Amazon AppStream 2.0: API Reference
Copyright © 2017 Amazon Web Services, Inc. and/or its affiliates. All rights reserved.

Amazon's trademarks and trade dress may not be used in connection with any product or service that is not Amazon's, in any manner that is likely to cause confusion among customers, or in any manner that disparages or discredits Amazon. All other trademarks not owned by Amazon are the property of their respective owners, who may or may not be affiliated with, connected to, or sponsored by Amazon.
# Table of Contents

Welcome ........................................................................................................................................... 1  
Actions ............................................................................................................................................ 2  
  AssociateFleet .............................................................................................................................. 3  
    Request Syntax ....................................................................................................................... 3  
    Request Parameters .............................................................................................................. 3  
    Response Elements ............................................................................................................. 3  
    Errors ..................................................................................................................................... 3  
    See Also ............................................................................................................................... 4  
  CreateDirectoryConfig ............................................................................................................. 5  
    Request Syntax ..................................................................................................................... 5  
    Request Parameters ............................................................................................................ 5  
    Response Syntax .................................................................................................................. 5  
    Response Elements .............................................................................................................. 6  
    Errors .................................................................................................................................... 6  
    See Also .............................................................................................................................. 6  
  CreateFleet .............................................................................................................................. 7  
    Request Syntax ..................................................................................................................... 7  
    Request Parameters ............................................................................................................ 7  
    Response Syntax .................................................................................................................. 9  
    Response Elements .............................................................................................................. 10  
    Errors .................................................................................................................................... 10  
    See Also .............................................................................................................................. 11  
  CreateImageBuilder ................................................................................................................ 12  
    Request Syntax ..................................................................................................................... 12  
    Request Parameters ............................................................................................................ 12  
    Response Syntax .................................................................................................................. 13  
    Response Elements .............................................................................................................. 14  
    Errors .................................................................................................................................... 14  
    See Also .............................................................................................................................. 15  
  CreateImageBuilderStreamingURL .......................................................................................... 16  
    Request Syntax ..................................................................................................................... 16  
    Request Parameters ............................................................................................................ 16  
    Response Syntax .................................................................................................................. 16  
    Response Elements .............................................................................................................. 16  
    Errors .................................................................................................................................... 17  
    See Also .............................................................................................................................. 17  
  CreateStack .............................................................................................................................. 18  
    Request Syntax ..................................................................................................................... 18  
    Request Parameters ............................................................................................................ 18  
    Response Syntax .................................................................................................................. 19  
    Response Elements .............................................................................................................. 19  
    Errors .................................................................................................................................... 19  
    See Also .............................................................................................................................. 20  
  CreateStreamingURL ............................................................................................................... 21  
    Request Syntax ..................................................................................................................... 21  
    Request Parameters ............................................................................................................ 21  
    Response Syntax .................................................................................................................. 22  
    Response Elements .............................................................................................................. 22  
    Errors .................................................................................................................................... 22  
    See Also .............................................................................................................................. 23  
  DeleteDirectoryConfig ............................................................................................................. 24  
    Request Syntax ..................................................................................................................... 24  
    Request Parameters ............................................................................................................ 24  
    Response Elements .............................................................................................................. 24  
    See Also .............................................................................................................................. 24
Welcome

You can use Amazon AppStream 2.0 to stream desktop applications to any device running a web browser, without rewriting them.

This document was last published on December 21, 2017.
Actions

The following actions are supported:

- AssociateFleet (p. 3)
- CreateDirectoryConfig (p. 5)
- CreateFleet (p. 7)
- CreateImageBuilder (p. 12)
- CreateImageBuilderStreamingURL (p. 16)
- CreateStack (p. 18)
- CreateStreamingURL (p. 21)
- DeleteDirectoryConfig (p. 24)
- DeleteFleet (p. 26)
- DeleteImage (p. 28)
- DeleteImageBuilder (p. 31)
- DeleteStack (p. 33)
- DescribeDirectoryConfigs (p. 35)
- DescribeFleets (p. 37)
- DescribeImageBuilders (p. 40)
- DescribeImages (p. 43)
- DescribeSessions (p. 45)
- DescribeStacks (p. 48)
- DisassociateFleet (p. 51)
- ExpireSession (p. 53)
- ListAssociatedFleets (p. 54)
- ListAssociatedStacks (p. 56)
- ListTagsForResource (p. 58)
- StartFleet (p. 60)
- StartImageBuilder (p. 62)
- StopFleet (p. 65)
- StopImageBuilder (p. 67)
- TagResource (p. 69)
- UntagResource (p. 71)
- UpdateDirectoryConfig (p. 73)
- UpdateFleet (p. 75)
- UpdateStack (p. 81)
**AssociateFleet**

Associates the specified fleet with the specified stack.

**Request Syntax**

```json
{
    "FleetName": "string",
    "StackName": "string"
}
```

**Request Parameters**

For information about the parameters that are common to all actions, see [Common Parameters (p. 114)](https://example.com).

The request accepts the following data in JSON format.

**FleetName (p. 3)**

The name of the fleet.

Type: String

Length Constraints: Minimum length of 1.

Required: Yes

**StackName (p. 3)**

The name of the stack.

Type: String

Length Constraints: Minimum length of 1.

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. 116)](https://example.com).

**ConcurrentModificationException**

An API error occurred. Wait a few minutes and try again.

HTTP Status Code: 400

**IncompatibleImageException**

The image does not support storage connectors.

HTTP Status Code: 400
LimitExceededException

The requested limit exceeds the permitted limit for an account.

HTTP Status Code: 400

OperationNotPermittedException

The attempted operation is not permitted.

HTTP Status Code: 400

ResourceNotFoundException

The specified resource was not 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
CreateDirectoryConfig

Creates a directory configuration.

Request Syntax

```json
{
    "DirectoryName": "string",
    "OrganizationalUnitDistinguishedNames": [ "string" ],
    "ServiceAccountCredentials": {
        "AccountName": "string",
        "AccountPassword": "string"
    }
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 114).

The request accepts the following data in JSON format.

**DirectoryName (p. 5)**

The fully qualified name of the directory (for example, corp.example.com).

Type: String

Required: Yes

**OrganizationalUnitDistinguishedNames (p. 5)**

The distinguished names of the organizational units for computer accounts.

Type: Array of strings


Required: Yes

**ServiceAccountCredentials (p. 5)**

The credentials for the service account used by the streaming instance to connect to the directory.

Type: ServiceAccountCredentials (p. 106) object

Required: Yes

Response Syntax

```json
{
    "DirectoryConfig": {
        "CreatedTime": number,
        "DirectoryName": "string",
        "OrganizationalUnitDistinguishedNames": [ "string" ],
        "ServiceAccountCredentials": {
            "AccountName": "string",
            "AccountPassword": "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.

**DirectoryConfig (p. 5)**

Information about the directory configuration.

Type: DirectoryConfig (p. 90) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 116).

**LimitExceededException**

The requested limit exceeds the permitted limit for an account.

HTTP Status Code: 400

**ResourceAlreadyExistsException**

The specified resource already exists.

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
CreateFleet

Creates a fleet.

Request Syntax

```
{
    "ComputeCapacity": {
        "DesiredInstances": number
    },
    "Description": "string",
    "DisconnectTimeoutInSeconds": number,
    "DisplayName": "string",
    "DomainJoinInfo": {
        "DirectoryName": "string",
        "OrganizationalUnitDistinguishedName": "string"
    },
    "EnableDefaultInternetAccess": boolean,
    "FleetType": "string",
    "ImageName": "string",
    "InstanceType": "string",
    "MaxUserDurationInSeconds": number,
    "Name": "string",
    "VpcConfig": {
        "SecurityGroupIds": [ "string" ],
        "SubnetIds": [ "string" ]
    }
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 114).

The request accepts the following data in JSON format.

**ComputeCapacity (p. 7)**

The desired capacity for the fleet.

Type: ComputeCapacity (p. 88) object

Required: Yes

**Description (p. 7)**

The description for display.

Type: String

Length Constraints: Maximum length of 256.

Required: No

**DisconnectTimeoutInSeconds (p. 7)**

The time after disconnection when a session is considered to have ended, in seconds. If a user who was disconnected reconnects within this time interval, the user is connected to their previous session. Specify a value between 60 and 57600.

Type: Integer
Required: No

**DisplayName (p. 7)**

The fleet name for display.

Type: String

Length Constraints: Maximum length of 100.

Required: No

**DomainJoinInfo (p. 7)**

The information needed to join a Microsoft Active Directory domain.

Type: DomainJoinInfo (p. 91) object

Required: No

**EnableDefaultInternetAccess (p. 7)**

Enables or disables default internet access for the fleet.

Type: Boolean

Required: No

**FleetType (p. 7)**

The fleet type.

- **ALWAYS_ON**
  
  Provides users with instant-on access to their apps. You are charged for all running instances in your fleet, even if no users are streaming apps.

- **ON_DEMAND**
  
  Provide users with access to applications after they connect, which takes one to two minutes. You are charged for instance streaming when users are connected and a small hourly fee for instances that are not streaming apps.

Type: String

Valid Values: ALWAYS_ON | ON_DEMAND

Required: No

**ImageName (p. 7)**

The name of the image used to create the fleet.

Type: String

Length Constraints: Minimum length of 1.

Required: Yes

**InstanceType (p. 7)**

The instance type to use when launching fleet instances. The following instance types are available:

- stream.standard.medium
- stream.standard.large
- stream.compute.large
- stream.compute.xlarge
- stream.compute.2xlarge
- stream.compute.4xlarge
- stream.compute.8xlarge
- stream.memory.large
- stream.memory.xlarge
- stream.memory.2xlarge
- stream.memory.4xlarge
- stream.memory.8xlarge
- stream.graphics-design.large
- stream.graphics-design.xlarge
- stream.graphics-design.2xlarge
- stream.graphics-design.4xlarge
- stream.graphics-design.8xlarge
- stream.graphics-pro.2xlarge
- stream.graphics-pro.4xlarge
- stream.graphics-pro.8xlarge
- stream.graphics-pro.16xlarge

Type: String

Length Constraints: Minimum length of 1.

Required: Yes

MaxUserDurationInSeconds (p. 7)

The maximum time that a streaming session can run, in seconds. Specify a value between 600 and 57600.

Type: Integer

Required: No

Name (p. 7)

A unique name for the fleet.

Type: String

Pattern: ^[a-zA-Z0-9][a-zA-Z0-9_.-]{0,100}$

Required: Yes

VpcConfig (p. 7)

The VPC configuration for the fleet.

Type: VpcConfig (p. 113) object

Required: No

Response Syntax

```json
{
    "Fleet": {
        "Arn": "string",
```
"ComputeCapacityStatus": {
  "Available": number,
  "Desired": number,
  "InUse": number,
  "Running": number
  
  "CreatedTime": number,
  "Description": "string",
  "DisconnectTimeoutInSeconds": number,
  "DisplayName": "string",
  "DomainJoinInfo": {
    "DirectoryName": "string",
    "OrganizationalUnitDistinguishedName": "string"
  },
  "EnableDefaultInternetAccess": boolean,
  "FleetErrors": [
    {
      "ErrorCode": "string",
      "ErrorMessage": "string"
    }
  ],
  "FleetType": "string",
  "ImageName": "string",
  "InstanceType": "string",
  "MaxUserDurationInSeconds": number,
  "Name": "string",
  "State": "string",
  "VpcConfig": {
    "SecurityGroupIds": [ "string" ],
    "SubnetIds": [ "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.

Fleet (p. 9)

Information about the fleet.

Type: Fleet (p. 92) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 116).

ConcurrentModificationException

An API error occurred. Wait a few minutes and try again.

HTTP Status Code: 400

IncompatibleImageException

The image does not support storage connectors.

HTTP Status Code: 400
InvalidParameterCombinationException

Indicates an incorrect combination of parameters, or a missing parameter.

HTTP Status Code: 400

InvalidRoleException

The specified role is invalid.

HTTP Status Code: 400

LimitExceededException

The requested limit exceeds the permitted limit for an account.

HTTP Status Code: 400

ResourceAlreadyExistsException

The specified resource already exists.

HTTP Status Code: 400

ResourceNotAvailableException

The specified resource exists and is not in use, but isn't available.

HTTP Status Code: 400

ResourceNotFoundException

The specified resource was not 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
CreateImageBuilder

Creates an image builder.

The initial state of the builder is PENDING. When it is ready, the state is RUNNING.

Request Syntax

```json
{
   "AppstreamAgentVersion": "string",
   "Description": "string",
   "DisplayName": "string",
   "DomainJoinInfo": {
      "DirectoryName": "string",
      "OrganizationalUnitDistinguishedName": "string"
   },
   "EnableDefaultInternetAccess": boolean,
   "ImageName": "string",
   "InstanceType": "string",
   "Name": "string",
   "VpcConfig": {
      "SecurityGroupIds": [ "string" ],
      "SubnetIds": [ "string" ]
   }
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 114).

The request accepts the following data in JSON format.

**AppstreamAgentVersion (p. 12)**

The version of the AppStream 2.0 agent to use for this image builder. To use the latest version of the AppStream 2.0 agent, specify [LATEST].

Type: String

Length Constraints: Minimum length of 1. Maximum length of 100.

Required: No

**Description (p. 12)**

The description for display.

Type: String

Length Constraints: Maximum length of 256.

Required: No

**DisplayName (p. 12)**

The image builder name for display.

Type: String
Length Constraints: Maximum length of 100.

Required: No

DomainJoinInfo (p. 12)

The information needed to join a Microsoft Active Directory domain.

Type: DomainJoinInfo (p. 91) object

Required: No

EnableDefaultInternetAccess (p. 12)

Enables or disables default internet access for the image builder.

Type: Boolean

Required: No

ImageName (p. 12)

The name of the image used to create the builder.

Type: String

Length Constraints: Minimum length of 1.

Required: Yes

InstanceType (p. 12)

The instance type to use when launching the image builder.

Type: String

Length Constraints: Minimum length of 1.

Required: Yes

Name (p. 12)

A unique name for the image builder.

Type: String

Pattern: ^[a-zA-Z0-9][a-zA-Z0-9_.-]{0,100}$

Required: Yes

VpcConfig (p. 12)

The VPC configuration for the image builder. You can specify only one subnet.

Type: VpcConfig (p. 113) object

Required: No

Response Syntax

```
{
    "ImageBuilder": {
        "AppstreamAgentVersion": "string",
        "Arn": "string",
    }
}
```
"CreatedTime": number,
"Description": "string",
"DisplayName": "string",
"DomainJoinInfo": {
  "DirectoryName": "string",
  "OrganizationalUnitDistinguishedName": "string"
},
"EnableDefaultInternetAccess": boolean,
"ImageArn": "string",
"ImageBuilderErrors": [
  {
    "ErrorCode": "string",
    "ErrorMessage": "string",
    "ErrorTimestamp": number
  }
],
"InstanceType": "string",
"Name": "string",
"Platform": "string",
"State": "string",
"StateChangeReason": {
  "Code": "string",
  "Message": "string"
},
"VpcConfig": {
  "SecurityGroupIds": [ "string" ],
  "SubnetIds": [ "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.

ImageButton (p. 13)

  Information about the image builder.

  Type:ImageButton (p. 99) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 116).

ConcurrentModificationException

  An API error occurred. Wait a few minutes and try again.

  HTTP Status Code: 400

IncompatibleImageException

  The image does not support storage connectors.

  HTTP Status Code: 400

InvalidParameterCombinationException

  Indicates an incorrect combination of parameters, or a missing parameter.
HTTP Status Code: 400
InvalidRoleException
The specified role is invalid.

HTTP Status Code: 400
LimitExceededException
The requested limit exceeds the permitted limit for an account.

HTTP Status Code: 400
ResourceAlreadyExistsException
The specified resource already exists.

HTTP Status Code: 400
ResourceNotAvailableException
The specified resource exists and is not in use, but isn't available.

HTTP Status Code: 400
ResourceNotFoundException
The specified resource was not found.

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
CreateImageBuilderStreamingURL

Creates a URL to start an image builder streaming session.

Request Syntax

```json
{
  "Name": "string",
  "Validity": number
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 114).

The request accepts the following data in JSON format.

Name (p. 16)

The name of the image builder.

Type: String

Length Constraints: Minimum length of 1.

Required: Yes

Validity (p. 16)

The time that the streaming URL will be valid, in seconds. Specify a value between 1 and 604800 seconds. The default is 3600 seconds.

Type: Long

Required: No

Response Syntax

```json
{
  "Expires": number,
  "StreamingURL": "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.

Expires (p. 16)

The elapsed time, in seconds after the Unix epoch, when this URL expires.

Type: Timestamp
StreamingURL (p. 16)

The URL to start the AppStream 2.0 streaming session.

Type: String

Length Constraints: Minimum length of 1.

Errors

For information about the errors that are common to all actions, see Common Errors (p. 116).

OperationNotPermittedException

The attempted operation is not permitted.

HTTP Status Code: 400

ResourceNotFoundException

The specified resource was not 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
CreateStack

Creates a stack.

Request Syntax

```json
{
  "Description": "string",
  "DisplayName": "string",
  "Name": "string",
  "RedirectURL": "string",
  "StorageConnectors": [
    {
      "ConnectorType": "string",
      "ResourceIdentifier": "string"
    }
  ]
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 114).

The request accepts the following data in JSON format.

**Description (p. 18)**

The description for display.

- Type: String
- Length Constraints: Maximum length of 256.
- Required: No

**DisplayName (p. 18)**

The stack name for display.

- Type: String
- Length Constraints: Maximum length of 100.
- Required: No

**Name (p. 18)**

The name of the stack.

- Type: String
- Length Constraints: Minimum length of 1.
- Required: Yes

**RedirectURL (p. 18)**

The URL the user is redirected to after the streaming session ends.

- Type: String
Length Constraints: Maximum length of 1000.

Required: No

StorageConnectors (p. 18)

The storage connectors to enable.

Type: Array of StorageConnector (p. 112) objects

Required: No

Response Syntax

```
{
  "Stack": {
    "Arn": "string",
    "CreatedTime": number,
    "Description": "string",
    "DisplayName": "string",
    "Name": "string",
    "RedirectURL": "string",
    "StackErrors": [
      {
        "ErrorCode": "string",
        "ErrorMessage": "string"
      }
    ],
    "StorageConnectors": [
      {
        "ConnectorType": "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.

Stack (p. 19)

Information about the stack.

Type: Stack (p. 109) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 116).

ConcurrentModificationException

An API error occurred. Wait a few minutes and try again.

HTTP Status Code: 400
InvalidParameterCombinationException

 Indicates an incorrect combination of parameters, or a missing parameter.

 HTTP Status Code: 400

 InvalidRoleException

 The specified role is invalid.

 HTTP Status Code: 400

 LimitExceededException

 The requested limit exceeds the permitted limit for an account.

 HTTP Status Code: 400

 ResourceAlreadyExistsException

 The specified resource already exists.

 HTTP Status Code: 400

 ResourceNotFoundException

 The specified resource was not 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
CreateStreamingURL

Creates a URL to start a streaming session for the specified user.

**Request Syntax**

```json
{
    "ApplicationId": "string",
    "FleetName": "string",
    "SessionContext": "string",
    "StackName": "string",
    "UserId": "string",
    "Validity": number
}
```

**Request Parameters**

For information about the parameters that are common to all actions, see [Common Parameters](#). The request accepts the following data in JSON format.

**ApplicationId (p. 21)**

The name of the application to launch after the session starts. This is the name that you specified as Name in the Image Assistant.

Type: String

Length Constraints: Minimum length of 1.

Required: No

**FleetName (p. 21)**

The name of the fleet.

Type: String

Length Constraints: Minimum length of 1.

Required: Yes

**SessionContext (p. 21)**

The session context. For more information, see [Session Context](#) in the Amazon AppStream 2.0 Developer Guide.

Type: String

Length Constraints: Minimum length of 1.

Required: No

**StackName (p. 21)**

The name of the stack.

Type: String
Length Constraints: Minimum length of 1.
Required: Yes

**UserId (p. 21)**

The ID of the user.
Type: String
Pattern: \[\w+=,.@-\]*
Required: Yes

**Validity (p. 21)**

The time that the streaming URL will be valid, in seconds. Specify a value between 1 and 604800 seconds. The default is 60 seconds.
Type: Long
Required: No

---

### Response Syntax

```
{
   "Expires": number,
   "StreamingURL": "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.

**Expires (p. 22)**

The elapsed time, in seconds after the Unix epoch, when this URL expires.
Type: Timestamp

**StreamingURL (p. 22)**

The URL to start the AppStream 2.0 streaming session.
Type: String
Length Constraints: Minimum length of 1.

### Errors

For information about the errors that are common to all actions, see Common Errors (p. 116).

**InvalidParameterCombinationException**

Indicates an incorrect combination of parameters, or a missing parameter.
HTTP Status Code: 400

**OperationNotPermittedException**

The attempted operation is not permitted.

HTTP Status Code: 400

**ResourceNotAvailableException**

The specified resource exists and is not in use, but isn't available.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource was not 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
DeleteDirectoryConfig

Deletes the specified directory configuration.

Request Syntax

```json
{
  "DirectoryName": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 114).

The request accepts the following data in JSON format.

DirectoryName (p. 24)

The name of the directory configuration.

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. 116).

ResourceInUseException

The specified resource is in use.

HTTP Status Code: 400

ResourceNotFoundException

The specified resource was not 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
DeleteFleet

Deletes the specified fleet.

Request Syntax

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

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 114).

The request accepts the following data in JSON format.

**Name (p. 26)**

The name of the fleet.

- Type: String
- Length Constraints: Minimum length of 1.
- 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. 116).

**ConcurrentModificationException**

An API error occurred. Wait a few minutes and try again.

- HTTP Status Code: 400

**ResourceInUseException**

The specified resource is in use.

- HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource was not 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
DeleteImage

Deletes the specified image. You cannot delete an image that is currently in use. After you delete an image, you cannot provision new capacity using the image.

Request Syntax

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

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 114).

The request accepts the following data in JSON format.

**Name (p. 28)**

The name of the image.

- Type: String
- Pattern: `^[a-zA-Z0-9][a-zA-Z0-9_.-]{0,100}$`
- Required: Yes

Response Syntax

```json
{
  "Image": {
    "Applications": [
      {
        "DisplayName": "string",
        "Enabled": boolean,
        "IconURL": "string",
        "LaunchParameters": "string",
        "LaunchPath": "string",
        "Metadata": {
          "string": "string"
        },
        "Name": "string"
      }
    ],
    "AppstreamAgentVersion": "string",
    "Arn": "string",
    "BaseImageArn": "string",
    "CreatedTime": number,
    "Description": "string",
    "DisplayName": "string",
    "ImageBuilderSupported": boolean,
    "Name": "string",
    "Platform": "string",
    "PublicBaseImageReleasedDate": number,
    "State": "string",
    "StateChangeReason": {}
  }
}
```
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.

Image (p. 28)

Information about the image.

Type: Image (p. 96) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 116).

ConcurrentModificationException

An API error occurred. Wait a few minutes and try again.

HTTP Status Code: 400

OperationNotPermittedException

The attempted operation is not permitted.

HTTP Status Code: 400

ResourceInUseException

The specified resource is in use.

HTTP Status Code: 400

ResourceNotFoundException

The specified resource was not 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
See Also

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

Deletes the specified image builder and releases the capacity.

**Request Syntax**

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

**Request Parameters**

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

The request accepts the following data in JSON format.

**Name**

The name of the image builder.

- **Type:** String
- **Pattern:** `^[a-zA-Z0-9][a-zA-Z0-9_.-]{0,100}$`
- **Required:** Yes

**Response Syntax**

```json
{
    "ImageBuilder": {
        "AppstreamAgentVersion": "string",
        "Arn": "string",
        "CreatedTime": number,
        "Description": "string",
        "DisplayName": "string",
        "DomainJoinInfo": {
            "DirectoryName": "string",
            "OrganizationalUnitDistinguishedName": "string"
        },
        "EnableDefaultInternetAccess": boolean,
        "ImageArn": "string",
        "ImageBuilderErrors": [
            {
                "ErrorCode": "string",
                "ErrorMessage": "string",
                "ErrorTimestamp": number
            }
        ],
        "InstanceType": "string",
        "Name": "string",
        "Platform": "string",
        "State": "string",
        "StateChangeReason": {
            "Code": "string",
            "Message": "string"
        }
    }
}
```
"VpcConfig": {
   "SecurityGroupIds": [ "string" ],
   "SubnetIds": [ "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.

**ImageBuilder (p. 31)**

Information about the image builder.

Type: ImageBuilder (p. 99) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 116).

**ConcurrentModificationException**

An API error occurred. Wait a few minutes and try again.

HTTP Status Code: 400

**OperationNotPermittedException**

The attempted operation is not permitted.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource was not 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
DeleteStack

Deletes the specified stack. After this operation completes, the environment can no longer be activated and any reservations made for the stack are released.

Request Syntax

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

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 114).

The request accepts the following data in JSON format.

**Name (p. 33)**

The name of the stack.

*Type: String*

*Length Constraints: Minimum length of 1.*

*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. 116).

**ConcurrentModificationException**

An API error occurred. Wait a few minutes and try again.

HTTP Status Code: 400

**ResourceInUseException**

The specified resource is in use.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource was not 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:
Amazon AppStream 2.0 API Reference

See Also

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

Describes the specified directory configurations.

Request Syntax

```
{
    "DirectoryNames": [ "string" ],
    "MaxResults": number,
    "NextToken": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 114).

The request accepts the following data in JSON format.

**DirectoryNames (p. 35)**

The directory names.

Type: Array of strings

Required: No

**MaxResults (p. 35)**

The maximum size of each page of results.

Type: Integer

Required: No

**NextToken (p. 35)**

The pagination token to use to retrieve the next page of results for this operation. If this value is null, it retrieves the first page.

Type: String

Length Constraints: Minimum length of 1.

Required: No

Response Syntax

```
{
    "DirectoryConfigs": [
        {
            "CreatedTime": number,
            "DirectoryName": "string",
            "OrganizationalUnitDistinguishedNames": [ "string" ],
            "ServiceAccountCredentials": {
                
            "AccountName": "string",
            "AccountPassword": "string"
        }
    }
}
```

API Version 2016-12-01
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.

**DirectoryConfigs (p. 35)**

Information about the directory configurations.

Type: Array of DirectoryConfig (p. 90) objects

**NextToken (p. 35)**

The pagination token to use to retrieve the next page of results for this operation. If there are no more pages, this value is null.

Type: String

Length Constraints: Minimum length of 1.

Errors

For information about the errors that are common to all actions, see Common Errors (p. 116).

**ResourceNotFoundException**

The specified resource was not 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
DescribeFleets

Describes the specified fleets or all fleets in the account.

Request Syntax

```json
{
    "Names": [ "string" ],
    "NextToken": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 114).

The request accepts the following data in JSON format.

**Names (p. 37)**

The names of the fleets to describe.

Type: Array of strings

Length Constraints: Minimum length of 1.

Required: No

**NextToken (p. 37)**

The pagination token to use to retrieve the next page of results for this operation. If this value is null, it retrieves the first page.

Type: String

Length Constraints: Minimum length of 1.

Required: No

Response Syntax

```json
{
    "Fleets": [
        {
            "Arn": "string",
            "ComputeCapacityStatus": {
                "Available": number,
                "Desired": number,
                "InUse": number,
                "Running": number
            },
            "CreatedTime": number,
            "Description": "string",
            "DisconnectTimeoutInSeconds": number,
            "DisplayName": "string",
            "DomainJoinInfo": {
                "DirectoryName": "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.

Fleets (p. 37)

Information about the fleets.

Type: Array of Fleet (p. 92) objects

NextToken (p. 37)

The pagination token to use to retrieve the next page of results for this operation. If there are no more pages, this value is null.

Type: String

Length Constraints: Minimum length of 1.

Errors

For information about the errors that are common to all actions, see Common Errors (p. 116).

ResourceNotFoundException

The specified resource was not 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:
See Also

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

Describes the specified image builders or all image builders in the account.

Request Syntax

```json
{
  "MaxResults": number,
  "Names": [ "string" ],
  "NextToken": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 114).

The request accepts the following data in JSON format.

MaxResults (p. 40)

The maximum size of each page of results.

Type: Integer

Required: No

Names (p. 40)

The names of the image builders to describe.

Type: Array of strings

Length Constraints: Minimum length of 1.

Required: No

NextToken (p. 40)

The pagination token to use to retrieve the next page of results for this operation. If this value is null, it retrieves the first page.

Type: String

Length Constraints: Minimum length of 1.

Required: No

Response Syntax

```json
{
  "ImageBuilders": [
    {
      "AppstreamAgentVersion": "string",
      "Arn": "string",
      "CreatedTime": number,
      "Description": "string",
      "Name": "string",
      "OwnerAccount": "string",
      "OwnerArn": "string",
      "OsName": "string",
      "OsVersion": "string",
      "TagSet": [
        {
          "Key": "string",
          "Value": "string"
        }
      ]
    }
  ]
}
```
"DisplayName": "string",
"DomainJoinInfo": {
  "DirectoryName": "string",
  "OrganizationalUnitDistinguishedName": "string"
},
"EnableDefaultInternetAccess": boolean,
"ImageArn": "string",
"ImageBuilderErrors": [
  {
    "ErrorCode": "string",
    "ErrorMessage": "string",
    "ErrorTimestamp": number
  }
],
"InstanceType": "string",
"Name": "string",
"Platform": "string",
"State": "string",
"StateChangeReason": {
  "Code": "string",
  "Message": "string"
},
"VpcConfig": {
  "SecurityGroupIds": [ "string" ],
  "SubnetIds": [ "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.

ImageBuilders (p. 40)

Information about the image builders.

Type: Array of ImageBuilder (p. 99) objects

NextToken (p. 40)

The pagination token to use to retrieve the next page of results for this operation. If there are no more pages, this value is null.

Type: String

Length Constraints: Minimum length of 1.

Errors

For information about the errors that are common to all actions, see Common Errors (p. 116).

ResourceNotFoundException

The specified resource was not 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
DescribeImages

Describes the specified images or all images in the account.

Request Syntax

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

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 114).

The request accepts the following data in JSON format.

Names (p. 43)

The names of the images to describe.

Type: Array of strings

Length Constraints: Minimum length of 1.

Required: No

Response Syntax

```json
{
  "Images": [
    {
      "Applications": [
        {
          "DisplayName": "string",
          "Enabled": boolean,
          "IconURL": "string",
          "LaunchParameters": "string",
          "LaunchPath": "string",
          "Metadata": {
            "string": "string"
          },
          "Name": "string"
        }
      ],
      "AppstreamAgentVersion": "string",
      "Arn": "string",
      "BaseImageArn": "string",
      "CreatedTime": number,
      "Description": "string",
      "DisplayName": "string",
      "ImageBuilderSupported": boolean,
      "Name": "string",
      "Platform": "string",
      "PublicBaseImageReleasedDate": number,
      "State": "string",
      "StateChangeReason": {
```

API Version 2016-12-01
43
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.

Images (p. 43)

Information about the images.

Type: Array of Image (p. 96) objects

Errors

For information about the errors that are common to all actions, see Common Errors (p. 116).

ResourceNotFoundException

The specified resource was not 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
DescribeSessions

Describes the streaming sessions for the specified stack and fleet. If a user ID is provided, only the streaming sessions for only that user are returned. If an authentication type is not provided, the default is to authenticate users using a streaming URL.

Request Syntax

```
{
    "AuthenticationType": "string",
    "FleetName": "string",
    "Limit": number,
    "NextToken": "string",
    "StackName": "string",
    "UserId": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 114).

The request accepts the following data in JSON format.

**AuthenticationType (p. 45)**

The authentication method. Specify API for a user authenticated using a streaming URL or SAML for a SAML federated user. The default is to authenticate users using a streaming URL.

Type: String

Valid Values: API | SAML | USERPOOL

Required: No

**FleetName (p. 45)**

The name of the fleet.

Type: String

Length Constraints: Minimum length of 1.

Required: Yes

**Limit (p. 45)**

The size of each page of results. The default value is 20 and the maximum value is 50.

Type: Integer

Required: No

**NextToken (p. 45)**

The pagination token to use to retrieve the next page of results for this operation. If this value is null, it retrieves the first page.

Type: String
Length Constraints: Minimum length of 1.

Required: No

**StackName (p. 45)**
The name of the stack.

Type: String

Length Constraints: Minimum length of 1.

Required: Yes

**UserId (p. 45)**
The user ID.

Type: String


Required: No

**Response Syntax**

```
{
   "NextToken": "string",
   "Sessions": [
      {
         "AuthenticationType": "string",
         "FleetName": "string",
         "Id": "string",
         "StackName": "string",
         "State": "string",
         "UserId": "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. 46)**

The pagination token to use to retrieve the next page of results for this operation. If there are no more pages, this value is null.

Type: String

Length Constraints: Minimum length of 1.

**Sessions (p. 46)**

Information about the streaming sessions.

Type: Array of Session (p. 107) objects
Errors

For information about the errors that are common to all actions, see Common Errors (p. 116).

InvalidParameterCombinationException

Indicates an incorrect combination of parameters, or a missing parameter.

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
DescribeStacks

Describes the specified stacks or all stacks in the account.

Request Syntax

```json
{
    "Names": [ "string" ],
    "NextToken": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 114).

The request accepts the following data in JSON format.

**Names (p. 48)**

The names of the stacks to describe.

Type: Array of strings

Length Constraints: Minimum length of 1.

Required: No

**NextToken (p. 48)**

The pagination token to use to retrieve the next page of results for this operation. If this value is null, it retrieves the first page.

Type: String

Length Constraints: Minimum length of 1.

Required: No

Response Syntax

```json
{
    "NextToken": "string",
    "Stacks": [
        {
            "Arn": "string",
            "CreatedTime": number,
            "Description": "string",
            "DisplayName": "string",
            "Name": "string",
            "RedirectURL": "string",
            "StackErrors": [
                {
                    "ErrorCode": "string",
                    "ErrorMessage": "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. 48)**

The pagination token to use to retrieve the next page of results for this operation. If there are no more pages, this value is null.

Type: String

Length Constraints: Minimum length of 1.

**Stacks (p. 48)**

Information about the stacks.

Type: Array of Stack (p. 109) objects

Errors

For information about the errors that are common to all actions, see Common Errors (p. 116).

**ResourceNotFoundException**

The specified resource was not 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
DisassociateFleet

Disassociates the specified fleet from the specified stack.

**Request Syntax**

```
{
  "FleetName": "string",
  "StackName": "string"
}
```

**Request Parameters**

For information about the parameters that are common to all actions, see Common Parameters (p. 114).

The request accepts the following data in JSON format.

**FleetName (p. 51)**

The name of the fleet.

Type: String

Length Constraints: Minimum length of 1.

Required: Yes

**StackName (p. 51)**

The name of the stack.

Type: String

Length Constraints: Minimum length of 1.

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. 116).

**ConcurrentModificationException**

An API error occurred. Wait a few minutes and try again.

HTTP Status Code: 400

**ResourceInUseException**

The specified resource is in use.

HTTP Status Code: 400
ResourceNotFoundException

The specified resource was not 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
ExpireSession

Stops the specified streaming session.

Request Syntax

```json
{
   "SessionId": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 114).

The request accepts the following data in JSON format.

**SessionId (p. 53)**

The ID of the streaming session.

Type: String

Length Constraints: Minimum length of 1.

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. 116).

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
ListAssociatedFleets

Lists the fleets associated with the specified stack.

Request Syntax

```json
{
   "NextToken": "string",
   "StackName": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 114).

The request accepts the following data in JSON format.

**NextToken (p. 54)**

The pagination token to use to retrieve the next page of results for this operation. If this value is null, it retrieves the first page.

Type: String

Length Constraints: Minimum length of 1.

Required: No

**StackName (p. 54)**

The name of the stack.

Type: String

Length Constraints: Minimum length of 1.

Required: Yes

Response Syntax

```json
{
   "Names": [ "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.

**Names (p. 54)**

The names of the fleets.
Errors

For information about the errors that are common to all actions, see Common Errors (p. 116).

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
ListAssociatedStacks

Lists the stacks associated with the specified fleet.

Request Syntax

```json
{
   "FleetName": "string",
   "NextToken": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 114).

The request accepts the following data in JSON format.

**FleetName (p. 56)**

The name of the fleet.

Type: String

Length Constraints: Minimum length of 1.

Required: Yes

**NextToken (p. 56)**

The pagination token to use to retrieve the next page of results for this operation. If this value is null, it retrieves the first page.

Type: String

Length Constraints: Minimum length of 1.

Required: No

Response Syntax

```json
{
   "Names": [ "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.

**Names (p. 56)**

The names of the stacks.
Errors

For information about the errors that are common to all actions, see Common Errors (p. 116).

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 the tags for the specified AppStream 2.0 resource. You can tag AppStream 2.0 image builders, images, fleets, and stacks.

For more information about tags, see Tagging Your Resources in the Amazon AppStream 2.0 Developer Guide.

Request Syntax

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

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 114).

The request accepts the following data in JSON format.

ResourceArn (p. 58)

The Amazon Resource Name (ARN) of the resource.

Type: String

Pattern: ^arn:aws:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9_/.+=,@.-]{0,1023}$

Required: Yes

Response Syntax

```json
{
   "Tags": {
      "string" : "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.

Tags (p. 58)

The information about the tags.

Type: String to string map

Key Length Constraints: Minimum length of 1. Maximum length of 128.
Key Pattern: ^([^aws:].[^{p(L)p(z)p(N)_/.=+\-@}]*$)
Value Length Constraints: Minimum length of 0. Maximum length of 256.
Value Pattern: ^([p(L)p(z)p(N)_/.=+\-@})*$)

Errors

For information about the errors that are common to all actions, see Common Errors (p. 116).

ResourceNotFoundException

The specified resource was not 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
StartFleet

Starts the specified fleet.

Request Syntax

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

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 114).

The request accepts the following data in JSON format.

Name (p. 60)

- The name of the fleet.
- Type: String
- Length Constraints: Minimum length of 1.
- 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. 116).

ConcurrentModificationException

- An API error occurred. Wait a few minutes and try again.
- HTTP Status Code: 400

LimitExceededException

- The requested limit exceeds the permitted limit for an account.
- HTTP Status Code: 400

OperationNotPermittedException

- The attempted operation is not permitted.
- HTTP Status Code: 400

ResourceNotFoundException

- The specified resource was not 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
StartImageBuilder

Starts the specified image builder.

**Request Syntax**

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

**Request Parameters**

For information about the parameters that are common to all actions, see Common Parameters (p. 114).

The request accepts the following data in JSON format.

**AppstreamAgentVersion (p. 62)**

The version of the AppStream 2.0 agent to use for this image builder. To use the latest version of the AppStream 2.0 agent, specify [LATEST].

Type: String

Length Constraints: Minimum length of 1. Maximum length of 100.

Required: No

**Name (p. 62)**

The name of the image builder.

Type: String

Length Constraints: Minimum length of 1.

Required: Yes

**Response Syntax**

```json
{
    "ImageBuilder": {
        "AppstreamAgentVersion": "string",
        "Arn": "string",
        "CreatedTime": number,
        "Description": "string",
        "DisplayName": "string",
        "DomainJoinInfo": {
            "DirectoryName": "string",
            "OrganizationalUnitDistinguishedName": "string"
        },
        "EnableDefaultInternetAccess": boolean,
        "ImageArn": "string",
        "ImageBuilderErrors": [
            {
                "ErrorCode": "string",
                "ErrorMessage": "string"
            }
        ]
    }
}
```
"ErrorTimestamp": number
},
"InstanceType": "string",
"Name": "string",
"Platform": "string",
"State": "string",
"StateChangeReason": {
  "Code": "string",
  "Message": "string"
},
"VpcConfig": {
  "SecurityGroupIds": [ "string" ],
  "SubnetIds": [ "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.

**ImageBuilder (p. 62)**

Information about the image builder.

Type: ImageBuilder (p. 99) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 116).

**ConcurrentModificationException**

An API error occurred. Wait a few minutes and try again.

HTTP Status Code: 400

**IncompatibleImageException**

The image does not support storage connectors.

HTTP Status Code: 400

**ResourceNotAvailableException**

The specified resource exists and is not in use, but isn't available.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource was not 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:
See Also

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

Stops the specified fleet.

Request Syntax

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

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 114).

The request accepts the following data in JSON format.

**Name (p. 65)**

- The name of the fleet.
- Type: String
- Length Constraints: Minimum length of 1.
- 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. 116).

**ConcurrentModificationException**

- An API error occurred. Wait a few minutes and try again.
  - HTTP Status Code: 400

**ResourceNotFoundException**

- The specified resource was not 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
StopImageBuilder

Stops the specified image builder.

**Request Syntax**

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

**Request Parameters**

For information about the parameters that are common to all actions, see [Common Parameters](p. 114).

The request accepts the following data in JSON format.

**Name (p. 67)**

The name of the image builder.

Type: String

Length Constraints: Minimum length of 1.

Required: Yes

**Response Syntax**

```json
{
  "ImageBuilder": {
    "AppstreamAgentVersion": "string",
    "Arn": "string",
    "CreatedTime": number,
    "Description": "string",
    "DisplayName": "string",
    "DomainJoinInfo": {
      "DirectoryName": "string",
      "OrganizationalUnitDistinguishedName": "string"
    },
    "EnableDefaultInternetAccess": boolean,
    "ImageArn": "string",
    "ImageBuilderErrors": [
      {
        "ErrorCode": "string",
        "ErrorMessage": "string",
        "ErrorTimestamp": number
      }
    ],
    "InstanceType": "string",
    "Name": "string",
    "Platform": "string",
    "State": "string",
    "StateChangeReason": {
      "Code": "string",
      "Message": "string"
    }
  }
}
```

API Version 2016-12-01
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.

**ImageBuilder (p. 67)**

Information about the image builder.

Type: ImageBuilder (p. 99) object

Errors

For information about the errors that are common to all actions, see [Common Errors (p. 116)](#).

**ConcurrentModificationException**

An API error occurred. Wait a few minutes and try again.

HTTP Status Code: 400

**OperationNotAllowedException**

The attempted operation is not permitted.

HTTP Status Code: 400

**ResourceNotFoundException**

The specified resource was not 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
TagResource

Adds or overwrites one or more tags for the specified AppStream 2.0 resource. You can tag AppStream 2.0 image builders, images, fleets, and stacks.

Each tag consists of a key and an optional value. If a resource already has a tag with the same key, this operation updates its value.

To list the current tags for your resources, use ListTagsForResource (p. 58). To disassociate tags from your resources, use UntagResource (p. 71).

For more information about tags, see Tagging Your Resources in the Amazon AppStream 2.0 Developer Guide.

Request Syntax

```
{
  "ResourceArn": "string",
  "Tags": {
    "string" : "string"
  }
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 114).

The request accepts the following data in JSON format.

**ResourceArn (p. 69)**

The Amazon Resource Name (ARN) of the resource.

Type: String

Pattern: ^arn:aws:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$

Required: Yes

**Tags (p. 69)**

The tags to associate. A tag is a key-value pair (the value is optional). For example, Environment=Test, or, if you do not specify a value, Environment=.

If you do not specify a value, we set the value to an empty string.

Type: String to string map

Key Length Constraints: Minimum length of 1. Maximum length of 128.

Key Pattern: ^(\^\(?!aws:\).[\p{L}\p{Z}\p{N}_.:/=+\-@]*))*$

Value Length Constraints: Minimum length of 0. Maximum length of 256.

Value Pattern: ^([^\p{L}\p{Z}\p{N}_.:/=+\-@]*))*$

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. 116).

LimitExceededException

The requested limit exceeds the permitted limit for an account.

HTTP Status Code: 400

ResourceNotFoundException

The specified resource was not 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
UntagResource

Disassociates the specified tags from the specified AppStream 2.0 resource.

To list the current tags for your resources, use ListTagsForResource (p. 58).

For more information about tags, see Tagging Your Resources in the Amazon AppStream 2.0 Developer Guide.

Request Syntax

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

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 114).

The request accepts the following data in JSON format.

ResourceArn (p. 71)

The Amazon Resource Name (ARN) of the resource.

Type: String

Pattern: ^arn:aws:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9_+/+=@.-]{0,1023}$

Required: Yes

TagKeys (p. 71)

The tag keys for the tags to disassociate.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 50 items.


Pattern: ^([^\!/\#\$?\+\-]([^\p{L}\p{Z}\p{N}\_\.:\/+\@])*\$)

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. 116).
ResourceNotFoundException

The specified resource was not 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
UpdateDirectoryConfig

Updates the specified directory configuration.

Request Syntax

```json
{
  "DirectoryName": "string",
  "OrganizationalUnitDistinguishedNames": [ "string" ],
  "ServiceAccountCredentials": {
    "AccountName": "string",
    "AccountPassword": "string"
  }
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 114).

The request accepts the following data in JSON format.

DirectoryName (p. 73)

The name of the directory configuration.

Type: String

Required: Yes

OrganizationalUnitDistinguishedNames (p. 73)

The distinguished names of the organizational units for computer accounts.

Type: Array of strings


Required: No

ServiceAccountCredentials (p. 73)

The credentials for the service account used by the streaming instance to connect to the directory.

Type: ServiceAccountCredentials (p. 106) object

Required: No

Response Syntax

```json
{
  "DirectoryConfig": {
    "CreatedTime": number,
    "DirectoryName": "string",
    "OrganizationalUnitDistinguishedNames": [ "string" ],
    "ServiceAccountCredentials": {
      "AccountName": "string",
      "AccountPassword": "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.

DirectoryConfig (p. 73)

Information about the directory configuration.

Type: DirectoryConfig (p. 90) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 116).

ConcurrentModificationException

An API error occurred. Wait a few minutes and try again.

HTTP Status Code: 400

ResourceInUseException

The specified resource is in use.

HTTP Status Code: 400

ResourceNotFoundException

The specified resource was not 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
UpdateFleet

Updates the specified fleet.

If the fleet is in the STOPPED state, you can update any attribute except the fleet name. If the fleet is in the RUNNING state, you can update the DisplayName and ComputeCapacity attributes. If the fleet is in the STARTING or STOPPING state, you can't update it.

Request Syntax

```
{
  "AttributesToDelete": [ "string" ],
  "ComputeCapacity": {
    "DesiredInstances": number
  },
  "DeleteVpcConfig": boolean,
  "Description": "string",
  "DisconnectTimeoutInSeconds": number,
  "DisplayName": "string",
  "DomainJoinInfo": {
    "DirectoryName": "string",
    "OrganizationalUnitDistinguishedName": "string"
  },
  "EnableDefaultInternetAccess": boolean,
  "ImageName": "string",
  "InstanceType": "string",
  "MaxUserDurationInSeconds": number,
  "Name": "string",
  "VpcConfig": {
    "SecurityGroupIds": [ "string" ],
    "SubnetIds": [ "string" ]
  }
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 114).

The request accepts the following data in JSON format.

**AttributesToDelete (p. 75)**

The fleet attributes to delete.

Type: Array of strings

Valid Values: VPC_CONFIGURATION | VPC_CONFIGURATION_SECURITY_GROUP_IDS | DOMAIN_JOIN_INFO

Required: No

**ComputeCapacity (p. 75)**

The desired capacity for the fleet.

Type: ComputeCapacity (p. 88) object

Required: No
DeleteVpcConfig (p. 75)

*This parameter has been deprecated.*

Deletes the VPC association for the specified fleet.

Type: Boolean

Required: No

Description (p. 75)

The description for display.

Type: String

Length Constraints: Maximum length of 256.

Required: No

DisconnectTimeoutInSeconds (p. 75)

The time after disconnection when a session is considered to have ended, in seconds. If a user who was disconnected reconnects within this time interval, the user is connected to their previous session. Specify a value between 60 and 57600.

Type: Integer

Required: No

DisplayName (p. 75)

The fleet name for display.

Type: String

Length Constraints: Maximum length of 100.

Required: No

DomainJoinInfo (p. 75)

The information needed to join a Microsoft Active Directory domain.

Type: DomainJoinInfo (p. 91) object

Required: No

EnableDefaultInternetAccess (p. 75)

Enables or disables default internet access for the fleet.

Type: Boolean

Required: No

ImageName (p. 75)

The name of the image used to create the fleet.

Type: String

Length Constraints: Minimum length of 1.

Required: No
**InstanceType (p. 75)**

The instance type to use when launching fleet instances. The following instance types are available:

- `stream.standard.medium`
- `stream.standard.large`
- `stream.compute.large`
- `stream.compute.xlarge`
- `stream.compute.2xlarge`
- `stream.compute.4xlarge`
- `stream.compute.8xlarge`
- `stream.memory.large`
- `stream.memory.xlarge`
- `stream.memory.2xlarge`
- `stream.memory.4xlarge`
- `stream.memory.8xlarge`
- `stream.graphics-design.large`
- `stream.graphics-design.xlarge`
- `stream.graphics-design.2xlarge`
- `stream.graphics-design.4xlarge`
- `stream.graphics-desktop.2xlarge`
- `stream.graphics-pro.4xlarge`
- `stream.graphics-pro.8xlarge`
- `stream.graphics-pro.16xlarge`

Type: String

Length Constraints: Minimum length of 1.

Required: No

**MaxUserDurationInSeconds (p. 75)**

The maximum time that a streaming session can run, in seconds. Specify a value between 600 and 57600.

Type: Integer

Required: No

**Name (p. 75)**

A unique name for the fleet.

Type: String

Length Constraints: Minimum length of 1.

Required: Yes

**VpcConfig (p. 75)**

The VPC configuration for the fleet.

Type: `VpcConfig (p. 113)` object

Required: No
Response Syntax

```json
{
    "Fleet": {
        "Arn": "string",
        "ComputeCapacityStatus": {
            "Available": number,
            "Desired": number,
            "InUse": number,
            "Running": number
        },
        "CreatedTime": number,
        "Description": "string",
        "DisconnectTimeoutInSeconds": number,
        "DisplayName": "string",
        "DomainJoinInfo": {
            "DirectoryName": "string",
            "OrganizationalUnitDistinguishedName": "string"
        },
        "EnableDefaultInternetAccess": boolean,
        "FleetErrors": [
            {
                "ErrorCode": "string",
                "ErrorMessage": "string"
            }
        ],
        "FleetType": "string",
        "ImageName": "string",
        "InstanceType": "string",
        "MaxUserDurationInSeconds": number,
        "Name": "string",
        "State": "string",
        "VpcConfig": {
            "SecurityGroupIds": [ "string" ],
            "SubnetIds": [ "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.

**Fleet (p. 78)**

Information about the fleet.

Type: **Fleet (p. 92)** object

**Errors**

For information about the errors that are common to all actions, see [Common Errors (p. 116)].

**ConcurrentModificationException**

An API error occurred. Wait a few minutes and try again.

HTTP Status Code: 400
IncompatibleImageException

The image does not support storage connectors.

HTTP Status Code: 400

InvalidParameterCombinationException

Indicates an incorrect combination of parameters, or a missing parameter.

HTTP Status Code: 400

InvalidRoleException

The specified role is invalid.

HTTP Status Code: 400

LimitExceededException

The requested limit exceeds the permitted limit for an account.

HTTP Status Code: 400

OperationNotPermittedException

The attempted operation is not permitted.

HTTP Status Code: 400

ResourceInUseException

The specified resource is in use.

HTTP Status Code: 400

ResourceNotFoundException

The specified resource was not 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
**UpdateStack**

Updates the specified stack.

**Request Syntax**

```
{
    "AttributesToDelete": [ "string" ],
    "DeleteStorageConnectors": boolean,
    "Description": "string",
    "DisplayName": "string",
    "Name": "string",
    "RedirectURL": "string",
    "StorageConnectors": [
        {
            "ConnectorType": "string",
            "ResourceIdentifier": "string"
        }
    ]
}
```

**Request Parameters**

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

The request accepts the following data in JSON format.

**AttributesToDelete (p. 81)**

The stack attributes to delete.

Type: Array of strings

Valid Values: STORAGE_CONNECTORS | REDIRECT_URL

Required: No

**DeleteStorageConnectors (p. 81)**

*This parameter has been deprecated.*

Deletes the storage connectors currently enabled for the stack.

Type: Boolean

Required: No

**Description (p. 81)**

The description for display.

Type: String

Length Constraints: Maximum length of 256.

Required: No

**DisplayName (p. 81)**

The stack name for display.
Type: String
Length Constraints: Maximum length of 100.
Required: No

**Name (p. 81)**

The name of the stack.
Type: String
Length Constraints: Minimum length of 1.
Required: Yes

**RedirectURL (p. 81)**

The URL the user is redirected to after the streaming session ends.
Type: String
Length Constraints: Maximum length of 1000.
Required: No

**StorageConnectors (p. 81)**

The storage connectors to enable.
Type: Array of StorageConnector (p. 112) objects
Required: No

---

**Response Syntax**

```json
{
    "Stack": {
        "Arn": "string",
        "CreatedTime": number,
        "Description": "string",
        "DisplayName": "string",
        "Name": "string",
        "RedirectURL": "string",
        "StackErrors": [
            {
                "ErrorCode": "string",
                "ErrorMessage": "string"
            }
        ],
        "StorageConnectors": [
            {
                "ConnectorType": "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.

Stack (p. 82)
Information about the stack.
Type: Stack (p. 109) object

Errors
For information about the errors that are common to all actions, see Common Errors (p. 116).

IncompatibleImageException
The image does not support storage connectors.
HTTP Status Code: 400

InvalidParameterCombinationException
Indicates an incorrect combination of parameters, or a missing parameter.
HTTP Status Code: 400

InvalidRoleException
The specified role is invalid.
HTTP Status Code: 400

LimitExceededException
The requested limit exceeds the permitted limit for an account.
HTTP Status Code: 400

ResourceInUseException
The specified resource is in use.
HTTP Status Code: 400

ResourceNotFoundException
The specified resource was not 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

API Version 2016-12-01
83
See Also

- AWS SDK for Python
- AWS SDK for Ruby V2
Data Types

The Amazon AppStream 2.0 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:

- Application (p. 86)
- ComputeCapacity (p. 88)
- ComputeCapacityStatus (p. 89)
- DirectoryConfig (p. 90)
- DomainJoinInfo (p. 91)
- Fleet (p. 92)
- FleetError (p. 95)
- Image (p. 96)
- ImageBuilder (p. 99)
- ImageBuilderStateChangeReason (p. 102)
- ImageStateChangeReason (p. 103)
- ResourceError (p. 104)
- ServiceAccountCredentials (p. 106)
- Session (p. 107)
- Stack (p. 109)
- StackError (p. 111)
- StorageConnector (p. 112)
- VpcConfig (p. 113)
Application

Describes an application in the application catalog.

Contents

DisplayName

The application name for display.

Type: String

Length Constraints: Minimum length of 1.

Required: No

Enabled

If there is a problem, the application can be disabled after image creation.

Type: Boolean

Required: No

IconURL

The URL for the application icon. This URL might be time-limited.

Type: String

Length Constraints: Minimum length of 1.

Required: No

LaunchParameters

The arguments that are passed to the application at launch.

Type: String

Length Constraints: Minimum length of 1.

Required: No

LaunchPath

The path to the application executable in the instance.

Type: String

Length Constraints: Minimum length of 1.

Required: No

Metadata

Additional attributes that describe the application.

Type: String to string map

Key Length Constraints: Minimum length of 1.

Value Length Constraints: Minimum length of 1.
Required: No

**Name**

The name of the application.

Type: String

Length Constraints: Minimum length of 1.

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
ComputeCapacity

Describes the capacity for a fleet.

Contents

**DesiredInstances**

The desired number of streaming instances.

Type: Integer

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
ComputeCapacityStatus

Describes the capacity status for a fleet.

Contents

Available
The number of currently available instances that can be used to stream sessions.
Type: Integer
Required: No

Desired
The desired number of streaming instances.
Type: Integer
Required: Yes

InUse
The number of instances in use for streaming.
Type: Integer
Required: No

Running
The total number of simultaneous streaming instances that are running.
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
DirectoryConfig

Configuration information for the directory used to join domains.

Contents

CreatedAtime

The time the directory configuration was created.

Type: Timestamp

Required: No

DirectoryName

The fully qualified name of the directory (for example, corp.example.com).

Type: String

Required: Yes

OrganizationalUnitDistinguishedNames

The distinguished names of the organizational units for computer accounts.

Type: Array of strings


Required: No

ServiceAccountCredentials

The credentials for the service account used by the streaming instance to connect to the directory.

Type: ServiceAccountCredentials (p. 106) 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
DomainJoinInfo

Contains the information needed to join a Microsoft Active Directory domain.

Contents

DirectoryName

The fully qualified name of the directory (for example, corp.example.com).

Type: String

Required: No

OrganizationalUnitDistinguishedName

The distinguished name of the organizational unit for computer accounts.

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
Fleet

Contains the parameters for a fleet.

Contents

Arn

The ARN for the fleet.

Type: String

Pattern: ^arn:aws:[A-Za-z0-9][A-Za-z0-9_/\.]{0,62}:[A-Za-z0-9_/\.]{0,63}:[A-Za-z0-9_/\.]{0,63}:[A-Za-z0-9][A-Za-z0-9:/+=,@.-]{0,1023}$

Required: Yes

ComputeCapacityStatus

The capacity status for the fleet.

Type: \n
ComputedCapacityStatus (p. 89) object

Required: Yes

CreatedTime

The time the fleet was created.

Type: Timestamp

Required: No

Description

The description for display.

Type: String

Length Constraints: Minimum length of 1.

Required: No

DisconnectTimeoutInSeconds

The time after disconnection when a session is considered to have ended, in seconds. If a user who was disconnected reconnects within this time interval, the user is connected to their previous session. Specify a value between 60 and 57600.

Type: Integer

Required: No

DisplayName

The fleet name for display.

Type: String

Length Constraints: Minimum length of 1.

Required: No
**DomainJoinInfo**

The information needed to join a Microsoft Active Directory domain.

Type: DomainJoinInfo (p. 91) object

Required: No

**EnableDefaultInternetAccess**

Indicates whether default internet access is enabled for the fleet.

Type: Boolean

Required: No

**FleetErrors**

The fleet errors.

Type: Array of FleetError (p. 95) objects

Required: No

**FleetType**

The fleet type.

ALWAYS_ON

Provides users with instant-on access to their apps. You are charged for all running instances in your fleet, even if no users are streaming apps.

ON_DEMAND

Provide users with access to applications after they connect, which takes one to two minutes. You are charged for instance streaming when users are connected and a small hourly fee for instances that are not streaming apps.

Type: String

Valid Values: ALWAYS_ON | ON_DEMAND

Required: No

**ImageName**

The name of the image used to create the fleet.

Type: String

Length Constraints: Minimum length of 1.

Required: Yes

**InstanceType**

The instance type to use when launching fleet instances.

Type: String

Length Constraints: Minimum length of 1.

Required: Yes

**MaxUserDurationInSeconds**

The maximum time that a streaming session can run, in seconds. Specify a value between 600 and 57600.
Type: Integer
Required: No

**Name**

The name of the fleet.

Type: String
Length Constraints: Minimum length of 1.
Required: Yes

**State**

The current state for the fleet.

Type: String
Valid Values: STARTING | RUNNING | STOPPING | STOPPED
Required: Yes

**VpcConfig**

The VPC configuration for the fleet.

Type: VpcConfig (p. 113) 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
FleetError

Describes a fleet error.

Contents

ErrorCode

The error code.

Type: String


Required: No

ErrorMessage

The error message.

Type: String

Length Constraints: Minimum length of 1.

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
Image

Describes an image.

Contents

Applications

The applications associated with the image.

Type: Array of Application (p. 86) objects

Required: No

AppstreamAgentVersion

The version of the AppStream 2.0 agent to use for instances that are launched from this image.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 100.

Required: No

Arn

The ARN of the image.

Type: String

Pattern: ^arn:aws:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$

Required: No

BaseImageArn

The ARN of the image from which this image was created.

Type: String

Pattern: ^arn:aws:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$

Required: No

CreatedTime

The time the image was created.

Type: Timestamp

Required: No

Description

The description for display.

Type: String

Length Constraints: Minimum length of 1.

Required: No
**DisplayName**

The image name for display.

Type: String

Length Constraints: Minimum length of 1.

Required: No

**ImageBuilderSupported**

Indicates whether an image builder can be launched from this image.

Type: Boolean

Required: No

**Name**

The name of the image.

Type: String

Length Constraints: Minimum length of 1.

Required: Yes

**Platform**

The operating system platform of the image.

Type: String

Valid Values: WINDOWS

Required: No

**PublicBaseImageReleasedDate**

The release date of the public base image. For private images, this date is the release date of the base image from which the image was created.

Type: Timestamp

Required: No

**State**

The image starts in the PENDING state. If image creation succeeds, the state is AVAILABLE. If image creation fails, the state is FAILED.

Type: String

Valid Values: PENDING | AVAILABLE | FAILED | DELETING

Required: No

**StateChangeReason**

The reason why the last state change occurred.

Type: ImageStateChangeReason (p. 103) object

Required: No
Visibility

Indicates whether the image is public or private.

Type: String

Valid Values: PUBLIC | PRIVATE

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
Describes a streaming instance used for editing an image. New images are created from a snapshot through an image builder.

Contents

**AppstreamAgentVersion**

The version of the AppStream 2.0 agent that is currently being used by this image builder.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 100.

Required: No

**Arn**

The ARN for the image builder.

Type: String

Pattern: *arn:aws:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$

Required: No

**CreatedTime**

The time stamp when the image builder was created.

Type: Timestamp

Required: No

**Description**

The description for display.

Type: String

Length Constraints: Minimum length of 1.

Required: No

**DisplayName**

The image builder name for display.

Type: String

Length Constraints: Minimum length of 1.

Required: No

**DomainJoinInfo**

The information needed to join a Microsoft Active Directory domain.

Type: DomainJoinInfo (p. 91) object

Required: No
EnableDefaultInternetAccess

Enables or disables default internet access for the image builder.

Type: Boolean

Required: No

ImageArn

The ARN of the image from which this builder was created.

Type: String

Pattern: ^arn:aws:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$

Required: No

ImageBuilderErrors

The image builder errors.

Type: Array of ResourceError (p. 104) objects

Required: No

InstanceType

The instance type for the image builder.

Type: String

Length Constraints: Minimum length of 1.

Required: No

Name

The name of the image builder.

Type: String

Length Constraints: Minimum length of 1.

Required: Yes

Platform

The operating system platform of the image builder.

Type: String

Valid Values: WINDOWS

Required: No

State

The state of the image builder.

Type: String

Valid Values: PENDING | UPDATING_AGENT | RUNNING | STOPPING | STOPPED | REBOOTING | SNAPSHOTTING | DELETING | FAILED

Required: No
StateChangeReason

The reason why the last state change occurred.

Type: ImageBuilderStateChangeReason (p. 102) object

Required: No

VpcConfig

The VPC configuration of the image builder.

Type: VpcConfig (p. 113) 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
ImageBuilderStateChangeReason

Describes the reason why the last image builder state change occurred.

Contents

Code

The state change reason code.
Type: String
Valid Values: INTERNAL_ERROR | IMAGE_UNAVAILABLE
Required: No

Message

The state change reason message.
Type: String
Length Constraints: Minimum length of 1.
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
ImageStateChangeReason

Describes the reason why the last image state change occurred.

Contents

Code

The state change reason code.

Type: String

Valid Values: INTERNAL_ERROR | IMAGE_BUILDER_NOT_AVAILABLE

Required: No

Message

The state change reason message.

Type: String

Length Constraints: Minimum length of 1.

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
ResourceError

Describes a resource error.

Contents

ErrorCode

The error code.

Type: String

Valid Values:
- IAM_SERVICE_ROLE_MISSING_ENI_DESCRIBE_ACTION
- IAM_SERVICE_ROLE_MISSING_ENI_CREATE_ACTION
- IAM_SERVICE_ROLE_MISSING_ENI_DELETE_ACTION
- NETWORK_INTERFACE_LIMIT_EXCEEDED
- INTERNAL_SERVICE_ERROR
- IAM_SERVICE_ROLE_IS_MISSING
- SUBNET_HAS_INSUFFICIENT_IP_ADDRESSES
- IAM_SERVICE_ROLE_MISSING_DESCRIBE_SUBNET_ACTION
- SUBNET_NOT_FOUND
- IMAGE_NOT_FOUND
- INVALID_SUBNET_CONFIGURATION
- SECURITY_GROUPS_NOT_FOUND
- IGW_NOT_ATTACHED
- IAM_SERVICE_ROLE_MISSING_DESCRIBE_SECURITY_GROUPS_ACTION
- DOMAIN_JOIN_ERROR_FILE_NOT_FOUND
- DOMAIN_JOIN_ERROR_ACCESS_DENIED
- DOMAIN_JOIN_ERROR_LOGON_FAILURE
- DOMAIN_JOIN_ERROR_INVALID_PARAMETER
- DOMAIN_JOIN_ERROR_MORE_DATA
- DOMAIN_JOIN_ERROR_NO_SUCH_DOMAIN
- DOMAIN_JOIN_ERROR_NOT_SUPPORTED
- DOMAIN_JOIN_NERR_INVALID_WORKGROUP_NAME
- DOMAIN_JOIN_NERR_WORKSTATION_NOT_STARTED
- DOMAIN_JOIN_ERROR_DS_MACHINE_ACCOUNT_QUOTA_EXCEEDED
- DOMAIN_JOIN_NERR_PASSWORD_EXPIRED
- DOMAIN_JOIN_INTERNAL_SERVICE_ERROR

Required: No

ErrorMessage

The error message.

Type: String

Length Constraints: Minimum length of 1.

Required: No

ErrorTimestamp

The time the error occurred.

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
**ServiceAccountCredentials**

Describes the credentials for the service account used by the streaming instance to connect to the directory.

**Contents**

**AccountName**

The user name of the account. This account must have the following privileges: create computer objects, join computers to the domain, and change/reset the password on descendant computer objects for the organizational units specified.

Type: String

Length Constraints: Minimum length of 1.

Required: Yes

**AccountPassword**

The password for the account.

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
Session

Describes a streaming session.

Contents

AuthenticationType

The authentication method. The user is authenticated using a streaming URL (API) or SAML federation (SAML).

Type: String

Valid Values: API | SAML | USERPOOL

Required: No

FleetName

The name of the fleet for the streaming session.

Type: String

Length Constraints: Minimum length of 1.

Required: Yes

Id

The ID of the streaming session.

Type: String

Length Constraints: Minimum length of 1.

Required: Yes

StackName

The name of the stack for the streaming session.

Type: String

Length Constraints: Minimum length of 1.

Required: Yes

State

The current state of the streaming session.

Type: String

Valid Values: ACTIVE | PENDING | EXPIRED

Required: Yes

UserIds

The identifier of the user for whom the session was created.

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
Stack

Describes a stack.

Contents

Arn

The ARN of the stack.

Type: String

Pattern: ^arn:aws:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$

Required: No

CreatedTime

The time the stack was created.

Type: Timestamp

Required: No

Description

The description for display.

Type: String

Length Constraints: Minimum length of 1.

Required: No

DisplayName

The stack name for display.

Type: String

Length Constraints: Minimum length of 1.

Required: No

Name

The name of the stack.

Type: String

Length Constraints: Minimum length of 1.

Required: Yes

RedirectURL

The URL the user is redirected to after the streaming session ends.

Type: String

Length Constraints: Maximum length of 1000.

Required: No
StackErrors

The errors for the stack.

Type: Array of StackError (p. 111) objects

Required: No

StorageConnectors

The storage connectors to enable.

Type: Array of StorageConnector (p. 112) 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
StackError

Describes a stack error.

Contents

ErrorCode

The error code.
Type: String
Valid Values: STORAGE_CONNECTOR_ERROR | INTERNAL_SERVICE_ERROR
Required: No

ErrorMessage

The error message.
Type: String
Length Constraints: Minimum length of 1.
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
StorageConnector

Describes a storage connector.

Contents

ConnectorType

The type of storage connector.

Type: String

Valid Values: HOMEFOLDERS

Required: Yes

ResourceIdentifier

The ARN of the storage connector.

Type: String

Length Constraints: Minimum length of 1.

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
VpcConfig

Describes VPC configuration information.

Contents

SecurityGroupIds

The security groups for the fleet.

Type: Array of strings

Array Members: Maximum number of 5 items.

Length Constraints: Minimum length of 1.

Required: No

SubnetIds

The subnets to which a network interface is established from the fleet instance.

Type: Array of strings

Length Constraints: Minimum length of 1.

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java
- AWS SDK for Ruby V2
Common Parameters

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

**Action**

The action to be performed.

Type: string

Required: Yes

**Version**

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

Type: string

Required: Yes

**X-Amz-Algorithm**

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

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

Type: string

Valid Values: AWS4-HMAC-SHA256

Required: Conditional

**X-Amz-Credential**

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

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

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

Type: string

Required: Conditional

**X-Amz-Date**

The date that is used to create the signature. The format must be ISO 8601 basic format (YYYYMMDD'T'HHMMSS'Z'). For example, the following date time is a valid X-Amz-Date value: 20120325T120000Z.

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

Type: string
Required: Conditional

X-Amz-Security-Token

The temporary security token that was obtained through a call to AWS Security Token Service (AWS STS). For a list of services that support temporary security credentials from AWS Security Token Service, go to AWS Services That Work with IAM in the IAM User Guide.

Condition: If you're using temporary security credentials from the AWS Security Token Service, you must include the security token.

Type: string
Required: Conditional

X-Amz-Signature

Specifies the hex-encoded signature that was calculated from the string to sign and the derived signing key.

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

Type: string
Required: Conditional

X-Amz-SignedHeaders

Specifies all the HTTP headers that were included as part of the canonical request. For more information about specifying signed headers, see Task 1: Create a Canonical Request For Signature Version 4 in the Amazon Web Services General Reference.

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

Type: string
Required: Conditional
Common Errors

This section lists the errors common to the API actions of all AWS services. For errors specific to an API action for this service, see the topic for that API action.

**AccessDeniedException**

You do not have sufficient access to perform this action.

HTTP Status Code: 400

**IncompleteSignature**

The request signature does not conform to AWS standards.

HTTP Status Code: 400

**InternalFailure**

The request processing has failed because of an unknown error, exception or failure.

HTTP Status Code: 500

**InvalidAction**

The action or operation requested is invalid. Verify that the action is typed correctly.

HTTP Status Code: 400

**InvalidClientTokenId**

The X.509 certificate or AWS access key ID provided does not exist in our records.

HTTP Status Code: 403

**InvalidParameterCombination**

Parameters that must not be used together were used together.

HTTP Status Code: 400

**InvalidParameterValue**

An invalid or out-of-range value was supplied for the input parameter.

HTTP Status Code: 400

**InvalidQueryParameter**

The AWS query string is malformed or does not adhere to AWS standards.

HTTP Status Code: 400

**MalformedQueryString**

The query string contains a syntax error.

HTTP Status Code: 404

**MissingAction**

The request is missing an action or a required parameter.

HTTP Status Code: 400
**MissingAuthenticationToken**

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

HTTP Status Code: 403

**MissingParameter**

A required parameter for the specified action is not supplied.

HTTP Status Code: 400

**OptInRequired**

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

HTTP Status Code: 403

**RequestExpired**

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

HTTP Status Code: 400

**ServiceUnavailable**

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

HTTP Status Code: 503

**ThrottlingException**

The request was denied due to request throttling.

HTTP Status Code: 400

**ValidationError**

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

HTTP Status Code: 400