetryInterval": number,
  "RetryTimeoutInMinutes": number,
  "SecurityDbEncryption": "string",
  "SecurityDbEncryptionName": "string",
  "ServerName": "string",
  "StandbyDelayTime": number,
  "UseBFile": boolean,
  "UseDirectPathFullLoad": boolean,
  "UseLogminerReader": boolean,
  "Username": "string"
},
"Port": number,
"PostgreSQLSettings": {
  "AfterConnectScript": "string",
  "CaptureDdls": boolean,
  "ConnectionTimeout": number,
  "DatabaseName": "string",
  "DdlArtifactsSchema": "string",
  "ExecuteTimeout": number,
  "FailTasksOnLobTruncation": boolean,
  "ForceLOBNullable": boolean,
  "HeartbeatEnable": boolean,
  "HeartbeatFrequency": number,
  "HeartbeatSchema": "string",
  "LoadUsingCsv": boolean,
  "Password": "string",

```

```

        "PluginName": "string",
        "Port": number,
        "ServerName": "string",
        "SlotName": "string",
        "UnboundedVarcharMaxSize": number,
        "Username": "string"
    },
    "RedshiftSettings": {
        "AcceptAnyDate": boolean,
        "AfterConnectScript": "string",
        "BucketFolder": "string",
        "BucketName": "string",
        "ConnectionTimeout": number,
        "DatabaseName": "string",
        "DateFormat": "string",
        "EmptyAsNull": boolean,
        "EncryptionMode": "string",
        "FileTransferUploadStreams": number,
        "LoadTimeout": number,
        "MaxFileSize": number,
        "Password": "string",
        "Port": number,
        "RemoveQuotes": boolean,
        "ReplaceChars": "string",
        "ReplaceInvalidChars": "string",
        "ServerName": "string",
        "ServerSideEncryptionKmsKeyId": "string",
        "ServiceAccessRoleArn": "string",
        "TimeFormat": "string",
        "TrimBlanks": boolean,
        "TruncateColumns": boolean,
        "Username": "string",
        "WriteBufferSize": number
    },
    "S3Settings": {
        "BucketFolder": "string",
        "BucketName": "string",
        "CompressionType": "string",
        "CsvDelimiter": "string",
        "CsvRowDelimiter": "string",
        "DateFormat": "string",
        "DataPageSize": number,
        "DictPageSizeLimit": number,
        "EnableStatistics": boolean,
        "EncodingType": "string",
        "EncryptionMode": "string",
        "ExternalTableDefinition": "string",
        "ParquetVersion": "string",
        "RowGroupLength": number,
        "ServerSideEncryptionKmsKeyId": "string",
        "ServiceAccessRoleArn": "string"
    },
    "ServerName": "string",
    "ServiceAccessRoleArn": "string",
    "SslMode": "string",
    "Status": "string",
    "SybaseSettings": {
        "ConnectionTimeout": number,
        "DatabaseName": "string",
        "Password": "string",
        "Port": number,
        "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. 141)

The modified endpoint.

Type: [Endpoint \(p. 199\)](#) object

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 262\)](#).

AccessDeniedFault

AWS DMS was denied access to the endpoint.

HTTP Status Code: 400

InvalidResourceStateFault

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

HTTP Status Code: 400

KMSKeyNotAccessibleFault

AWS DMS cannot access the KMS key.

HTTP Status Code: 400

ResourceAlreadyExistsFault

The resource you are attempting to create already exists.

HTTP Status Code: 400

ResourceNotFoundFault

The resource could not be found.

HTTP Status Code: 400

Example

Sample Request

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

```
Credential=<Credential>,
SignedHeaders=contenttype;date;host;user-
agent;x-amz-date;x-amz-target;x-amzn-
requestid,Signature=<Signature>
User-Agent: <UserAgentString>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Connection: Keep-Alive
X-Amz-Target: AmazonDMSv20160101.ModifyEndpoint
{
  "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](#)
- [AWS SDK for JavaScript](#)

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

ModifyEventSubscription

Modifies an existing AWS DMS event notification subscription.

Request Syntax

```
{  
  "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. 260).

The request accepts the following data in JSON format.

Enabled (p. 148)

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

Type: Boolean

Required: No

EventCategories (p. 148)

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. 148)

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. 148)

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

Valid values: replication-instance | migration-task

Type: String

Required: No

SubscriptionName (p. 148)

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. 149)

The modified event subscription.

Type: [EventSubscription \(p. 208\)](#) object

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 262\)](#).

ResourceNotFoundFault

The resource could not be found.

HTTP Status Code: 400

ResourceQuotaExceededFault

The quota for this resource quota has been exceeded.

HTTP Status Code: 400

SNSInvalidTopicFault

The SNS topic is invalid.

HTTP Status Code: 400

SNSNoAuthorizationFault

You are not authorized for the SNS subscription.

HTTP Status Code: 400

See Also

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

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

ModifyReplicationInstance

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

Some settings are applied during the maintenance window.

Request Syntax

```
{  
  "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. 260).

The request accepts the following data in JSON format.

AllocatedStorage (p. 151)

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

Type: Integer

Required: No

AllowMajorVersionUpgrade (p. 151)

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

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

Type: Boolean

Required: No

ApplyImmediately (p. 151)

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

Type: Boolean

Required: No

AutoMinorVersionUpgrade (p. 151)

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

Type: Boolean

Required: No

EngineVersion (p. 151)

The engine version number of the replication instance.

Type: String

Required: No

MultiAZ (p. 151)

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

Type: Boolean

Required: No

PreferredMaintenanceWindow (p. 151)

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. 151)

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

Type: String

Required: Yes

ReplicationInstanceClass (p. 151)

The compute and memory capacity of the replication instance.

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

Type: String

Required: No

ReplicationInstanceIdentifier (p. 151)

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

Type: String

Required: No

VpcSecurityGroupIds (p. 151)

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. 153)

The modified replication instance.

Type: [ReplicationInstance \(p. 233\)](#) object

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 262\)](#).

AccessDeniedFault

AWS DMS was denied access to the endpoint.

HTTP Status Code: 400

InsufficientResourceCapacityFault

There are not enough resources allocated to the database migration.

HTTP Status Code: 400

InvalidResourceStateFault

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

HTTP Status Code: 400

ResourceAlreadyExistsFault

The resource you are attempting to create already exists.

HTTP Status Code: 400

ResourceNotFoundFault

The resource could not be found.

HTTP Status Code: 400

StorageQuotaExceededFault

The storage quota has been exceeded.

HTTP Status Code: 400

UpgradeDependencyFailureFault

An upgrade dependency is preventing the database migration.

HTTP Status Code: 400

Example

Sample Request

```
POST / HTTP/1.1
Host: dms.<region>.<domain>
x-amz-Date: <Date>
Authorization: AWS4-HMAC-SHA256
Credential=<Credential>,
SignedHeaders=contenttype;date;host;user-agent;x-amz-date;x-amz-target;x-amzn-requestid,Signature=<Signature>
User-Agent: <UserAgentString>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Connection: Keep-Alive
X-Amz-Target: AmazonDMSv20160101.ModifyReplicationInstance
{
  "ReplicationInstanceArn":"arn:aws:dms:us-east-1:123456789012:rep: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](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V2](#)


```
        "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 \(p. 157\)](#)

The modified replication subnet group.

Type: [ReplicationSubnetGroup \(p. 239\)](#) object

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 262\)](#).

AccessDeniedFault

AWS DMS was denied access to the endpoint.

HTTP Status Code: 400

InvalidSubnet

The subnet provided is invalid.

HTTP Status Code: 400

ReplicationSubnetGroupDoesNotCoverEnoughAZs

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

HTTP Status Code: 400

ResourceNotFoundFault

The resource could not be found.

HTTP Status Code: 400

ResourceQuotaExceededFault

The quota for this resource quota has been exceeded.

HTTP Status Code: 400

SubnetAlreadyInUse

The specified subnet is already in use.

HTTP Status Code: 400

Example

Sample Request

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

Sample Response

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

See Also

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

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

ModifyReplicationTask

Modifies the specified replication task.

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

For more information about AWS DMS tasks, see [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"
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 260).

The request accepts the following data in JSON format.

CdcStartPosition (p. 161)

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

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

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

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

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

Type: String

Required: No

CdcStartTime (p. 161)

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. 161)

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

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

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

Type: String

Required: No

MigrationType (p. 161)

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. 161)

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

Type: String

Required: Yes

ReplicationTaskIdentifier (p. 161)

The replication task identifier.

Constraints:

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

Type: String

Required: No

ReplicationTaskSettings (p. 161)

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

Type: String

Required: No

TableMappings (p. 161)

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

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

Type: String

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,
      "FullLoadProgressPercent": number,
      "TablesErrored": number,
      "TablesLoaded": number,
      "TablesLoading": number,
      "TablesQueued": number
    },
    "SourceEndpointArn": "string",
    "Status": "string",
    "StopReason": "string",
    "TableMappings": "string",
    "TargetEndpointArn": "string"
  }
}
```

Response Elements

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

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

ReplicationTask (p. 163)

The replication task that was modified.

Type: [ReplicationTask \(p. 240\)](#) object

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 262\)](#).

InvalidResourceStateFault

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

HTTP Status Code: 400

KMSKeyNotAccessibleFault

AWS DMS cannot access the KMS key.

HTTP Status Code: 400

ResourceAlreadyExistsFault

The resource you are attempting to create already exists.

HTTP Status Code: 400

ResourceNotFoundFault

The resource could not be found.

HTTP Status Code: 400

Example

Sample Request

Sample Response

See Also

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

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

RebootReplicationInstance

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

Request Syntax

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

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 260).

The request accepts the following data in JSON format.

ForceFailover (p. 165)

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. 165)

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. 165)

The replication instance that is being rebooted.

Type: [ReplicationInstance \(p. 233\)](#) object

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 262\)](#).

InvalidResourceStateFault

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

HTTP Status Code: 400

ResourceNotFoundFault

The resource could not be found.

HTTP Status Code: 400

See Also

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

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

RefreshSchemas

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

Request Syntax

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

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 260).

The request accepts the following data in JSON format.

EndpointArn (p. 168)

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

Type: String

Required: Yes

ReplicationInstanceArn (p. 168)

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 \(p. 168\)](#)

The status of the refreshed schema.

Type: [RefreshSchemasStatus \(p. 232\)](#) object

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 262\)](#).

InvalidResourceStateFault

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

HTTP Status Code: 400

KMSKeyNotAccessibleFault

AWS DMS cannot access the KMS key.

HTTP Status Code: 400

ResourceNotFoundFault

The resource could not be found.

HTTP Status Code: 400

ResourceQuotaExceededFault

The quota for this resource quota has been exceeded.

HTTP Status Code: 400

See Also

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

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

ReloadTables

Reloads the target database table with the source data.

Request Syntax

```
{
  "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. 260).

The request accepts the following data in JSON format.

ReloadOption (p. 170)

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. 170)

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

Type: String

Required: Yes

TablesToReload (p. 170)

The name and schema of the table to be reloaded.

Type: Array of [TableToReload](#) (p. 257) 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. 170)

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. 262).

InvalidResourceStateFault

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

HTTP Status Code: 400

ResourceNotFoundFault

The resource could not be found.

HTTP Status Code: 400

See Also

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

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

RemoveTagsFromResource

Removes metadata tags from a DMS resource.

Request Syntax

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

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 260).

The request accepts the following data in JSON format.

ResourceArn (p. 172)

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

Type: String

Required: Yes

TagKeys (p. 172)

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. 262).

ResourceNotFoundFault

The resource could not be found.

HTTP Status Code: 400

Example

Sample Request

```
POST / HTTP/1.1
Host: dms.<region>.<domain>
x-amz-Date: <Date>
Authorization: AWS4-HMAC-SHA256
Credential=<Credential>,
SignedHeaders=contenttype;date;host;user-agent;x-amz-date;x-amz-target;x-amzn-requestid,Signature=<Signature>
User-Agent: <UserAgentString>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Connection: Keep-Alive
X-Amz-Target: AmazonDMSv20160101.RemoveTagsFromResource
{
  "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](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V2](#)

StartReplicationTask

Starts the replication task.

For more information about AWS DMS tasks, see [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. 260).

The request accepts the following data in JSON format.

CdcStartPosition (p. 174)

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

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

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

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

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

Type: String

Required: No

CdcStartTime (p. 174)

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. 174)

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

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

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

Type: String

Required: No

ReplicationTaskArn (p. 174)

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

Type: String

Required: Yes

StartReplicationTaskType (p. 174)

The type of replication task.

Type: String

Valid Values: start-replication | resume-processing | reload-target

Required: Yes

Response Syntax

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

Response Elements

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

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

ReplicationTask (p. 175)

The replication task started.

Type: [ReplicationTask \(p. 240\)](#) object

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 262\)](#).

AccessDeniedFault

AWS DMS was denied access to the endpoint.

HTTP Status Code: 400

InvalidResourceStateFault

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

HTTP Status Code: 400

ResourceNotFoundFault

The resource could not be found.

HTTP Status Code: 400

Example

Sample Request

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

Sample Response

```
HTTP/1.1 200 OK
x-amzn-RequestId: <RequestId>
```

```
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Date: <Date>
{
  "ReplicationTask":{
    "SourceEndpointArn":"arn:aws:dms:us-east-
1:123456789012:endpoint:RZZK4EZW5UANC7Y3P4E776WHBE",
    "ReplicationTaskIdentifier":"aks145",
    "ReplicationInstanceArn":"arn:aws:dms:us-east-
1:123456789012:rep:6USOU366XFJUWATDJGBCJS3VIQ",
    "TableMappings":{" \n\t\"TableMappings\": [ { \n\t\t\t\"Type\":
\n\t\t\t\t\"Include\", \n\t\t\t\t\"SourceSchema\": \"testDB\", \n\t\t\t\t\"SourceTable\":
\n\t\t\t\t\t\"%\" \n\t\t\t\t\t\", { \n\t\t\t\t\t\"Type\": \"Include\", \n\t\t\t\t\t
\n\t\t\t\t\t\"SourceSchema\": \"testDB\", \n\t\t\t\t\t\"SourceTable\": \"%\" \n\t\t\t\t\t} ]\n\t\t\t\t\t\",
    "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:GVBUIJQXJZASXWHTWCLN2WNT57E",
    "ReplicationTaskSettings":{"\"TargetMetadata\":{\"\"TargetSchema\": \"\", \"SupportLobs
\n\t\t\t\t\t\":true, \"FullLobMod
e\n\t\t\t\t\t\":true, \"LobChunkSize\n\t\t\t\t\t\":64, \"LimitedSizeLobMode\n\t\t\t\t\t\":false, \"LobMaxSize\n\t\t\t\t\t\":0}, \n
    \"FullLoadSettings\":{\"
      \"FullLoadEnabled\n\t\t\t\t\t\":true,
      \n\t\t\t\t\t\"
TargetTablePrepMode\n\t\t\t\t\t\": \"DO_NOTHING\",
      \n\t\t\t\t\t\"CreatePkAfterFullLoad\n\t\t\t\t\t\":false,
      \n\t\t\t\t\t\"StopTaskCachedChangesApplied\n\t\t\t\t\t\":false,
      \n\t\t\t\t\t\"StopTaskCachedChangesNotApplied\n\t\t\t\t\t\":false,
      \n\t\t\t\t\t\"Re
sumeEnabled\n\t\t\t\t\t\":false,
      \n\t\t\t\t\t\"ResumeMinTableSize\n\t\t\t\t\t\":100000,
      \n\t\t\t\t\t\"ResumeOnlyClusteredPKTabl
es\n\t\t\t\t\t\":true,
      \n\t\t\t\t\t\"MaxFullLoadSubTasks\n\t\t\t\t\t\":8,
      \n\t\t\t\t\t\"TransactionConsistencyTimeout\n\t\t\t\t\t\":600,
      \n\t\t\t\t\t\"C
ommitRate\n\t\t\t\t\t\":10000
    }
  }
}
```

See Also

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

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

StartReplicationTaskAssessment

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

Request Syntax

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

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 260).

The request accepts the following data in JSON format.

ReplicationTaskArn (p. 179)

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

Type: String

Required: Yes

Response Syntax

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

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. 179)

The assessed replication task.

Type: [ReplicationTask](#) (p. 240) object

Errors

For information about the errors that are common to all actions, see [Common Errors](#) (p. 262).

InvalidResourceStateFault

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

HTTP Status Code: 400

ResourceNotFoundFault

The resource could not be found.

HTTP Status Code: 400

See Also

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

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

StopReplicationTask

Stops the replication task.

Request Syntax

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

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 260).

The request accepts the following data in JSON format.

ReplicationTaskArn (p. 181)

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

Type: String

Required: Yes

Response Syntax

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


Response Elements

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

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

ReplicationTask (p. 181)

The replication task stopped.

Type: [ReplicationTask](#) (p. 240) object

Errors

For information about the errors that are common to all actions, see [Common Errors](#) (p. 262).

InvalidResourceStateFault

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

HTTP Status Code: 400

ResourceNotFoundFault

The resource could not be found.

HTTP Status Code: 400

Example

Sample Request

```
POST / HTTP/1.1
Host: dms.<region>.<domain>
x-amz-Date: <Date>
Authorization: AWS4-HMAC-SHA256
Credential=<Credential>,
SignedHeaders=contenttype;date;host;user-agent;x-amz-date;x-amz-target;x-amzn-requestid,Signature=<Signature>
User-Agent: <UserAgentString>
Content-Type: application/x-amz-json-1.1
Content-Length: <PayloadSizeBytes>
Connection: Keep-Alive
X-Amz-Target: AmazonDMSv20160101.StopReplicationTask
{
  "ReplicationTaskArn": "arn:aws:dms:us-east-1:123456789012:task: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:OEAMB3NXSTZ6LFYZFEPBBXPYM",
    "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
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python

- [AWS SDK for Ruby V2](#)

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. 260).

The request accepts the following data in JSON format.

EndpointArn (p. 185)

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

Type: String

Required: Yes

ReplicationInstanceArn (p. 185)

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. 185)

The connection tested.

Type: [Connection \(p. 194\)](#) object

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 262\)](#).

InvalidResourceStateFault

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

HTTP Status Code: 400

KMSKeyNotAccessibleFault

AWS DMS cannot access the KMS key.

HTTP Status Code: 400

ResourceNotFoundFault

The resource could not be found.

HTTP Status Code: 400

ResourceQuotaExceededFault

The quota for this resource quota has been exceeded.

HTTP Status Code: 400

Example

Sample Request

```
POST / HTTP/1.1
Host: dms.<region>.<domain>
x-amz-Date: <Date>
Authorization: AWS4-HMAC-SHA256
Credential=<Credential>,
SignedHeaders=contenttype;date;host;user-
agent;x-amz-date;x-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](#)
- [AWS SDK for JavaScript](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V2](#)

Data Types

The AWS Database Migration Service API contains several data types that various actions use. This section describes each data type in detail.

Note

The order of each element in a data type structure is not guaranteed. Applications should not assume a particular order.

The following data types are supported:

- [AccountQuota](#) (p. 190)
- [AvailabilityZone](#) (p. 191)
- [Certificate](#) (p. 192)
- [Connection](#) (p. 194)
- [DmsTransferSettings](#) (p. 196)
- [DynamoDbSettings](#) (p. 197)
- [ElasticsearchSettings](#) (p. 198)
- [Endpoint](#) (p. 199)
- [EndpointSetting](#) (p. 204)
- [Event](#) (p. 205)
- [EventCategoryGroup](#) (p. 207)
- [EventSubscription](#) (p. 208)
- [Filter](#) (p. 210)
- [IBMDB2Settings](#) (p. 211)
- [KinesisSettings](#) (p. 212)
- [MicrosoftSQLServerSettings](#) (p. 213)
- [MongoDbSettings](#) (p. 215)
- [MySQLSettings](#) (p. 218)
- [OracleSettings](#) (p. 220)
- [OrderableReplicationInstance](#) (p. 223)
- [PendingMaintenanceAction](#) (p. 225)
- [PostgreSQLSettings](#) (p. 227)
- [RedshiftSettings](#) (p. 229)
- [RefreshSchemasStatus](#) (p. 232)
- [ReplicationInstance](#) (p. 233)
- [ReplicationInstanceTaskLog](#) (p. 237)
- [ReplicationPendingModifiedValues](#) (p. 238)
- [ReplicationSubnetGroup](#) (p. 239)
- [ReplicationTask](#) (p. 240)
- [ReplicationTaskAssessmentResult](#) (p. 243)
- [ReplicationTaskStats](#) (p. 245)
- [ResourcePendingMaintenanceActions](#) (p. 247)
- [S3Settings](#) (p. 248)
- [Subnet](#) (p. 251)
- [SupportedEndpointType](#) (p. 252)

- [SybaseSettings](#) (p. 253)
- [TableStatistics](#) (p. 254)
- [TableToReload](#) (p. 257)
- [Tag](#) (p. 258)
- [VpcSecurityGroupMembership](#) (p. 259)

AccountQuota

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

Contents

AccountQuotaName

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

Type: String

Required: No

Max

The maximum allowed value for the quota.

Type: Long

Required: No

Used

The amount currently used toward the quota maximum.

Type: Long

Required: No

See Also

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

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

AvailabilityZone

Contents

Name

The name of the availability zone.

Type: String

Required: No

See Also

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

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

Certificate

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

Contents

CertificateArn

The Amazon Resource Name (ARN) for the certificate.

Type: String

Required: No

CertificateCreationDate

The date that the certificate was created.

Type: Timestamp

Required: No

CertificateIdentifier

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

Type: String

Required: No

CertificateOwner

The owner of the certificate.

Type: String

Required: No

CertificatePem

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

Type: String

Required: No

CertificateWallet

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

Type: Base64-encoded binary data object

Required: No

KeyLength

The key length of the cryptographic algorithm being used.

Type: Integer

Required: No

SigningAlgorithm

The signing algorithm for the certificate.

Type: String

Required: No

ValidFromDate

The beginning date that the certificate is valid.

Type: Timestamp

Required: No

ValidToDate

The final date that the certificate is valid.

Type: Timestamp

Required: No

See Also

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

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

Connection

Contents

EndpointArn

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

Type: String

Required: No

EndpointIdentifier

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

Type: String

Required: No

LastFailureMessage

The error message when the connection last failed.

Type: String

Required: No

ReplicationInstanceArn

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

Type: String

Required: No

ReplicationInstanceIdentifier

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

Type: String

Required: No

Status

The connection status.

Type: String

Required: No

See Also

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

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

- [AWS SDK for Ruby V2](#)

DmsTransferSettings

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

Contents

BucketName

The name of the S3 bucket to use.

Type: String

Required: No

ServiceAccessRoleArn

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

Type: String

Required: No

See Also

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

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

DynamoDbSettings

Contents

ServiceAccessRoleArn

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

Type: String

Required: Yes

See Also

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

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

ElasticsearchSettings

Contents

EndpointUri

The endpoint for the ElasticSearch cluster.

Type: String

Required: Yes

ErrorRetryDuration

The maximum number of seconds that 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.

Type: Integer

Required: No

ServiceAccessRoleArn

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

Type: String

Required: Yes

See Also

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

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

Endpoint

Contents

CertificateArn

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

Type: String

Required: No

DatabaseName

The name of the database at the endpoint.

Type: String

Required: No

DmsTransferSettings

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

Possible attributes include the following:

- `serviceAccessRoleArn` - The IAM role that has permission to access the Amazon S3 bucket.
- `bucketName` - The name of the S3 bucket to use.
- `compressionType` - An optional parameter to use GZIP to compress the target files. To use GZIP, set this value to `NONE` (the default). To keep the files uncompressed, don't use this value.

Shorthand syntax for these attributes is as follows:

`ServiceAccessRoleArn=string,BucketName=string,CompressionType=string`

JSON syntax for these attributes is as follows: `{ "ServiceAccessRoleArn": "string", "BucketName": "string", "CompressionType": "none"|"gzip" }`

Type: [DmsTransferSettings \(p. 196\)](#) object

Required: No

DynamoDbSettings

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

Type: [DynamoDbSettings \(p. 197\)](#) object

Required: No

ElasticsearchSettings

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

Type: [ElasticsearchSettings \(p. 198\)](#) object

Required: No

EndpointArn

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

Type: String

Required: No

EndpointIdentifier

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

Type: String

Required: No

EndpointType

The type of endpoint.

Type: String

Valid Values: `source` | `target`

Required: No

EngineDisplayName

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

Type: String

Required: No

EngineName

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

Type: String

Required: No

ExternalId

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

Type: String

Required: No

ExternalTableDefinition

The external table definition.

Type: String

Required: No

ExtraConnectionAttributes

Additional connection attributes used to connect to the endpoint.

Type: String

Required: No

IBMDB2Settings

Type: [IBMDB2Settings \(p. 211\)](#) object

Required: No

KinesisSettings

The settings for the Amazon Kinesis source endpoint. For more information, see the [KinesisSettings](#) structure.

Type: [KinesisSettings \(p. 212\)](#) object

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

MicrosoftSQLServerSettings

Type: [MicrosoftSQLServerSettings \(p. 213\)](#) object

Required: No

MongoDbSettings

The settings for the MongoDB source endpoint. For more information, see the [MongoDbSettings](#) structure.

Type: [MongoDbSettings \(p. 215\)](#) object

Required: No

MySQLSettings

Type: [MySQLSettings \(p. 218\)](#) object

Required: No

OracleSettings

Type: [OracleSettings \(p. 220\)](#) object

Required: No

Port

The port value used to access the endpoint.

Type: Integer

Required: No

PostgreSQLSettings

Type: [PostgreSQLSettings \(p. 227\)](#) object

Required: No

RedshiftSettings

Type: [RedshiftSettings \(p. 229\)](#) object

Required: No

S3Settings

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

Type: [S3Settings \(p. 248\)](#) object

Required: No

ServerName

The name of the server at the endpoint.

Type: String

Required: No

ServiceAccessRoleArn

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

Type: String

Required: No

SslMode

The SSL mode used to connect to the endpoint.

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

The default value is none.

Type: String

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

Required: No

Status

The status of the endpoint.

Type: String

Required: No

SybaseSettings

Type: [SybaseSettings \(p. 253\)](#) 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](#)
- [AWS SDK for Ruby V2](#)

EndpointSetting

Contents

EnumValues

Type: Array of strings

Required: No

Name

Type: String

Required: No

Sensitive

Type: Boolean

Required: No

Type

Type: String

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

Required: No

Units

Type: String

Required: No

See Also

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

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

Event

Contents

Date

The date of the event.

Type: Timestamp

Required: No

EventCategories

The event categories available for the specified source type.

Type: Array of strings

Required: No

Message

The event message.

Type: String

Required: No

SourceIdentifier

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

Constraints: replication instance, endpoint, migration task

Type: String

Required: No

SourceType

The type of AWS DMS resource that generates events.

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

Type: String

Valid Values: `replication-instance`

Required: No

See Also

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

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

EventCategoryGroup

Contents

EventCategories

A list of event categories for a `SourceType` that you want to subscribe to.

Type: Array of strings

Required: No

SourceType

The type of AWS DMS resource that generates events.

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

Type: String

Required: No

See Also

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

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

EventSubscription

Contents

CustomerAwsId

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

Type: String

Required: No

CustSubscriptionId

The AWS DMS event notification subscription Id.

Type: String

Required: No

Enabled

Boolean value that indicates if the event subscription is enabled.

Type: Boolean

Required: No

EventCategoriesList

A 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 | migration-task

Type: String

Required: No

Status

The status of the AWS DMS event notification subscription.

Constraints:

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

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

Type: String

Required: No

SubscriptionCreationTime

The time the RDS event notification subscription was created.

Type: String

Required: No

See Also

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

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

Filter

Contents

Name

The name of the filter.

Type: String

Required: Yes

Values

The filter value.

Type: Array of strings

Required: Yes

See Also

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

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

IBMDB2Settings

Contents

DatabaseName

Type: String

Required: No

ExecuteTimeout

Type: Integer

Required: No

Password

Type: String

Required: No

Port

Type: Integer

Required: No

ServerName

Type: String

Required: No

SetDataCaptureChanges

Type: Boolean

Required: No

Username

Type: String

Required: No

See Also

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

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

KinesisSettings

Contents

MessageFormat

The output format for the records created on the endpoint. The message format is `JSON`.

Type: String

Valid Values: `json`

Required: No

ServiceAccessRoleArn

The Amazon Resource Name (ARN) for the IAM role that DMS uses to write to the Amazon Kinesis data stream.

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

MicrosoftSQLServerSettings

Contents

ActivateSafeguard

Type: Boolean

Required: No

BcpPacketSize

Type: Integer

Required: No

ConnectionTimeout

Type: Integer

Required: No

DatabaseName

Type: String

Required: No

IgnoreDdl

Type: Boolean

Required: No

IgnoreMsReplicationEnablement

Type: Boolean

Required: No

Password

Type: String

Required: No

ReadBackupOnly

Type: Boolean

Required: No

SafeguardFrequency

Type: Integer

Required: No

SafeguardPolicy

Type: String

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

Required: No

ServerName

Type: String

Required: No

UseBcpCdc

Type: Boolean

Required: No

UseBcpFullLoad

Type: Boolean

Required: No

Username

Type: String

Required: No

See Also

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

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

MongoDbSettings

Contents

AuthMechanism

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

Valid values: DEFAULT, MONGODB_CR, SCRAM_SHA_1

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

Type: String

Valid Values: `default` | `mongodb_cr` | `scram_sha_1`

Required: No

AuthSource

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

The default is `admin`.

Type: String

Required: No

AuthType

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

Valid values: NO, PASSWORD

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

Type: String

Valid Values: `no` | `password`

Required: No

DatabaseName

The database name on the MongoDB source endpoint.

Type: String

Required: No

DocsToInvestigate

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

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

Type: String

Required: No

ExtractDocId

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

Default value is `false`.

Type: String

Required: No

KmsKeyId

The 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.

Valid values: `NONE`, `ONE`

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

Type: String

Valid Values: `none` | `one`

Required: No

Password

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

Type: String

Required: No

Port

The port value for the MongoDB source endpoint.

Type: Integer

Required: No

ServerName

The name of the server on the MongoDB source endpoint.

Type: String

Required: No

Username

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

Type: String

Required: No

See Also

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

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

MySQLSettings

Contents

AfterConnectScript

Type: String

Required: No

CharsetMapping

Type: String

Required: No

ConnectionTimeout

Type: Integer

Required: No

DatabaseName

Type: String

Required: No

EventsPollInterval

Type: Integer

Required: No

LoadUsingCsv

Type: Boolean

Required: No

MinPollInterval

Type: Integer

Required: No

ParallelLoadThreads

Type: Integer

Required: No

Password

Type: String

Required: No

Port

Type: Integer

Required: No

ReadTimeout

Type: Integer

Required: No

ServerName

Type: String

Required: No

ServerTimezone

Type: String

Required: No

UnloadTimeout

Type: Integer

Required: No

Username

Type: String

Required: No

WriteTimeout

Type: Integer

Required: No

See Also

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

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

OracleSettings

Contents

AddSupplementalLogging

Type: Boolean

Required: No

AlwaysReplaceEmptyString

Type: Boolean

Required: No

ArchivedLogDestId

Type: Integer

Required: No

ArchivedLogsOnly

Type: Boolean

Required: No

AsmPassword

Type: String

Required: No

AsmServer

Type: String

Required: No

AsmUser

Type: String

Required: No

BatchSize

Type: Integer

Required: No

CharacterSet

Type: String

Required: No

CharLengthSemantics

Type: String

Valid Values: `default` | `char` | `byte`

Required: No

CopyOnlineRedoFromAsmToTempFolder

Type: Boolean

Required: No

CopyToTempFolder

Type: String

Required: No

DatabaseName

Type: String

Required: No

DirectPathParallelLoad

Type: Boolean

Required: No

EmptyStringValue

Type: String

Required: No

ExposeViews

Type: Boolean

Required: No

FailTasksOnLobTruncation

Type: Boolean

Required: No

NumberDatatypeScale

Type: Integer

Required: No

Password

Type: String

Required: No

Port

Type: Integer

Required: No

ReadTableSpaceName

Type: Boolean

Required: No

RetryInterval

Type: Integer

Required: No

RetryTimeoutInMinutes

Type: Integer

Required: No

SecurityDbEncryption

Type: String

Required: No

SecurityDbEncryptionName

Type: String

Required: No

ServerName

Type: String

Required: No

StandbyDelayTime

Type: Integer

Required: No

UseBFile

Type: Boolean

Required: No

UseDirectPathFullLoad

Type: Boolean

Required: No

UseLogminerReader

Type: Boolean

Required: No

Username

Type: String

Required: No

See Also

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

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

OrderableReplicationInstance

Contents

AvailabilityZones

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

ReplicationInstanceClass

The compute and memory capacity of the replication instance.

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

Type: String

Required: No

StorageType

The type of storage used by the replication instance.

Type: String

Required: No

See Also

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

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

PendingMaintenanceAction

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 will be applied. The maintenance action will be 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, the `AutoAppliedAfterDate`, and the `ForcedApplyDate`. This value is blank if an opt-in request has not been received and nothing has been specified as `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 will be 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

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

PostgreSQLSettings

Contents

AfterConnectScript

Type: String

Required: No

CaptureDdls

Type: Boolean

Required: No

ConnectionTimeout

Type: Integer

Required: No

DatabaseName

Type: String

Required: No

DdlArtifactsSchema

Type: String

Required: No

ExecuteTimeout

Type: Integer

Required: No

FailTasksOnLobTruncation

Type: Boolean

Required: No

ForceLOBNullable

Type: Boolean

Required: No

HeartbeatEnable

Type: Boolean

Required: No

HeartbeatFrequency

Type: Integer

Required: No

HeartbeatSchema

Type: String

Required: No

LoadUsingCsv

Type: Boolean

Required: No

Password

Type: String

Required: No

PluginName

Type: String

Valid Values: `no-preference` | `test-decoding` | `pglogical`

Required: No

Port

Type: Integer

Required: No

ServerName

Type: String

Required: No

SlotName

Type: String

Required: No

UnboundedVarcharMaxSize

Type: Integer

Required: No

Username

Type: String

Required: No

See Also

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

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

RedshiftSettings

Contents

AcceptAnyDate

Type: Boolean

Required: No

AfterConnectScript

Type: String

Required: No

BucketFolder

Type: String

Required: No

BucketName

Type: String

Required: No

ConnectionTimeout

Type: Integer

Required: No

DatabaseName

Type: String

Required: No

DateFormat

Type: String

Required: No

EmptyAsNull

Type: Boolean

Required: No

EncryptionMode

Type: String

Valid Values: `sse-s3` | `sse-kms`

Required: No

FileTransferUploadStreams

Type: Integer

Required: No

LoadTimeout

Type: Integer

Required: No

MaxFileSize

Type: Integer

Required: No

Password

Type: String

Required: No

Port

Type: Integer

Required: No

RemoveQuotes

Type: Boolean

Required: No

ReplaceChars

Type: String

Required: No

ReplaceInvalidChars

Type: String

Required: No

ServerName

Type: String

Required: No

ServerSideEncryptionKmsKeyId

Type: String

Required: No

ServiceAccessRoleArn

Type: String

Required: No

TimeFormat

Type: String

Required: No

TrimBlanks

Type: Boolean

Required: No

TruncateColumns

Type: Boolean

Required: No

Username

Type: String

Required: No

WriteBufferSize

Type: Integer

Required: No

See Also

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

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

RefreshSchemasStatus

Contents

EndpointArn

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

Type: String

Required: No

LastFailureMessage

The last failure message for the schema.

Type: String

Required: No

LastRefreshDate

The date the schema was last refreshed.

Type: Timestamp

Required: No

ReplicationInstanceArn

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

Type: String

Required: No

Status

The status of the schema.

Type: String

Valid Values: `successful` | `failed` | `refreshing`

Required: No

See Also

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

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

ReplicationInstance

Contents

AllocatedStorage

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

Type: Integer

Required: No

AutoMinorVersionUpgrade

Boolean value indicating if minor version upgrades will be automatically applied to the instance.

Type: Boolean

Required: No

AvailabilityZone

The Availability Zone for the instance.

Type: String

Required: No

DnsNameServers

The DNS name servers for the replication instance.

Type: String

Required: No

EngineVersion

The engine version number of the replication instance.

Type: String

Required: No

FreeUntil

The expiration date of the free replication instance that is part of the Free DMS program.

Type: Timestamp

Required: No

InstanceCreateTime

The time the replication instance was created.

Type: Timestamp

Required: No

KmsKeyId

The 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

MultiAZ

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

Type: Boolean

Required: No

PendingModifiedValues

The pending modification values.

Type: [ReplicationPendingModifiedValues \(p. 238\)](#) object

Required: No

PreferredMaintenanceWindow

The maintenance window times for the replication instance.

Type: String

Required: No

PubliclyAccessible

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

Type: Boolean

Required: No

ReplicationInstanceArn

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

Type: String

Required: No

ReplicationInstanceClass

The compute and memory capacity of the replication instance.

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

Type: String

Required: No

ReplicationInstanceIdentifier

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

Constraints:

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

Example: myrepinstance

Type: String

Required: No

ReplicationInstancePrivateIpAddress

This member has been deprecated.

The private IP address of the replication instance.

Type: String

Required: No

ReplicationInstancePrivateIpAddresses

The private IP address of the replication instance.

Type: Array of strings

Required: No

ReplicationInstancePublicIpAddress

This member has been deprecated.

The public IP address of the replication instance.

Type: String

Required: No

ReplicationInstancePublicIpAddresses

The public IP address of the replication instance.

Type: Array of strings

Required: No

ReplicationInstanceStatus

The status of the replication instance.

Type: String

Required: No

ReplicationSubnetGroup

The subnet group for the replication instance.

Type: [ReplicationSubnetGroup](#) (p. 239) 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. 259) 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](#)
- [AWS SDK for Ruby V2](#)

ReplicationInstanceTaskLog

Contains metadata for a replication instance task log.

Contents

ReplicationInstanceTaskLogSize

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

Type: Long

Required: No

ReplicationTaskArn

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

Type: String

Required: No

ReplicationTaskName

The name of the replication task.

Type: String

Required: No

See Also

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

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

ReplicationPendingModifiedValues

Contents

AllocatedStorage

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

Type: Integer

Required: No

EngineVersion

The engine version number of the replication instance.

Type: String

Required: No

MultiAZ

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

Type: Boolean

Required: No

ReplicationInstanceClass

The compute and memory capacity of the replication instance.

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

Type: String

Required: No

See Also

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

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

ReplicationSubnetGroup

Contents

ReplicationSubnetGroupDescription

The description of the replication subnet group.

Type: String

Required: No

ReplicationSubnetGroupIdentifier

The identifier of the replication instance subnet group.

Type: String

Required: No

SubnetGroupStatus

The status of the subnet group.

Type: String

Required: No

Subnets

The subnets that are in the subnet group.

Type: Array of [Subnet \(p. 251\)](#) objects

Required: No

VpcId

The ID of the VPC.

Type: String

Required: No

See Also

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

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

ReplicationTask

Contents

CdcStartPosition

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

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

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

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

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

Type: String

Required: No

CdcStopPosition

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

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

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

Type: String

Required: No

LastFailureMessage

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

Type: String

Required: No

MigrationType

The type of migration.

Type: String

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

Required: No

RecoveryCheckpoint

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

Type: String

Required: No

ReplicationInstanceArn

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

Type: String

Required: No

ReplicationTaskArn

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

Type: String

Required: No

ReplicationTaskCreationDate

The date the replication task was created.

Type: Timestamp

Required: No

ReplicationTaskIdentifier

The user-assigned replication task identifier or name.

Constraints:

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

Type: String

Required: No

ReplicationTaskSettings

The settings for the replication task.

Type: String

Required: No

ReplicationTaskStartDate

The date the replication task is scheduled to start.

Type: Timestamp

Required: No

ReplicationTaskStats

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

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

Required: No

SourceEndpointArn

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

Type: String

Required: No

Status

The status of the replication task.

Type: String

Required: No

StopReason

The reason the replication task was stopped.

Type: String

Required: No

TableMappings

Table mappings specified in the task.

Type: String

Required: No

TargetEndpointArn

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

Type: String

Required: No

See Also

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

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

ReplicationTaskAssessmentResult

The task assessment report in JSON format.

Contents

AssessmentResults

The task assessment results in JSON format.

Type: String

Required: No

AssessmentResultsFile

The file containing the results of the task assessment.

Type: String

Required: No

AssessmentStatus

The status of the task assessment.

Type: String

Required: No

ReplicationTaskArn

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

Type: String

Required: No

ReplicationTaskIdentifier

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

Type: String

Required: No

ReplicationTaskLastAssessmentDate

The date the task assessment was completed.

Type: Timestamp

Required: No

S3ObjectUrl

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

Type: String

Required: No

See Also

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

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

ReplicationTaskStats

Contents

ElapsedTimeMillis

The elapsed time of the task, in milliseconds.

Type: Long

Required: No

FullLoadProgressPercent

The percent complete for the full load migration task.

Type: Integer

Required: No

TablesErrored

The number of errors that have occurred during this task.

Type: Integer

Required: No

TablesLoaded

The number of tables loaded for this task.

Type: Integer

Required: No

TablesLoading

The number of tables currently loading for this task.

Type: Integer

Required: No

TablesQueued

The number of tables queued for this task.

Type: Integer

Required: No

See Also

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

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

- [AWS SDK for Ruby V2](#)

ResourcePendingMaintenanceActions

Contents

PendingMaintenanceActionDetails

Detailed information about the pending maintenance action.

Type: Array of [PendingMaintenanceAction](#) (p. 225) 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 \(ARN\)](#) in the 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](#)
- [AWS SDK for Ruby V2](#)

S3Settings

Contents

BucketFolder

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

Type: String

Required: No

BucketName

The name of the S3 bucket.

Type: String

Required: No

CompressionType

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

Type: String

Valid Values: none | gzip

Required: No

CsvDelimiter

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

Type: String

Required: No

CsvRowDelimiter

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

Type: String

Required: No

DataFormat

Type: String

Valid Values: csv | parquet

Required: No

DataPageSize

Type: Integer

Required: No

DictPageSizeLimit

Type: Integer

Required: No

EnableStatistics

Type: Boolean

Required: No

EncodingType

Type: String

Valid Values: `plain` | `plain-dictionary` | `rle-dictionary`

Required: No

EncryptionMode

Type: String

Valid Values: `sse-s3` | `sse-kms`

Required: No

ExternalTableDefinition

The external table definition.

Type: String

Required: No

ParquetVersion

Type: String

Valid Values: `parquet-1-0` | `parquet-2-0`

Required: No

RowGroupLength

Type: Integer

Required: No

ServerSideEncryptionKmsKeyId

Type: String

Required: No

ServiceAccessRoleArn

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

Type: String

Required: No

See Also

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

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

Subnet

Contents

SubnetAvailabilityZone

The Availability Zone of the subnet.

Type: [AvailabilityZone](#) (p. 191) object

Required: No

SubnetIdentifier

The subnet identifier.

Type: String

Required: No

SubnetStatus

The status of the subnet.

Type: String

Required: No

See Also

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

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

SupportedEndpointType

Contents

EndpointType

The type of endpoint.

Type: String

Valid Values: `source` | `target`

Required: No

EngineDisplayName

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

Type: String

Required: No

EngineName

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

Type: String

Required: No

SupportsCDC

Indicates if Change Data Capture (CDC) is supported.

Type: Boolean

Required: No

See Also

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

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

SybaseSettings

Contents

ConnectionTimeout

Type: Integer

Required: No

DatabaseName

Type: String

Required: No

Password

Type: String

Required: No

Port

Type: Integer

Required: No

ServerName

Type: String

Required: No

Username

Type: String

Required: No

See Also

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

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

TableStatistics

Contents

Ddls

The Data Definition Language (DDL) used to build and modify the structure of your tables.

Type: Long

Required: No

Deletes

The number of delete actions performed on a table.

Type: Long

Required: No

FullLoadCondtnlChkFailedRows

The number of rows that failed conditional checks during the Full Load operation (valid only for DynamoDB as a target migrations).

Type: Long

Required: No

FullLoadErrorRows

The number of rows that failed to load during the Full Load operation (valid only for DynamoDB as a target migrations).

Type: Long

Required: No

FullLoadRows

The number of rows added during the Full Load operation.

Type: Long

Required: No

Inserts

The number of insert actions performed on a table.

Type: Long

Required: No

LastUpdateTime

The last time the table was updated.

Type: Timestamp

Required: No

SchemaName

The schema name.

Type: String

Required: No

TableName

The name of the table.

Type: String

Required: No

TableState

The state of the tables described.

Valid states: Table does not exist | Before load | Full load | Table completed | Table cancelled | Table error | Table all | Table updates | Table is being reloaded

Type: String

Required: No

Updates

The number of update actions performed on a table.

Type: Long

Required: No

ValidationFailedRecords

The number of records that failed validation.

Type: Long

Required: No

ValidationPendingRecords

The number of records that have yet to be validated.

Type: Long

Required: No

ValidationState

The validation state of the table.

The parameter can have the following values

- Not enabled—Validation is not enabled for the table in the migration task.
- Pending records—Some records in the table are waiting for validation.
- Mismatched records—Some records in the table do not match between the source and target.
- Suspended records—Some records in the table could not be validated.
- No primary key—The table could not be validated because it had no primary key.
- Table error—The table was not validated because it was in an error state and some data was not migrated.

- Validated—All rows in the table were validated. If the table is updated, the status can change from Validated.
- Error—The table could not be validated because of an unexpected error.

Type: String

Required: No

ValidationStateDetails

Additional details about the state of validation.

Type: String

Required: No

ValidationSuspendedRecords

The number of records that could not be validated.

Type: Long

Required: No

See Also

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

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

TableToReload

Contents

SchemaName

The schema name of the table to be reloaded.

Type: String

Required: No

TableName

The table name of the table to be reloaded.

Type: String

Required: No

See Also

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

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

Tag

Contents

Key

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

Type: String

Required: No

Value

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

Type: String

Required: No

See Also

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

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

VpcSecurityGroupMembership

Contents

Status

The status of the VPC security group.

Type: String

Required: No

VpcSecurityGroupId

The VPC security group Id.

Type: String

Required: No

See Also

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

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

Common Parameters

The following list contains the parameters that all actions use for signing Signature Version 4 requests with a query string. Any action-specific parameters are listed in the topic for that action. For more information about Signature Version 4, see [Signature Version 4 Signing Process](#) in the *Amazon Web Services General Reference*.

Action

The action to be performed.

Type: string

Required: Yes

Version

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

Type: string

Required: Yes

X-Amz-Algorithm

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

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

Type: string

Valid Values: `AWS4-HMAC-SHA256`

Required: Conditional

X-Amz-Credential

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

For more information, see [Task 2: Create a String to Sign for Signature Version 4](#) in the *Amazon Web Services General Reference*.

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

Type: string

Required: Conditional

X-Amz-Date

The date that is used to create the signature. The format must be ISO 8601 basic format (YYYYMMDD'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

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