AWS Server Migration Service

Server Migration

API Version 2016-10-24
# Table of Contents

Welcome ........................................................................................................................................... 1  
Actions ............................................................................................................................................... 2  
CreateReplicationJob ................................................................. 3  
  Request Syntax ........................................................................ 3  
  Request Parameters ................................................................ 3  
  Response Syntax ..................................................................... 3  
  Response Elements .................................................................. 4  
  Errors ...................................................................................... 4  
  See Also ..................................................................................... 4  
DeleteReplicationJob ................................................................. 6  
  Request Syntax ........................................................................ 6  
  Request Parameters ................................................................ 6  
  Response Elements .................................................................. 6  
  Errors ...................................................................................... 6  
  See Also ..................................................................................... 6  
DeleteServerCatalog ................................................................. 8  
  Response Elements .................................................................. 8  
  Errors ...................................................................................... 8  
  See Also ..................................................................................... 8  
DisassociateConnector ............................................................... 9  
  Request Syntax ........................................................................ 9  
  Request Parameters ................................................................ 9  
  Response Elements .................................................................. 9  
  Errors ...................................................................................... 9  
  See Also ..................................................................................... 9  
GetConnectors ............................................................................... 11  
  Request Syntax ......................................................................... 11  
  Request Parameters ................................................................ 11  
  Response Syntax ..................................................................... 11  
  Response Elements .................................................................. 11  
  Errors ...................................................................................... 12  
  See Also ..................................................................................... 12  
GetReplicationJobs ..................................................................... 13  
  Request Syntax ......................................................................... 13  
  Request Parameters ................................................................ 13  
  Response Syntax ..................................................................... 13  
  Response Elements .................................................................. 14  
  Errors ...................................................................................... 14  
  See Also ..................................................................................... 14  
GetReplicationRuns .................................................................... 16  
  Request Syntax ......................................................................... 16  
  Request Parameters ................................................................ 16  
  Response Syntax ..................................................................... 16  
  Response Elements .................................................................. 16  
  Errors ...................................................................................... 17  
  See Also ..................................................................................... 17  
GetServers ................................................................................... 19  
  Request Syntax ......................................................................... 19  
  Request Parameters ................................................................ 19  
  Response Syntax ..................................................................... 19  
  Response Elements .................................................................. 19  
  Errors ...................................................................................... 20  
  See Also ..................................................................................... 20  
ImportServerCatalog ................................................................. 21

API Version 2016-10-24

iii
Welcome

This document was last published on February 8, 2018.
Actions

The following actions are supported:

- `CreateReplicationJob` (p. 3)
- `DeleteReplicationJob` (p. 6)
- `DeleteServerCatalog` (p. 8)
- `DisassociateConnector` (p. 9)
- `GetConnectors` (p. 11)
- `GetReplicationJobs` (p. 13)
- `GetReplicationRuns` (p. 16)
- `GetServers` (p. 19)
- `ImportServerCatalog` (p. 21)
- `StartOnDemandReplicationRun` (p. 22)
- `UpdateReplicationJob` (p. 24)
CreateReplicationJob

Request Syntax

```
{
   "description": "string",
   "frequency": number,
   "licenseType": "string",
   "roleName": "string",
   "seedReplicationTime": number,
   "serverId": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 36).

The request accepts the following data in JSON format.

description (p. 3)
Type: String
Required: No

frequency (p. 3)
Type: Integer
Required: Yes

licenseType (p. 3)
Type: String
Valid Values: AWS | BYOL
Required: No

roleName (p. 3)
Type: String
Required: No

seedReplicationTime (p. 3)
Type: Timestamp
Required: Yes

serverId (p. 3)
Type: String
Required: Yes

Response Syntax

```
{
}
```
"replicationJobId": "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.

**replicationJobId (p. 3)**

Type: String

Errors

For information about the errors that are common to all actions, see Common Errors (p. 38).

**InternalError**

HTTP Status Code: 500

**InvalidParameterException**

HTTP Status Code: 400

**MissingRequiredParameterException**

HTTP Status Code: 400

**NoConnectorsAvailableException**

HTTP Status Code: 400

**OperationNotPermittedException**

HTTP Status Code: 400

**ReplicationJobAlreadyExistsException**

HTTP Status Code: 400

**ServerCannotBeReplicatedException**

HTTP Status Code: 400

**UnauthorizedOperationException**

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
See Also

- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
DeleteReplicationJob

Request Syntax

```json
{
  "replicationJobId": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 36).

The request accepts the following data in JSON format.

**replicationJobId (p. 6)**

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. 38).

- **InvalidParameterException**
  - HTTP Status Code: 400
- **MissingRequiredParameterException**
  - HTTP Status Code: 400
- **OperationNotPermittedException**
  - HTTP Status Code: 400
- **ReplicationJobNotFoundException**
  - HTTP Status Code: 400
- **UnauthorizedOperationException**
  - 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
See Also

- 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
DeleteServerCatalog

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. 38).

InvalidParameterException

  HTTP Status Code: 400

MissingRequiredParameterException

  HTTP Status Code: 400

OperationNotPermittedException

  HTTP Status Code: 400

UnauthorizedOperationException

  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
DisassociateConnector

Request Syntax

```json
{
   "connectorId": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 36).

The request accepts the following data in JSON format.

**connectorId (p. 9)**

- 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. 38).

- **InvalidParameterException**
  - HTTP Status Code: 400
- **MissingRequiredParameterException**
  - HTTP Status Code: 400
- **OperationNotAllowedException**
  - HTTP Status Code: 400
- **UnauthorizedOperationException**
  - 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
See Also

- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V2
GetConnectors

Request Syntax

```json
{
  "maxResults": number,
  "nextToken": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 36).

The request accepts the following data in JSON format.

**maxResults (p. 11)**
- **Type:** Integer
- **Required:** No

**nextToken (p. 11)**
- **Type:** String
- **Required:** No

Response Syntax

```json
{
  "connectorList": [
  {
    "associatedOn": number,
    "capabilityList": [ "string" ],
    "connectorId": "string",
    "ipAddress": "string",
    "macAddress": "string",
    "status": "string",
    "version": "string",
    "vmManagerId": "string",
    "vmManagerName": "string",
    "vmManagerType": "string"
  }
  ],
  "nextToken": "string"
}
```

Response Elements

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

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

**connectorList (p. 11)**
- **Type:** Array of Connector (p. 27) objects
**nextToken (p. 11)**

Type: String

**Errors**

For information about the errors that are common to all actions, see Common Errors (p. 38).

**UnauthorizedOperationException**

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
GetReplicationJobs

**Request Syntax**

```
{
  "maxResults": number,
  "nextToken": "string",
  "replicationJobId": "string"
}
```

**Request Parameters**

For information about the parameters that are common to all actions, see Common Parameters (p. 36).

The request accepts the following data in JSON format.

- **maxResults (p. 13)**
  
  Type: Integer
  
  Required: No

- **nextToken (p. 13)**
  
  Type: String
  
  Required: No

- **replicationJobId (p. 13)**
  
  Type: String
  
  Required: No

**Response Syntax**

```
{
  "nextToken": "string",
  "replicationJobList": [
    {
      "description": "string",
      "frequency": number,
      "latestAmiId": "string",
      "licenseType": "string",
      "nextReplicationRunStartTime": number,
      "replicationJobId": "string",
      "replicationRunList": [
        {
          "amiId": "string",
          "completedTime": number,
          "description": "string",
          "replicationRunId": "string",
          "scheduledStartTime": number,
          "state": "string",
          "statusMessage": "string",
          "type": "string"
        }
      ]
    }
  ]
}
```

API Version 2016-10-24
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.

```json
nextToken (p. 13)
  Type: String
replicationJobList (p. 13)
  Type: Array of ReplicationJob (p. 29) objects
```

Errors

For information about the errors that are common to all actions, see Common Errors (p. 38).

```text
InvalidParameterException
  HTTP Status Code: 400
MissingRequiredParameterException
  HTTP Status Code: 400
UnauthorizedOperationException
  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

API Version 2016-10-24
See Also

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

Request Syntax

```
{
    "maxResults": number,
    "nextToken": "string",
    "replicationJobId": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 36).

The request accepts the following data in JSON format.

**maxResults (p. 16)**
- Type: Integer
- Required: No

**nextToken (p. 16)**
- Type: String
- Required: No

**replicationJobId (p. 16)**
- Type: String
- Required: Yes

Response Syntax

```
{
    "nextToken": "string",
    "replicationJob": {
        "description": "string",
        "frequency": number,
        "latestAmiId": "string",
        "licenseType": "string",
        "nextReplicationRunStartTime": number,
        "replicationJobId": "string",
        "replicationRunList": [
            {
                "amiId": "string",
                "completedTime": number,
                "description": "string",
                "replicationRunId": "string",
                "scheduledStartRun": number,
                "state": "string",
                "statusMessage": "string",
                "type": "string"
            }
        ],
        "roleName": "string",
    }
}
```
"seedReplicationTime": number,
"serverId": "string",
"serverType": "string",
"state": "string",
"statusMessage": "string",
"vmServer": {
  "vmManagerName": "string",
  "vmManagerType": "string",
  "vmName": "string",
  "vmPath": "string",
  "vmServerAddress": {
    "vmId": "string",
    "vmManagerId": "string"
  }
},
"replicationRunList": [ {
  "amiId": "string",
  "completedTime": number,
  "description": "string",
  "replicationRunId": "string",
  "scheduledStartTime": number,
  "state": "string",
  "statusMessage": "string",
  "type": "string"
} ]

Response Elements

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

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

nextToken (p. 16)
  Type: String
replicationJob (p. 16)
  Type: ReplicationJob (p. 29) object
replicationRunList (p. 16)
  Type: Array of ReplicationRun (p. 31) objects

Errors

For information about the errors that are common to all actions, see Common Errors (p. 38).

InvalidParameterException
  HTTP Status Code: 400
MissingRequiredParameterException
  HTTP Status Code: 400
UnauthorizedOperationException
  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
GetServers

Request Syntax

```json
{
    "maxResults": number,
    "nextToken": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 36).

The request accepts the following data in JSON format.

**maxResults (p. 19)**
- Type: Integer
- Required: No

**nextToken (p. 19)**
- Type: String
- Required: No

Response Syntax

```json
{
    "lastModifiedOn": number,
    "nextToken": "string",
    "serverCatalogStatus": "string",
    "serverList": [
        {
            "replicationJobId": "string",
            "replicationJobTerminated": boolean,
            "serverId": "string",
            "serverType": "string",
            "vmServer": {
                "vmManagerName": "string",
                "vmManagerType": "string",
                "vmName": "string",
                "vmPath": "string",
                "vmServerAddress": {
                    "vmId": "string",
                    "vmManagerId": "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.

**lastModifiedOn (p. 19)**
Type: Timestamp

**nextToken (p. 19)**
Type: String

**serverCatalogStatus (p. 19)**
Type: String
Valid Values: NOT_IMPORTED | IMPORTING | AVAILABLE | DELETED | EXPIRED

**serverList (p. 19)**
Type: Array of Server (p. 33) objects

**Errors**

For information about the errors that are common to all actions, see Common Errors (p. 38).

**UnauthorizedOperationException**

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
ImportServerCatalog

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. 38).

InvalidParameterException

HTTP Status Code: 400

MissingRequiredParameterException

HTTP Status Code: 400

NoConnectorsAvailableException

HTTP Status Code: 400

OperationNotPermittedException

HTTP Status Code: 400

UnauthorizedOperationException

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
StartOnDemandReplicationRun

Request Syntax

```json
{
    "description": "string",
    "replicationJobId": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 36).

The request accepts the following data in JSON format.

- **description (p. 22)**
  - Type: String
  - Required: No
- **replicationJobId (p. 22)**
  - Type: String
  - Required: Yes

Response Syntax

```json
{
    "replicationRunId": "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.

- **replicationRunId (p. 22)**
  - Type: String

Errors

For information about the errors that are common to all actions, see Common Errors (p. 38).

- **InvalidParameterException**
  - HTTP Status Code: 400
- **MissingRequiredParameterException**
  - HTTP Status Code: 400
OperationNotPermittedException
HTTP Status Code: 400

ReplicationRunLimitExceeded Exception
HTTP Status Code: 400

UnauthorizedOperationException
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
UpdateReplicationJob

Request Syntax

```json
{
  "description": "string",
  "frequency": number,
  "licenseType": "string",
  "nextReplicationRunStartTime": number,
  "replicationJobId": "string",
  "roleName": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 36).

The request accepts the following data in JSON format.

description (p. 24)

Type: String

Required: No

frequency (p. 24)

Type: Integer

Required: No

licenseType (p. 24)

Type: String

Valid Values: AWS | BYOL

Required: No

nextReplicationRunStartTime (p. 24)

Type: Timestamp

Required: No

replicationJobId (p. 24)

Type: String

Required: Yes

roleName (p. 24)

Type: String

Required: No

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. 38).

InternalError

HTTP Status Code: 500

InvalidParameterException

HTTP Status Code: 400

MissingRequiredParameterException

HTTP Status Code: 400

OperationNotPermittedException

HTTP Status Code: 400

ReplicationJobNotFoundException

HTTP Status Code: 400

ServerCannotBeReplicatedException

HTTP Status Code: 400

UnauthorizedOperationException

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
Data Types

The AWS Server 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:

- Connector (p. 27)
- ReplicationJob (p. 29)
- ReplicationRun (p. 31)
- Server (p. 33)
- VmServer (p. 34)
- VmServerAddress (p. 35)
Connector

Contents

associatedOn
  Type: Timestamp
  Required: No

capabilityList
  Type: Array of strings
  Valid Values: VSphere
  Required: No

connectorId
  Type: String
  Required: No

ipAddress
  Type: String
  Required: No

macAddress
  Type: String
  Required: No

status
  Type: String
  Valid Values: healthy | unhealthy
  Required: No

version
  Type: String
  Required: No

vmManagerId
  Type: String
  Required: No

vmManagerName
  Type: String
  Required: No

vmManagerType
  Type: String
  Required: No
Valid Values: VSPHERE

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
ReplicationJob

Contents

description
Type: String
Required: No

count
Type: Integer
Required: No

count
Type: String
Required: No

latestAmiId
Type: String
Required: No

licenseType
Type: String
Valid Values: AWS | BYOL
Required: No

nextReplicationRunStartTime
Type: Timestamp
Required: No

replicationJobId
Type: String
Required: No

replicationRunList
Type: Array of ReplicationRun (p. 31) objects
Required: No

roleName
Type: String
Required: No

seedReplicationTime
Type: Timestamp
Required: No

serverId
Type: String
Required: No
serverType
Type: String
Valid Values: VIRTUAL_MACHINE
Required: No

state
Type: String
Valid Values: PENDING | ACTIVE | FAILED | DELETING | DELETED
Required: No

statusMessage
Type: String
Required: No

vmServer
Type: VmServer (p. 34) object
Required: No

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

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

Contents

amiId
Type: String
Required: No

completedTime
Type: Timestamp
Required: No

description
Type: String
Required: No

replicationRunId
Type: String
Required: No

scheduledStartTime
Type: Timestamp
Required: No

state
Type: String
Valid Values: PENDING | MISSED | ACTIVE | FAILED | COMPLETED | DELETING | DELETED
Required: No

statusMessage
Type: String
Required: No

type
Type: String
Valid Values: ON_DEMAND | AUTOMATIC
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
Server

Contents

replicationJobId
Type: String
Required: No

replicationJobTerminated
Type: Boolean
Required: No

serverId
Type: String
Required: No

serverType
Type: String
Valid Values: VIRTUAL_MACHINE
Required: No

vmServer
Type: VmServer (p. 34) object
Required: No

See Also

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

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

Contents

vmManagerName
Type: String
Required: No

vmManagerType
Type: String
Valid Values: VSPHERE
Required: No

vmName
Type: String
Required: No

vmPath
Type: String
Required: No

vmServerAddress
Type: VmServerAddress (p. 35) object
Required: No

See Also

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

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

Contents

vmId
   Type: String
   Required: No

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

**X-Amz-Date**
- The date that is used to create the signature. The format must be ISO 8601 basic format (YYYYMMDD'T'HHMMSS'Z'). For example, the following date time is a valid X-Amz-Date value: 20120325T120000Z.
  - Condition: Specify this parameter when you include authentication information in a query string instead of in the HTTP authorization header.
  - Type: string
  - Required: Conditional
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