# Table of Contents

Welcome ..................................................................................................................................... 1  
Actions ........................................................................................................................................ 2  
CreateTrail .................................................................................................................................. 3  
  Request Syntax .......................................................................................................................... 3  
  Request Parameters ................................................................................................................... 3  
  Response Syntax ....................................................................................................................... 4  
  Response Elements ................................................................................................................... 4  
  Errors ......................................................................................................................................... 4  
DeleteTrail .................................................................................................................................... 6  
  Request Syntax .......................................................................................................................... 6  
  Request Parameters ................................................................................................................... 6  
  Response Elements ................................................................................................................... 6  
  Errors ......................................................................................................................................... 6  
DescribeTrails ............................................................................................................................ 7  
  Request Syntax .......................................................................................................................... 7  
  Request Parameters ................................................................................................................... 7  
  Response Syntax ....................................................................................................................... 7  
  Response Elements ................................................................................................................... 7  
DescribeTrails ............................................................................................................................ 7  
  Request Syntax .......................................................................................................................... 7  
  Request Parameters ................................................................................................................... 7  
  Response Syntax ....................................................................................................................... 7  
  Response Elements ................................................................................................................... 7  
GetTrailStatus ............................................................................................................................ 8  
  Request Syntax .......................................................................................................................... 8  
  Request Parameters ................................................................................................................... 8  
  Response Syntax ....................................................................................................................... 8  
  Response Elements ................................................................................................................... 8  
  Errors ......................................................................................................................................... 8  
StartLogging ............................................................................................................................... 10  
  Request Syntax .......................................................................................................................... 10  
  Request Parameters ................................................................................................................... 10  
  Response Elements ................................................................................................................... 10  
  Errors ......................................................................................................................................... 10  
StopLogging ............................................................................................................................... 11  
  Request Syntax .......................................................................................................................... 11  
  Request Parameters ................................................................................................................... 11  
  Response Elements ................................................................................................................... 11  
  Errors ......................................................................................................................................... 11  
UpdateTrail ................................................................................................................................... 12  
  Request Syntax .......................................................................................................................... 12  
  Request Parameters ................................................................................................................... 12  
  Response Syntax ....................................................................................................................... 13  
  Response Elements ................................................................................................................... 13  
  Errors ......................................................................................................................................... 13  
Data Types .................................................................................................................................... 15  
CreateTrailResult ......................................................................................................................... 15  
  Description ............................................................................................................................... 15  
  Contents ..................................................................................................................................... 15  
DeleteTrailResult ........................................................................................................................ 16  
  Description ............................................................................................................................... 16  
  Contents ..................................................................................................................................... 16  
DescribeTrailsResult .................................................................................................................... 16  
  Description ............................................................................................................................... 16  
  Contents ..................................................................................................................................... 16  
GetTrailStatusResult .................................................................................................................... 17  
  Description ............................................................................................................................... 17  
  Contents ..................................................................................................................................... 17  
StartLoggingResult ....................................................................................................................... 18  
  Description ............................................................................................................................... 18
Contents .................................................................................................................... 18
StopLoggingResult .............................................................................................................. 18
  Description ................................................................................................................. 18
  Contents .................................................................................................................... 18
Trail ................................................................................................................................... 18
  Description ................................................................................................................. 18
  Contents .................................................................................................................... 18
UpdateTrailResult ................................................................................................................ 19
  Description ................................................................................................................. 19
  Contents .................................................................................................................... 19
Common Parameters ................................................................................................................... 20
  Common Parameters for Signature V4 Signing ................................................................. 22
  Common Errors ............................................................................................................. 24
Welcome

This is the CloudTrail API Reference. It provides descriptions of actions, data types, common parameters, and common errors for CloudTrail.

CloudTrail is a web service that records AWS API calls for your AWS account and delivers log files to an Amazon S3 bucket. The recorded information includes the identity of the user, the start time of the AWS API call, the source IP address, the request parameters, and the response elements returned by the service.

**Note**
As an alternative to using the API, you can use one of the AWS SDKs, which consist of libraries and sample code for various programming languages and platforms (Java, Ruby, .NET, iOS, Android, etc.). The SDKs provide a convenient way to create programmatic access to AWSCloudTrail. For example, the SDKs take care of cryptographically signing requests, managing errors, and retrying requests automatically. For information about the AWS SDKs, including how to download and install them, see the Tools for Amazon Web Services page.

See the CloudTrail User Guide for information about the data that is included with each AWS API call listed in the log files.

This document was last updated on August 27, 2014.
Actions

The following actions are supported:

- CreateTrail (p. 3)
- DeleteTrail (p. 6)
- DescribeTrails (p. 7)
- GetTrailStatus (p. 8)
- StartLogging (p. 10)
- StopLogging (p. 11)
- UpdateTrail (p. 12)
CreateTrail

From the command line, use `create-subscription`.

Creates a trail that specifies the settings for delivery of log data to an Amazon S3 bucket.

**Request Syntax**

```json
{
   "IncludeGlobalServiceEvents": "boolean",
   "Name": "string",
   "S3BucketName": "string",
   "S3KeyPrefix": "string",
   "SnsTopicName": "string"
}
```

**Request Parameters**

For information about the common parameters that all actions use, see [Common Parameters](#p.20).

The request accepts the following data in JSON format.

- **IncludeGlobalServiceEvents**
  Specifies whether the trail is publishing events from global services such as IAM to the log files.
  - Type: Boolean
  - Required: No

- **Name**
  Specifies the name of the trail.
  - Type: String
  - Required: Yes

- **S3BucketName**
  Specifies the name of the Amazon S3 bucket designated for publishing log files.
  - Type: String
  - Required: Yes

- **S3KeyPrefix**
  Specifies the Amazon S3 key prefix that precedes the name of the bucket you have designated for log file delivery.
  - Type: String
  - Required: No

- **SnsTopicName**
  Specifies the name of the Amazon SNS topic defined for notification of log file delivery.
  - Type: String
Response Syntax

```json
{
   "IncludeGlobalServiceEvents": "boolean",
   "Name": "string",
   "S3BucketName": "string",
   "S3KeyPrefix": "string",
   "SnsTopicName": "string"
}
```

Response Elements

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

**IncludeGlobalServiceEvents**
Specifies whether the trail is publishing events from global services such as IAM to the log files.

Type: Boolean

**Name**
Specifies the name of the trail.

Type: String

**S3BucketName**
Specifies the name of the Amazon S3 bucket designated for publishing log files.

Type: String

**S3KeyPrefix**
Specifies the Amazon S3 key prefix that precedes the name of the bucket you have designated for log file delivery.

Type: String

**SnsTopicName**
Specifies the name of the Amazon SNS topic defined for notification of log file delivery.

Type: String

Errors

For information about the errors that are common to all actions, see Common Errors (p. 24).

**InsufficientS3BucketPolicyException**
This exception is thrown when the policy on the S3 bucket is not sufficient.

HTTP Status Code: 403

**InsufficientSnsTopicPolicyException**
This exception is thrown when the policy on the SNS topic is not sufficient.

HTTP Status Code: 403
InvalidS3BucketNameException
This exception is thrown when the provided S3 bucket name is not valid.

HTTP Status Code: 400

InvalidS3PrefixException
This exception is thrown when the provided S3 prefix is not valid.

HTTP Status Code: 400

InvalidSnsTopicNameException
This exception is thrown when the provided SNS topic name is not valid.

HTTP Status Code: 400

InvalidTrailNameException
This exception is thrown when the provided trail name is not valid.

HTTP Status Code: 400

MaximumNumberOfTrailsExceededException
This exception is thrown when the maximum number of trails is reached.

HTTP Status Code: 403

S3BucketDoesNotExistException
This exception is thrown when the specified S3 bucket does not exist.

HTTP Status Code: 404

TrailAlreadyExistsException
This exception is thrown when the specified trail already exists.

HTTP Status Code: 400
DeleteTrail

Deletes a trail.

**Request Syntax**

```json
{
   "Name": "string"
}
```

**Request Parameters**

For information about the common parameters that all actions use, see Common Parameters (p. 20).

The request accepts the following data in JSON format.

- **Name**
  - The name of a trail to be deleted.
  - 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. 24).

- **InvalidTrailNameException**
  - This exception is thrown when the provided trail name is not valid.
  - HTTP Status Code: 400

- **TrailNotFoundException**
  - This exception is thrown when the trail with the given name is not found.
  - HTTP Status Code: 404
DescribeTrails

Retrieves the settings for some or all trails associated with an account.

Request Syntax

```json
{
    "TrailNameList": [
        "string"
    ]
}
```

Request Parameters

For information about the common parameters that all actions use, see Common Parameters (p. 20).

The request accepts the following data in JSON format.

**TrailNameList**

The list of trails.

Type: array of Strings

Required: No

Response Syntax

```json
{
    "TrailList": [
        {
            "IncludeGlobalServiceEvents": "boolean",
            "Name": "string",
            "S3BucketName": "string",
            "S3KeyPrefix": "string",
            "SnsTopicName": "string"
        }
    ]
}
```

Response Elements

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

**TrailList**

The list of trails.

Type: array of Trail (p. 18) objects
GetTrailStatus

Returns a JSON-formatted list of information about the specified trail. Fields include information on delivery errors, Amazon SNS and Amazon S3 errors, and start and stop logging times for each trail.

Request Syntax

```
{
   "Name": "string"
}
```

Request Parameters

For information about the common parameters that all actions use, see Common Parameters (p. 20).

The request accepts the following data in JSON format.

**Name**

The name of the trail for which you are requesting the current status.

- Type: String
- Required: Yes

Response Syntax

```
{
   "IsLogging": "boolean",
   "LatestDeliveryError": "string",
   "LatestDeliveryTime": "number",
   "LatestNotificationError": "string",
   "LatestNotificationTime": "number",
   "StartLoggingTime": "number",
   "StopLoggingTime": "number"
}
```

Response Elements

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

**IsLogging**

Whether the CloudTrail is currently logging AWS API calls.

- Type: Boolean

**LatestDeliveryError**

Displays any Amazon S3 error that CloudTrail encountered when attempting to deliver log files to the designated bucket. For more information see the topic Error Responses in the Amazon S3 API Reference.
LatestDeliveryTime
Specifies the date and time that CloudTrail last delivered log files to an account's Amazon S3 bucket.

Type: DateTime

LatestNotificationError
Displays any Amazon SNS error that CloudTrail encountered when attempting to send a notification.
For more information about Amazon SNS errors, see the Amazon SNS Developer Guide.

Type: String

LatestNotificationTime
Specifies the date and time of the most recent Amazon SNS notification that CloudTrail has written
a new log file to an account's Amazon S3 bucket.

Type: DateTime

StartLoggingTime
Specifies the most recent date and time when CloudTrail started recording API calls for an AWS
account.

Type: DateTime

StopLoggingTime
Specifies the most recent date and time when CloudTrail stopped recording API calls for an AWS
account.

Type: DateTime

Errors
For information about the errors that are common to all actions, see Common Errors (p. 24).

InvalidTrailNameException
This exception is thrown when the provided trail name is not valid.

HTTP Status Code: 400

TrailNotFoundException
This exception is thrown when the trail with the given name is not found.

HTTP Status Code: 404
StartLogging

Starts the recording of AWS API calls and log file delivery for a trail.

Request Syntax

```
{
   "Name": "string"
}
```

Request Parameters

For information about the common parameters that all actions use, see Common Parameters (p. 20).

The request accepts the following data in JSON format.

Name

The name of the trail for which CloudTrail logs AWS API calls.

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. 24).

InvalidTrailNameException

This exception is thrown when the provided trail name is not valid.

HTTP Status Code: 400

TrailNotFoundException

This exception is thrown when the trail with the given name is not found.

HTTP Status Code: 404
StopLogging

Suspends the recording of AWS API calls and log file delivery for the specified trail. Under most circumstances, there is no need to use this action. You can update a trail without stopping it first. This action is the only way to stop recording.

Request Syntax

```json
{
   "Name": "string"
}
```

Request Parameters

For information about the common parameters that all actions use, see Common Parameters (p. 20).

The request accepts the following data in JSON format.

**Name**

Communicates to CloudTrail the name of the trail for which to stop logging AWS API calls.

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. 24).

**InvalidTrailNameException**

This exception is thrown when the provided trail name is not valid.

HTTP Status Code: 400

**TrailNotFoundException**

This exception is thrown when the trail with the given name is not found.

HTTP Status Code: 404
UpdateTrail

From the command line, use `update-subscription`.

Updates the settings that specify delivery of log files. Changes to a trail do not require stopping the CloudTrail service. Use this action to designate an existing bucket for log delivery. If the existing bucket has previously been a target for CloudTrail log files, an IAM policy exists for the bucket.

Request Syntax

```
{
   "IncludeGlobalServiceEvents": "boolean",
   "Name": "string",
   "S3BucketName": "string",
   "S3KeyPrefix": "string",
   "SnsTopicName": "string"
}
```

Request Parameters

For information about the common parameters that all actions use, see Common Parameters (p. 20).

The request accepts the following data in JSON format.

**IncludeGlobalServiceEvents**

Specifies whether the trail is publishing events from global services such as IAM to the log files.

Type: Boolean

Required: No

**Name**

Specifies the name of the trail.

Type: String

Required: Yes

**S3BucketName**

Specifies the name of the Amazon S3 bucket designated for publishing log files.

Type: String

Required: No

**S3KeyPrefix**

Specifies the Amazon S3 key prefix that precedes the name of the bucket you have designated for log file delivery.

Type: String

Required: No

**SnsTopicName**

Specifies the name of the Amazon SNS topic defined for notification of log file delivery.

Type: String
Response Syntax

```
{
   "IncludeGlobalServiceEvents": "boolean",
   "Name": "string",
   "S3BucketName": "string",
   "S3KeyPrefix": "string",
   "SnsTopicName": "string"
}
```

Response Elements

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

**IncludeGlobalServiceEvents**

Specifies whether the trail is publishing events from global services such as IAM to the log files.

Type: Boolean

**Name**

Specifies the name of the trail.

Type: String

**S3BucketName**

Specifies the name of the Amazon S3 bucket designated for publishing log files.

Type: String

**S3KeyPrefix**

Specifies the Amazon S3 key prefix that precedes the name of the bucket you have designated for log file delivery.

Type: String

**SnsTopicName**

Specifies the name of the Amazon SNS topic defined for notification of log file delivery.

Type: String

Errors

For information about the errors that are common to all actions, see Common Errors (p. 24).

**InsufficientS3BucketPolicyException**

This exception is thrown when the policy on the S3 bucket is not sufficient.

HTTP Status Code: 403

**InsufficientSnsTopicPolicyException**

This exception is thrown when the policy on the SNS topic is not sufficient.

HTTP Status Code: 403
InvalidS3BucketNameException
This exception is thrown when the provided S3 bucket name is not valid.

HTTP Status Code: 400

InvalidS3PrefixException
This exception is thrown when the provided S3 prefix is not valid.

HTTP Status Code: 400

InvalidSnsTopicNameException
This exception is thrown when the provided SNS topic name is not valid.

HTTP Status Code: 400

InvalidTrailNameException
This exception is thrown when the provided trail name is not valid.

HTTP Status Code: 400

S3BucketDoesNotExistException
This exception is thrown when the specified S3 bucket does not exist.

HTTP Status Code: 404

TrailNotFoundException
This exception is thrown when the trail with the given name is not found.

HTTP Status Code: 404
Data Types

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

**Note**
The order of each element in the response is not guaranteed. Applications should not assume a particular order.

The following data types are supported:

- CreateTrailResult (p. 15)
- DeleteTrailResult (p. 16)
- DescribeTrailsResult (p. 16)
- GetTrailStatusResult (p. 17)
- StartLoggingResult (p. 18)
- StopLoggingResult (p. 18)
- Trail (p. 18)
- UpdateTrailResult (p. 19)

## CreateTrailResult

### Description

Returns the objects or data listed below if successful. Otherwise, returns an error.

### Contents

**IncludeGlobalServiceEvents**
Specifies whether the trail is publishing events from global services such as IAM to the log files.

Type: Boolean
Required: No

**Name**
 Specifies the name of the trail.
**S3BucketName**
Specifies the name of the Amazon S3 bucket designated for publishing log files.

Type: String
Required: No

**S3KeyPrefix**
Specifies the Amazon S3 key prefix that precedes the name of the bucket you have designated for log file delivery.

Type: String
Required: No

**SnsTopicName**
Specifies the name of the Amazon SNS topic defined for notification of log file delivery.

Type: String
Required: No

**DeleteTrailResult**

**Description**
Returns the objects or data listed below if successful. Otherwise, returns an error.

**Contents**

**DescribeTrailsResult**

**Description**
Returns the objects or data listed below if successful. Otherwise, returns an error.

**Contents**

**TrailList**
The list of trails.

Type: array of Trail (p. 18) objects
Required: No
GetTrailStatusResult

Description

Returns the objects or data listed below if successful. Otherwise, returns an error.

Contents

IsLogging
  Whether the CloudTrail is currently logging AWS API calls.
  Type: Boolean
  Required: No

LatestDeliveryError
  Displays any Amazon S3 error that CloudTrail encountered when attempting to deliver log files to
  the designated bucket. For more information see the topic Error Responses in the Amazon S3 API
  Reference.
  Type: String
  Required: No

LatestDeliveryTime
  Specifies the date and time that CloudTrail last delivered log files to an account's Amazon S3 bucket.
  Type: DateTime
  Required: No

LatestNotificationError
  Displays any Amazon SNS error that CloudTrail encountered when attempting to send a notification.
  For more information about Amazon SNS errors, see the Amazon SNS Developer Guide.
  Type: String
  Required: No

LatestNotificationTime
  Specifies the date and time of the most recent Amazon SNS notification that CloudTrail has written
  a new log file to an account's Amazon S3 bucket.
  Type: DateTime
  Required: No

StartLoggingTime
  Specifies the most recent date and time when CloudTrail started recording API calls for an AWS
  account.
  Type: DateTime
  Required: No

StopLoggingTime
  Specifies the most recent date and time when CloudTrail stopped recording API calls for an AWS
  account.
  Type: DateTime
  Required: No
StartLoggingResult

Description

Returns the objects or data listed below if successful. Otherwise, returns an error.

Contents

StopLoggingResult

Description

Returns the objects or data listed below if successful. Otherwise, returns an error.

Contents

Trail

Description

The settings for a trail.

Contents

IncludeGlobalServiceEvents

Set to True to include AWS API calls from AWS global services such as IAM. Otherwise, False.

Type: Boolean

Required: No

Name

Name of the trail set by calling CreateTrail (p. 3).

Type: String

Required: No

S3BucketName

Name of the Amazon S3 bucket into which CloudTrail delivers your trail files.

Type: String

Required: No

S3KeyPrefix

Value of the Amazon S3 prefix.

Type: String

Required: No
**SnsTopicName**
Name of the existing Amazon SNS topic that CloudTrail uses to notify the account owner when new CloudTrail log files have been delivered.

Type: String  
Required: No

**UpdateTrailResult**

**Description**
Returns the objects or data listed below if successful. Otherwise, returns an error.

**Contents**

**IncludeGlobalServiceEvents**
Specifies whether the trail is publishing events from global services such as IAM to the log files.

Type: Boolean  
Required: No

**Name**
Specifies the name of the trail.

Type: String  
Required: No

**S3BucketName**
Specifies the name of the Amazon S3 bucket designated for publishing log files.

Type: String  
Required: No

**S3KeyPrefix**
Specifies the Amazon S3 key prefix that precedes the name of the bucket you have designated for log file delivery.

Type: String  
Required: No

**SnsTopicName**
Specifies the name of the Amazon SNS topic defined for notification of log file delivery.

Type: String  
Required: No
Common Parameters

This section lists the request parameters that all actions use. Any action-specific parameters are listed in the topic for the action.

Action
The action to be performed.
Default: None
Type: string
Required: Yes

AuthParams
The parameters that are required to authenticate a Conditional request. Contains:
• AWSAccessKeyId
• SignatureVersion
• Timestamp
• Signature
Default: None
Required: Conditional

AWSAccessKeyId
The access key ID that corresponds to the secret access key that you used to sign the request.
Default: None
Type: string
Required: Yes

Expires
The date and time when the request signature expires, expressed in the format YYYY-MM-DDThh:mm:ssZ, as specified in the ISO 8601 standard.
Condition: Requests must include either Timestamp or Expires, but not both.
Default: None
Type: string
Required: Conditional

**SecurityToken**
The temporary security token that was obtained through a call to AWS Security Token Service. For a list of services that support AWS Security Token Service, go to Using Temporary Security Credentials to Access AWS in Using Temporary Security Credentials.

Default: None
Type: string
Required: No

**Signature**
The digital signature that you created for the request. For information about generating a signature, go to the service’s developer documentation.

Default: None
Type: string
Required: Yes

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

Default: None
Type: string

Valid Values: HmacSHA256 | HmacSHA1

Required: Yes

**SignatureVersion**
The signature version you use to sign the request. Set this to the value that is recommended for your service.

Default: None
Type: string
Required: Yes

**Timestamp**
The date and time when the request was signed, expressed in the format YYYY-MM-DDThh:mm:ssZ, as specified in the ISO 8601 standard.

Condition: Requests must include either Timestamp or Expires, but not both.

Default: None
Type: string
Required: Conditional

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

Default: None
Type: string
Required: Yes
Common Parameters for Signature V4 Signing

The following table lists the parameters that all actions use for signing Signature Version 4 requests. Any action-specific parameters are listed in the topic for that action. To view sample requests, see Examples of Signed Signature Version 4 Requests or Signature Version 4 Test Suite in the Amazon Web Services General Reference.

**Action**
The action to be performed.
Type: string
Required: Yes

**Version**
The API version that the request is written for, expressed in the format YYYY-MM-DD.
Type: string
Required: Yes

**X-Amz-Algorithm**
The hash algorithm that you used to create the request signature.
Condition: Specify this parameter when you include authentication information in a query string instead of in the HTTP authorization header.
Type: string
Valid Values: AWS4-HMAC-SHA256
Required: Conditional

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

For more information, see Task 2: Create a String to Sign for Signature Version 4 in the Amazon Web Services General Reference.
Condition: Specify this parameter when you include authentication information in a query string instead of in the HTTP authorization header.

Type: string
Required: Conditional

**X-Amz-Date**
The date that is used to create the signature. The format must be ISO 8601 basic format (YYYYMMDD'"T"HHMMSS'"Z"). For example, the following date time is a valid X-Amz-Date value:

20120325T120000Z.

Condition: X-Amz-Date is optional for all requests; it can be used to override the date used for signing requests. If the Date header is specified in the ISO 8601 basic format, X-Amz-Date is not required. When X-Amz-Date is used, it always overrides the value of the Date header. For more information, see Handling Dates in Signature Version 4 in the Amazon Web Services General Reference.

Type: string
Required: Conditional

**X-Amz-Security-Token**
The temporary security token that was obtained through a call to AWS Security Token Service. For a list of services that support AWS Security Token Service, go to Using Temporary Security Credentials to Access AWS in Using Temporary Security Credentials.

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 common errors that all actions return. Any action-specific errors are listed in the topic for the action.

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

**Throttling**
The request was denied due to request throttling.

HTTP Status Code: 400

**Validation>Error**
The input fails to satisfy the constraints specified by an AWS service.

HTTP Status Code: 400