



API Reference

# Amazon AppStream 2.0



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# Amazon AppStream 2.0: API Reference

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# Table of Contents

<b>Welcome</b> .....	<b>1</b>
<b>Actions</b> .....	<b>2</b>
AssociateAppBlockBuilderAppBlock .....	5
Request Syntax .....	5
Request Parameters .....	5
Response Syntax .....	5
Response Elements .....	6
Errors .....	6
See Also .....	7
AssociateApplicationFleet .....	8
Request Syntax .....	8
Request Parameters .....	8
Response Syntax .....	8
Response Elements .....	9
Errors .....	9
See Also .....	10
AssociateApplicationToEntitlement .....	11
Request Syntax .....	11
Request Parameters .....	11
Response Elements .....	12
Errors .....	12
See Also .....	12
AssociateFleet .....	14
Request Syntax .....	14
Request Parameters .....	14
Response Elements .....	14
Errors .....	15
See Also .....	15
BatchAssociateUserStack .....	17
Request Syntax .....	17
Request Parameters .....	17
Response Syntax .....	17
Response Elements .....	18
Errors .....	18

---

See Also .....	18
BatchDisassociateUserStack .....	20
Request Syntax .....	20
Request Parameters .....	20
Response Syntax .....	20
Response Elements .....	21
Errors .....	21
See Also .....	21
CopyImage .....	23
Request Syntax .....	23
Request Parameters .....	23
Response Syntax .....	24
Response Elements .....	24
Errors .....	24
See Also .....	25
CreateAppBlock .....	27
Request Syntax .....	27
Request Parameters .....	28
Response Syntax .....	29
Response Elements .....	30
Errors .....	31
See Also .....	31
CreateAppBlockBuilder .....	33
Request Syntax .....	33
Request Parameters .....	33
Response Syntax .....	36
Response Elements .....	37
Errors .....	38
See Also .....	39
CreateAppBlockBuilderStreamingURL .....	40
Request Syntax .....	40
Request Parameters .....	40
Response Syntax .....	40
Response Elements .....	41
Errors .....	41
See Also .....	41

CreateApplication .....	43
Request Syntax .....	43
Request Parameters .....	43
Response Syntax .....	46
Response Elements .....	47
Errors .....	47
See Also .....	48
CreateDirectoryConfig .....	49
Request Syntax .....	49
Request Parameters .....	49
Response Syntax .....	50
Response Elements .....	51
Errors .....	51
See Also .....	52
CreateEntitlement .....	53
Request Syntax .....	53
Request Parameters .....	53
Response Syntax .....	54
Response Elements .....	55
Errors .....	55
See Also .....	56
CreateFleet .....	57
Request Syntax .....	57
Request Parameters .....	58
Response Syntax .....	66
Response Elements .....	67
Errors .....	67
See Also .....	69
CreateImageBuilder .....	70
Request Syntax .....	70
Request Parameters .....	70
Response Syntax .....	75
Response Elements .....	76
Errors .....	77
See Also .....	78
CreateImageBuilderStreamingURL .....	79

Request Syntax .....	79
Request Parameters .....	79
Response Syntax .....	79
Response Elements .....	80
Errors .....	80
See Also .....	80
CreateStack .....	82
Request Syntax .....	82
Request Parameters .....	83
Response Syntax .....	86
Response Elements .....	87
Errors .....	87
See Also .....	88
CreateStreamingURL .....	90
Request Syntax .....	90
Request Parameters .....	90
Response Syntax .....	92
Response Elements .....	92
Errors .....	92
See Also .....	93
CreateThemeForStack .....	94
Request Syntax .....	94
Request Parameters .....	94
Response Syntax .....	96
Response Elements .....	96
Errors .....	96
See Also .....	97
CreateUpdatedImage .....	99
Request Syntax .....	99
Request Parameters .....	99
Response Syntax .....	101
Response Elements .....	102
Errors .....	103
See Also .....	104
CreateUsageReportSubscription .....	105
Response Syntax .....	105

Response Elements .....	105
Errors .....	106
See Also .....	106
CreateUser .....	107
Request Syntax .....	107
Request Parameters .....	107
Response Elements .....	109
Errors .....	109
See Also .....	110
DeleteAppBlock .....	111
Request Syntax .....	111
Request Parameters .....	111
Response Elements .....	111
Errors .....	111
See Also .....	112
DeleteAppBlockBuilder .....	113
Request Syntax .....	113
Request Parameters .....	113
Response Elements .....	113
Errors .....	113
See Also .....	114
DeleteApplication .....	115
Request Syntax .....	115
Request Parameters .....	115
Response Elements .....	115
Errors .....	115
See Also .....	116
DeleteDirectoryConfig .....	117
Request Syntax .....	117
Request Parameters .....	117
Response Elements .....	117
Errors .....	117
See Also .....	118
DeleteEntitlement .....	119
Request Syntax .....	119
Request Parameters .....	119

---

Response Elements .....	119
Errors .....	120
See Also .....	120
DeleteFleet .....	122
Request Syntax .....	122
Request Parameters .....	122
Response Elements .....	122
Errors .....	122
See Also .....	123
DeletelImage .....	124
Request Syntax .....	124
Request Parameters .....	124
Response Syntax .....	124
Response Elements .....	126
Errors .....	126
See Also .....	127
DeletelImageBuilder .....	128
Request Syntax .....	128
Request Parameters .....	128
Response Syntax .....	128
Response Elements .....	129
Errors .....	130
See Also .....	130
DeletelImagePermissions .....	131
Request Syntax .....	131
Request Parameters .....	131
Response Elements .....	131
Errors .....	132
See Also .....	132
DeleteStack .....	133
Request Syntax .....	133
Request Parameters .....	133
Response Elements .....	133
Errors .....	133
See Also .....	134
DeleteThemeForStack .....	135



Request Syntax .....	135
Request Parameters .....	135
Response Elements .....	135
Errors .....	135
See Also .....	136
DeleteUsageReportSubscription .....	137
Response Elements .....	137
Errors .....	137
See Also .....	137
DeleteUser .....	139
Request Syntax .....	139
Request Parameters .....	139
Response Elements .....	140
Errors .....	140
See Also .....	140
DescribeAppBlockBuilderAppBlockAssociations .....	141
Request Syntax .....	141
Request Parameters .....	141
Response Syntax .....	142
Response Elements .....	142
Errors .....	143
See Also .....	143
DescribeAppBlockBuilders .....	144
Request Syntax .....	144
Request Parameters .....	144
Response Syntax .....	145
Response Elements .....	146
Errors .....	146
See Also .....	146
DescribeAppBlocks .....	148
Request Syntax .....	148
Request Parameters .....	148
Response Syntax .....	149
Response Elements .....	150
Errors .....	150
See Also .....	151

DescribeApplicationFleetAssociations .....	152
Request Syntax .....	152
Request Parameters .....	152
Response Syntax .....	153
Response Elements .....	153
Errors .....	154
See Also .....	154
DescribeApplications .....	156
Request Syntax .....	156
Request Parameters .....	156
Response Syntax .....	157
Response Elements .....	157
Errors .....	158
See Also .....	158
DescribeDirectoryConfigs .....	160
Request Syntax .....	160
Request Parameters .....	160
Response Syntax .....	161
Response Elements .....	161
Errors .....	162
See Also .....	162
DescribeEntitlements .....	163
Request Syntax .....	163
Request Parameters .....	163
Response Syntax .....	164
Response Elements .....	164
Errors .....	165
See Also .....	165
DescribeFleets .....	167
Request Syntax .....	167
Request Parameters .....	167
Response Syntax .....	167
Response Elements .....	169
Errors .....	169
See Also .....	170
DescribeImageBuilders .....	171

Request Syntax .....	171
Request Parameters .....	171
Response Syntax .....	172
Response Elements .....	173
Errors .....	173
See Also .....	174
<b>DescribeImagePermissions .....</b>	<b>175</b>
Request Syntax .....	175
Request Parameters .....	175
Response Syntax .....	176
Response Elements .....	176
Errors .....	177
See Also .....	177
<b>DescribeImages .....</b>	<b>179</b>
Request Syntax .....	179
Request Parameters .....	179
Response Syntax .....	180
Response Elements .....	182
Errors .....	182
See Also .....	183
<b>DescribeSessions .....</b>	<b>184</b>
Request Syntax .....	184
Request Parameters .....	184
Response Syntax .....	186
Response Elements .....	186
Errors .....	187
See Also .....	187
<b>DescribeStacks .....</b>	<b>188</b>
Request Syntax .....	188
Request Parameters .....	188
Response Syntax .....	188
Response Elements .....	190
Errors .....	190
See Also .....	190
<b>DescribeThemeForStack .....</b>	<b>192</b>
Request Syntax .....	192

Request Parameters .....	192
Response Syntax .....	192
Response Elements .....	193
Errors .....	193
See Also .....	193
<b>DescribeUsageReportSubscriptions .....</b>	<b>195</b>
Request Syntax .....	195
Request Parameters .....	195
Response Syntax .....	195
Response Elements .....	196
Errors .....	196
See Also .....	197
<b>DescribeUsers .....</b>	<b>198</b>
Request Syntax .....	198
Request Parameters .....	198
Response Syntax .....	199
Response Elements .....	199
Errors .....	200
See Also .....	200
<b>DescribeUserStackAssociations .....</b>	<b>201</b>
Request Syntax .....	201
Request Parameters .....	201
Response Syntax .....	202
Response Elements .....	203
Errors .....	203
See Also .....	204
<b>DisableUser .....</b>	<b>205</b>
Request Syntax .....	205
Request Parameters .....	205
Response Elements .....	206
Errors .....	206
See Also .....	206
<b>DisassociateAppBlockBuilderAppBlock .....</b>	<b>207</b>
Request Syntax .....	207
Request Parameters .....	207
Response Elements .....	207

Errors .....	208
See Also .....	208
DisassociateApplicationFleet .....	210
Request Syntax .....	210
Request Parameters .....	210
Response Elements .....	210
Errors .....	211
See Also .....	211
DisassociateApplicationFromEntitlement .....	212
Request Syntax .....	212
Request Parameters .....	212
Response Elements .....	213
Errors .....	213
See Also .....	213
DisassociateFleet .....	215
Request Syntax .....	215
Request Parameters .....	215
Response Elements .....	215
Errors .....	216
See Also .....	216
EnableUser .....	218
Request Syntax .....	218
Request Parameters .....	218
Response Elements .....	219
Errors .....	219
See Also .....	219
ExpireSession .....	221
Request Syntax .....	221
Request Parameters .....	221
Response Elements .....	221
Errors .....	221
See Also .....	221
ListAssociatedFleets .....	223
Request Syntax .....	223
Request Parameters .....	223
Response Syntax .....	223

Response Elements .....	224
Errors .....	224
See Also .....	224
ListAssociatedStacks .....	226
Request Syntax .....	226
Request Parameters .....	226
Response Syntax .....	226
Response Elements .....	227
Errors .....	227
See Also .....	227
ListEntitledApplications .....	229
Request Syntax .....	229
Request Parameters .....	229
Response Syntax .....	230
Response Elements .....	230
Errors .....	231
See Also .....	231
ListTagsForResource .....	232
Request Syntax .....	232
Request Parameters .....	232
Response Syntax .....	232
Response Elements .....	233
Errors .....	233
See Also .....	233
StartAppBlockBuilder .....	235
Request Syntax .....	235
Request Parameters .....	235
Response Syntax .....	235
Response Elements .....	236
Errors .....	236
See Also .....	237
StartFleet .....	239
Request Syntax .....	239
Request Parameters .....	239
Response Elements .....	239
Errors .....	239

See Also .....	240
StartImageBuilder .....	242
Request Syntax .....	242
Request Parameters .....	242
Response Syntax .....	242
Response Elements .....	244
Errors .....	244
See Also .....	245
StopAppBlockBuilder .....	246
Request Syntax .....	246
Request Parameters .....	246
Response Syntax .....	246
Response Elements .....	247
Errors .....	247
See Also .....	248
StopFleet .....	249
Request Syntax .....	249
Request Parameters .....	249
Response Elements .....	249
Errors .....	249
See Also .....	250
StopImageBuilder .....	251
Request Syntax .....	251
Request Parameters .....	251
Response Syntax .....	251
Response Elements .....	252
Errors .....	253
See Also .....	253
TagResource .....	254
Request Syntax .....	254
Request Parameters .....	254
Response Elements .....	255
Errors .....	255
See Also .....	256
UntagResource .....	257
Request Syntax .....	257

Request Parameters .....	257
Response Elements .....	258
Errors .....	258
See Also .....	258
UpdateAppBlockBuilder .....	259
Request Syntax .....	259
Request Parameters .....	259
Response Syntax .....	262
Response Elements .....	263
Errors .....	263
See Also .....	265
UpdateApplication .....	266
Request Syntax .....	266
Request Parameters .....	266
Response Syntax .....	268
Response Elements .....	269
Errors .....	269
See Also .....	270
UpdateDirectoryConfig .....	271
Request Syntax .....	271
Request Parameters .....	271
Response Syntax .....	272
Response Elements .....	273
Errors .....	273
See Also .....	274
UpdateEntitlement .....	275
Request Syntax .....	275
Request Parameters .....	275
Response Syntax .....	276
Response Elements .....	277
Errors .....	277
See Also .....	278
UpdateFleet .....	279
Request Syntax .....	279
Request Parameters .....	280
Response Syntax .....	287



Response Elements .....	288
Errors .....	289
See Also .....	290
UpdateImagePermissions .....	292
Request Syntax .....	292
Request Parameters .....	292
Response Elements .....	293
Errors .....	293
See Also .....	293
UpdateStack .....	295
Request Syntax .....	295
Request Parameters .....	296
Response Syntax .....	299
Response Elements .....	300
Errors .....	300
See Also .....	302
UpdateThemeForStack .....	303
Request Syntax .....	303
Request Parameters .....	303
Response Syntax .....	305
Response Elements .....	306
Errors .....	306
See Also .....	307
<b>Data Types .....</b>	<b>308</b>
AccessEndpoint .....	310
Contents .....	310
See Also .....	310
AppBlock .....	311
Contents .....	311
See Also .....	313
AppBlockBuilder .....	315
Contents .....	315
See Also .....	318
AppBlockBuilderAppBlockAssociation .....	319
Contents .....	319
See Also .....	319

AppBlockBuilderStateChangeReason .....	320
Contents .....	320
See Also .....	320
Application .....	321
Contents .....	321
See Also .....	324
ApplicationFleetAssociation .....	325
Contents .....	325
See Also .....	325
ApplicationSettings .....	326
Contents .....	326
See Also .....	326
ApplicationSettingsResponse .....	327
Contents .....	327
See Also .....	327
CertificateBasedAuthProperties .....	329
Contents .....	329
See Also .....	329
ComputeCapacity .....	331
Contents .....	331
See Also .....	331
ComputeCapacityStatus .....	332
Contents .....	332
See Also .....	333
DirectoryConfig .....	335
Contents .....	335
See Also .....	336
DomainJoinInfo .....	337
Contents .....	337
See Also .....	337
EntitledApplication .....	338
Contents .....	338
See Also .....	338
Entitlement .....	339
Contents .....	339
See Also .....	340

EntitlementAttribute .....	341
Contents .....	341
See Also .....	342
ErrorDetails .....	343
Contents .....	343
See Also .....	343
Fleet .....	344
Contents .....	344
See Also .....	351
FleetError .....	353
Contents .....	353
See Also .....	354
Image .....	355
Contents .....	355
See Also .....	359
ImageBuilder .....	361
Contents .....	361
See Also .....	366
ImageBuilderStateChangeReason .....	367
Contents .....	367
See Also .....	367
ImagePermissions .....	368
Contents .....	368
See Also .....	368
ImageStateChangeReason .....	369
Contents .....	369
See Also .....	369
LastReportGenerationExecutionError .....	370
Contents .....	370
See Also .....	370
NetworkAccessConfiguration .....	371
Contents .....	371
See Also .....	371
ResourceError .....	372
Contents .....	372
See Also .....	373

S3Location .....	374
Contents .....	374
See Also .....	375
ScriptDetails .....	376
Contents .....	376
See Also .....	376
ServiceAccountCredentials .....	378
Contents .....	378
See Also .....	378
Session .....	379
Contents .....	379
See Also .....	381
SharedImagePermissions .....	382
Contents .....	382
See Also .....	382
Stack .....	383
Contents .....	383
See Also .....	386
StackError .....	387
Contents .....	387
See Also .....	387
StorageConnector .....	388
Contents .....	388
See Also .....	388
StreamingExperienceSettings .....	390
Contents .....	390
See Also .....	390
Theme .....	391
Contents .....	391
See Also .....	392
ThemeFooterLink .....	394
Contents .....	394
See Also .....	394
UsageReportSubscription .....	395
Contents .....	395
See Also .....	396

---

User .....	397
Contents .....	397
See Also .....	399
UserSetting .....	400
Contents .....	400
See Also .....	401
UserStackAssociation .....	402
Contents .....	402
See Also .....	403
UserStackAssociationError .....	404
Contents .....	404
See Also .....	404
VpcConfig .....	406
Contents .....	406
See Also .....	406
<b>Common Parameters .....</b>	<b>407</b>
<b>Common Errors .....</b>	<b>410</b>

# Welcome

This is the *Amazon AppStream 2.0 API Reference*. This documentation provides descriptions and syntax for each of the actions and data types in AppStream 2.0. AppStream 2.0 is a fully managed, secure application streaming service that lets you stream desktop applications to users without rewriting applications. AppStream 2.0 manages the AWS resources that are required to host and run your applications, scales automatically, and provides access to your users on demand.

## Note

You can call the AppStream 2.0 API operations by using an interface VPC endpoint (interface endpoint). For more information, see [Access AppStream 2.0 API Operations and CLI Commands Through an Interface VPC Endpoint](#) in the *Amazon AppStream 2.0 Administration Guide*.

To learn more about AppStream 2.0, see the following resources:

- [Amazon AppStream 2.0 product page](#)
- [Amazon AppStream 2.0 documentation](#)

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# Actions

The following actions are supported:

- [AssociateAppBlockBuilderAppBlock](#)
- [AssociateApplicationFleet](#)
- [AssociateApplicationToEntitlement](#)
- [AssociateFleet](#)
- [BatchAssociateUserStack](#)
- [BatchDisassociateUserStack](#)
- [CopyImage](#)
- [CreateAppBlock](#)
- [CreateAppBlockBuilder](#)
- [CreateAppBlockBuilderStreamingURL](#)
- [CreateApplication](#)
- [CreateDirectoryConfig](#)
- [CreateEntitlement](#)
- [CreateFleet](#)
- [CreateImageBuilder](#)
- [CreateImageBuilderStreamingURL](#)
- [CreateStack](#)
- [CreateStreamingURL](#)
- [CreateThemeForStack](#)
- [CreateUpdatedImage](#)
- [CreateUsageReportSubscription](#)
- [CreateUser](#)
- [DeleteAppBlock](#)
- [DeleteAppBlockBuilder](#)
- [DeleteApplication](#)
- [DeleteDirectoryConfig](#)
- [DeleteEntitlement](#)

- [DeleteFleet](#)
- [DeleteImage](#)
- [DeleteImageBuilder](#)
- [DeleteImagePermissions](#)
- [DeleteStack](#)
- [DeleteThemeForStack](#)
- [DeleteUsageReportSubscription](#)
- [DeleteUser](#)
- [DescribeAppBlockBuilderAppBlockAssociations](#)
- [DescribeAppBlockBuilders](#)
- [DescribeAppBlocks](#)
- [DescribeApplicationFleetAssociations](#)
- [DescribeApplications](#)
- [DescribeDirectoryConfigs](#)
- [DescribeEntitlements](#)
- [DescribeFleets](#)
- [DescribeImageBuilders](#)
- [DescribeImagePermissions](#)
- [DescribeImages](#)
- [DescribeSessions](#)
- [DescribeStacks](#)
- [DescribeThemeForStack](#)
- [DescribeUsageReportSubscriptions](#)
- [DescribeUsers](#)
- [DescribeUserStackAssociations](#)
- [DisableUser](#)
- [DisassociateAppBlockBuilderAppBlock](#)
- [DisassociateApplicationFleet](#)
- [DisassociateApplicationFromEntitlement](#)
- [DisassociateFleet](#)



- [EnableUser](#)
- [ExpireSession](#)
- [ListAssociatedFleets](#)
- [ListAssociatedStacks](#)
- [ListEntitledApplications](#)
- [ListTagsForResource](#)
- [StartAppBlockBuilder](#)
- [StartFleet](#)
- [StartImageBuilder](#)
- [StopAppBlockBuilder](#)
- [StopFleet](#)
- [StopImageBuilder](#)
- [TagResource](#)
- [UntagResource](#)
- [UpdateAppBlockBuilder](#)
- [UpdateApplication](#)
- [UpdateDirectoryConfig](#)
- [UpdateEntitlement](#)
- [UpdateFleet](#)
- [UpdateImagePermissions](#)
- [UpdateStack](#)
- [UpdateThemeForStack](#)

# AssociateAppBlockBuilderAppBlock

Associates the specified app block builder with the specified app block.

## Request Syntax

```
{
  "AppBlockArn": "string",
  "AppBlockBuilderName": "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.

### AppBlockArn

The ARN of the app block.

Type: String

Pattern: `^arn:aws(?:\-cn|\-iso\-b|\-iso|\-us\-gov)?:[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

### AppBlockBuilderName

The name of the app block builder.

Type: String

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

Required: Yes

## Response Syntax

```
{
```

```
"AppBlockBuilderAppBlockAssociation": {  
  "AppBlockArn": "string",  
  "AppBlockBuilderName": "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.

### AppBlockBuilderAppBlockAssociation

The list of app block builders associated with app blocks.

Type: [AppBlockBuilderAppBlockAssociation](#) object

## Errors

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

### **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

### **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 v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# AssociateApplicationFleet

Associates the specified application with the specified fleet. This is only supported for Elastic fleets.

## Request Syntax

```
{
  "ApplicationArn": "string",
  "FleetName": "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.

### ApplicationArn

The ARN of the application.

Type: String

Pattern: `^arn:aws(?:\-cn|\-iso\-b|\-iso|\-us\-gov)?:[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

### FleetName

The name of the fleet.

Type: String

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

Required: Yes

## Response Syntax

```
{
```

```
"ApplicationFleetAssociation": {  
  "ApplicationArn": "string",  
  "FleetName": "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.

### ApplicationFleetAssociation

If fleet name is specified, this returns the list of applications that are associated to it. If application ARN is specified, this returns the list of fleets to which it is associated.

Type: [ApplicationFleetAssociation](#) object

## Errors

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

### **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

### **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 v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# AssociateApplicationToEntitlement

Associates an application to entitle.

## Request Syntax

```
{
  "ApplicationIdentifier": "string",
  "EntitlementName": "string",
  "StackName": "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.

### ApplicationIdentifier

The identifier of the application.

Type: String

Length Constraints: Minimum length of 1.

Required: Yes

### EntitlementName

The name of the entitlement.

Type: String

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

Required: Yes

### StackName

The name of the stack.

Type: String

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



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](#).

### **EntitlementNotFoundException**

The entitlement can't be found.

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

### **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 v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# AssociateFleet

Associates the specified fleet with 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](#).

The request accepts the following data in JSON format.

### FleetName

The name of the fleet.

Type: String

Length Constraints: Minimum length of 1.

Required: Yes

### StackName

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](#).

### **ConcurrentModificationException**

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

HTTP Status Code: 400

### **IncompatibleImageException**

The image can't be updated because it's not compatible for updates.

HTTP Status Code: 400

### **InvalidAccountStatusException**

The resource cannot be created because your AWS account is suspended. For assistance, contact AWS Support.

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 v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# BatchAssociateUserStack

Associates the specified users with the specified stacks. Users in a user pool cannot be assigned to stacks with fleets that are joined to an Active Directory domain.

## Request Syntax

```
{
  "UserStackAssociations": [
    {
      "AuthenticationType": "string",
      "SendEmailNotification": boolean,
      "StackName": "string",
      "UserName": "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.

### UserStackAssociations

The list of UserStackAssociation objects.

Type: Array of [UserStackAssociation](#) objects

Array Members: Minimum number of 1 item. Maximum number of 25 items.

Required: Yes

## Response Syntax

```
{
  "errors": [
    {
      "ErrorCode": "string",
      "ErrorMessage": "string",
    }
  ]
}
```

```
    "UserStackAssociation": {
      "AuthenticationType": "string",
      "SendEmailNotification": boolean,
      "StackName": "string",
      "UserName": "string"
    }
  ]
}
```

## Response Elements

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

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

### errors

The list of `UserStackAssociationError` objects.

Type: Array of [UserStackAssociationError](#) objects

## Errors

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

### **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

## 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 v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)



# BatchDisassociateUserStack

Disassociates the specified users from the specified stacks.

## Request Syntax

```
{
  "UserStackAssociations": [
    {
      "AuthenticationType": "string",
      "SendEmailNotification": boolean,
      "StackName": "string",
      "UserName": "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.

### UserStackAssociations

The list of UserStackAssociation objects.

Type: Array of [UserStackAssociation](#) objects

Array Members: Minimum number of 1 item. Maximum number of 25 items.

Required: Yes

## Response Syntax

```
{
  "errors": [
    {
      "ErrorCode": "string",
      "ErrorMessage": "string",
      "UserStackAssociation": {
```

```
    "AuthenticationType": "string",
    "SendEmailNotification": boolean,
    "StackName": "string",
    "UserName": "string"
  }
}
```

## Response Elements

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

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

### errors

The list of `UserStackAssociationError` objects.

Type: Array of [UserStackAssociationError](#) objects

## Errors

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

### **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

## 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 v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# CopyImage

Copies the image within the same region or to a new region within the same AWS account. Note that any tags you added to the image will not be copied.

## Request Syntax

```
{
  "DestinationImageDescription": "string",
  "DestinationImageName": "string",
  "DestinationRegion": "string",
  "SourceImageName": "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.

### DestinationImageDescription

The description that the image will have when it is copied to the destination.

Type: String

Length Constraints: Maximum length of 256.

Required: No

### DestinationImageName

The name that the image will have when it is copied to the destination.

Type: String

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

Required: Yes

### DestinationRegion

The destination region to which the image will be copied. This parameter is required, even if you are copying an image within the same region.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 32.

Required: Yes

### SourceImageName

The name of the image to copy.

Type: String

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

Required: Yes

## Response Syntax

```
{
  "DestinationImageName": "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.

### DestinationImageName

The name of the destination image.

Type: String

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

## Errors

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

### **IncompatibleImageException**

The image can't be updated because it's not compatible for updates.

HTTP Status Code: 400

### **InvalidAccountStatusException**

The resource cannot be created because your AWS account is suspended. For assistance, contact AWS Support.

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 v2](#)
- [AWS SDK for Java V2](#)

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

# CreateAppBlock

Creates an app block.

App blocks are an Amazon AppStream 2.0 resource that stores the details about the virtual hard disk in an S3 bucket. It also stores the setup script with details about how to mount the virtual hard disk. The virtual hard disk includes the application binaries and other files necessary to launch your applications. Multiple applications can be assigned to a single app block.

This is only supported for Elastic fleets.

## Request Syntax

```
{
  "Description": "string",
  "DisplayName": "string",
  "Name": "string",
  "PackagingType": "string",
  "PostSetupScriptDetails": {
    "ExecutableParameters": "string",
    "ExecutablePath": "string",
    "ScriptS3Location": {
      "S3Bucket": "string",
      "S3Key": "string"
    },
    "TimeoutInSeconds": number
  },
  "SetupScriptDetails": {
    "ExecutableParameters": "string",
    "ExecutablePath": "string",
    "ScriptS3Location": {
      "S3Bucket": "string",
      "S3Key": "string"
    },
    "TimeoutInSeconds": number
  },
  "SourceS3Location": {
    "S3Bucket": "string",
    "S3Key": "string"
  },
  "Tags": {
    "string" : "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.

### Description

The description of the app block.

Type: String

Length Constraints: Maximum length of 256.

Required: No

### DisplayName

The display name of the app block. This is not displayed to the user.

Type: String

Length Constraints: Maximum length of 100.

Required: No

### Name

The name of the app block.

Type: String

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

Required: Yes

### PackagingType

The packaging type of the app block.

Type: String

Valid Values: CUSTOM | APPSTREAM2

Required: No

## PostSetupScriptDetails

The post setup script details of the app block. This can only be provided for the APPSTREAM2 PackagingType.

Type: [ScriptDetails](#) object

Required: No

## SetupScriptDetails

The setup script details of the app block. This must be provided for the CUSTOM PackagingType.

Type: [ScriptDetails](#) object

Required: No

## SourceS3Location

The source S3 location of the app block.

Type: [S3Location](#) object

Required: Yes

## Tags

The tags assigned to the app block.

Type: String to string map

Map Entries: Maximum number of 50 items.

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

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

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

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

Required: No

## Response Syntax

```
{
  "AppBlock": {
```

```
"AppBlockErrors": [  
  {  
    "ErrorCode": "string",  
    "ErrorMessage": "string"  
  }  
],  
"Arn": "string",  
"CreatedTime": number,  
"Description": "string",  
"DisplayName": "string",  
"Name": "string",  
"PackagingType": "string",  
"PostSetupScriptDetails": {  
  "ExecutableParameters": "string",  
  "ExecutablePath": "string",  
  "ScriptS3Location": {  
    "S3Bucket": "string",  
    "S3Key": "string"  
  },  
  "TimeoutInSeconds": number  
},  
"SetupScriptDetails": {  
  "ExecutableParameters": "string",  
  "ExecutablePath": "string",  
  "ScriptS3Location": {  
    "S3Bucket": "string",  
    "S3Key": "string"  
  },  
  "TimeoutInSeconds": number  
},  
"SourceS3Location": {  
  "S3Bucket": "string",  
  "S3Key": "string"  
},  
"State": "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.

## [AppBlock](#)

The app block.

Type: [AppBlock](#) object

## Errors

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

### **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

### **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 v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# CreateAppBlockBuilder

Creates an app block builder.

## Request Syntax

```
{
  "AccessEndpoints": [
    {
      "EndpointType": "string",
      "VpceId": "string"
    }
  ],
  "Description": "string",
  "DisplayName": "string",
  "EnableDefaultInternetAccess": boolean,
  "IamRoleArn": "string",
  "InstanceType": "string",
  "Name": "string",
  "Platform": "string",
  "Tags": {
    "string" : "string"
  },
  "VpcConfig": {
    "SecurityGroupIds": [ "string" ],
    "SubnetIds": [ "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.

### [AccessEndpoints](#)

The list of interface VPC endpoint (interface endpoint) objects. Administrators can connect to the app block builder only through the specified endpoints.

Type: Array of [AccessEndpoint](#) objects

Array Members: Minimum number of 1 item. Maximum number of 4 items.

Required: No

### Description

The description of the app block builder.

Type: String

Length Constraints: Maximum length of 256.

Required: No

### DisplayName

The display name of the app block builder.

Type: String

Length Constraints: Maximum length of 100.

Required: No

### EnableDefaultInternetAccess

Enables or disables default internet access for the app block builder.

Type: Boolean

Required: No

### IamRoleArn

The Amazon Resource Name (ARN) of the IAM role to apply to the app block builder. To assume a role, the app block builder calls the AWS Security Token Service (STS) AssumeRole API operation and passes the ARN of the role to use. The operation creates a new session with temporary credentials. AppStream 2.0 retrieves the temporary credentials and creates the **appstream\_machine\_role** credential profile on the instance.

For more information, see [Using an IAM Role to Grant Permissions to Applications and Scripts Running on AppStream 2.0 Streaming Instances](#) in the *Amazon AppStream 2.0 Administration Guide*.

Type: String

Pattern: `^arn:aws(?:\-cn|\-iso\-b|\-iso|\-us\-gov)?:[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

## InstanceType

The instance type to use when launching the app block builder. The following instance types are available:

- stream.standard.small
- stream.standard.medium
- stream.standard.large
- stream.standard.xlarge
- stream.standard.2xlarge

Type: String

Length Constraints: Minimum length of 1.

Required: Yes

## Name

The unique name for the app block builder.

Type: String

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

Required: Yes

## Platform

The platform of the app block builder.

WINDOWS\_SERVER\_2019 is the only valid value.

Type: String

Valid Values: WINDOWS\_SERVER\_2019

Required: Yes



## Tags

The tags to associate with the app block builder. A tag is a key-value pair, and the value is optional. For example, Environment=Test. If you do not specify a value, Environment=.

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

Generally allowed characters are: letters, numbers, and spaces representable in UTF-8, and the following special characters:

`_ . : / = + \ - @`

For more information, see [Tagging Your Resources](#) in the *Amazon AppStream 2.0 Administration Guide*.

Type: String to string map

Map Entries: Maximum number of 50 items.

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: No

## VpcConfig

The VPC configuration for the app block builder.

App block builders require that you specify at least two subnets in different availability zones.

Type: [VpcConfig](#) object

Required: Yes

## Response Syntax

```
{
  "AppBlockBuilder": {
```

```
"AccessEndpoints": [
  {
    "EndpointType": "string",
    "VpceId": "string"
  }
],
"AppBlockBuilderErrors": [
  {
    "ErrorCode": "string",
    "ErrorMessage": "string",
    "ErrorTimestamp": number
  }
],
"Arn": "string",
"CreatedTime": number,
"Description": "string",
"DisplayName": "string",
"EnableDefaultInternetAccess": boolean,
"IamRoleArn": "string",
"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.

### AppBlockBuilder

Describes an app block builder.

Type: [AppBlockBuilder](#) object

## Errors

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

### **ConcurrentModificationException**

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

HTTP Status Code: 400

### **InvalidAccountStatusException**

The resource cannot be created because your AWS account is suspended. For assistance, contact AWS Support.

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

### **RequestLimitExceededException**

AppStream 2.0 can't process the request right now because the Describe calls from your AWS account are being throttled by Amazon EC2. Try again later.

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 v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# CreateAppBlockBuilderStreamingURL

Creates a URL to start a create app block builder streaming session.

## Request Syntax

```
{
  "AppBlockBuilderName": "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.

### AppBlockBuilderName

The name of the app block builder.

Type: String

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

Required: Yes

### Validity

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

```
{
  "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

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

Type: Timestamp

### StreamingURL

The URL to start the 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](#).

### **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 v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# CreateApplication

Creates an application.

Applications are an Amazon AppStream 2.0 resource that stores the details about how to launch applications on Elastic fleet streaming instances. An application consists of the launch details, icon, and display name. Applications are associated with an app block that contains the application binaries and other files. The applications assigned to an Elastic fleet are the applications users can launch.

This is only supported for Elastic fleets.

## Request Syntax

```
{
  "AppBlockArn": "string",
  "Description": "string",
  "DisplayName": "string",
  "IconS3Location": {
    "S3Bucket": "string",
    "S3Key": "string"
  },
  "InstanceFamilies": [ "string" ],
  "LaunchParameters": "string",
  "LaunchPath": "string",
  "Name": "string",
  "Platforms": [ "string" ],
  "Tags": {
    "string" : "string"
  },
  "WorkingDirectory": "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.

### AppBlockArn

The app block ARN to which the application should be associated



Type: String

Pattern: `^arn:aws(?:\-cn|\-iso\-b|\-iso|\-us\-gov)?:[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

### Description

The description of the application.

Type: String

Length Constraints: Maximum length of 256.

Required: No

### DisplayName

The display name of the application. This name is visible to users in the application catalog.

Type: String

Length Constraints: Maximum length of 100.

Required: No

### IconS3Location

The location in S3 of the application icon.

Type: [S3Location](#) object

Required: Yes

### InstanceFamilies

The instance families the application supports. Valid values are GENERAL\_PURPOSE and GRAPHICS\_G4.

Type: Array of strings

Length Constraints: Minimum length of 1.

Required: Yes

## LaunchParameters

The launch parameters of the application.

Type: String

Length Constraints: Minimum length of 1.

Required: No

## LaunchPath

The launch path of the application.

Type: String

Length Constraints: Minimum length of 1.

Required: Yes

## Name

The name of the application. This name is visible to users when display name is not specified.

Type: String

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

Required: Yes

## Platforms

The platforms the application supports. `WINDOWS_SERVER_2019` and `AMAZON_LINUX2` are supported for Elastic fleets.

Type: Array of strings

Array Members: Maximum number of 4 items.

Valid Values: `WINDOWS` | `WINDOWS_SERVER_2016` | `WINDOWS_SERVER_2019` | `WINDOWS_SERVER_2022` | `AMAZON_LINUX2` | `RHEL8` | `ROCKY_LINUX8`

Required: Yes

## Tags

The tags assigned to the application.

Type: String to string map

Map Entries: Maximum number of 50 items.

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

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

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

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

Required: No

### WorkingDirectory

The working directory of the application.

Type: String

Length Constraints: Minimum length of 1.

Required: No

## Response Syntax

```
{
  "Application": {
    "AppBlockArn": "string",
    "Arn": "string",
    "CreatedTime": number,
    "Description": "string",
    "DisplayName": "string",
    "Enabled": boolean,
    "IconS3Location": {
      "S3Bucket": "string",
      "S3Key": "string"
    },
    "IconURL": "string",
    "InstanceFamilies": [ "string" ],
    "LaunchParameters": "string",
    "LaunchPath": "string",
    "Metadata": {
      "string" : "string"
    }
  }
}
```

```
    },  
    "Name": "string",  
    "Platforms": [ "string" ],  
    "WorkingDirectory": "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.

### Application

Describes an application in the application catalog.

Type: [Application](#) object

## Errors

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

### **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

### **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 v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# CreateDirectoryConfig

Creates a Directory Config object in AppStream 2.0. This object includes the configuration information required to join fleets and image builders to Microsoft Active Directory domains.

## Request Syntax

```
{
  "CertificateBasedAuthProperties": {
    "CertificateAuthorityArn": "string",
    "Status": "string"
  },
  "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](#).

The request accepts the following data in JSON format.

### CertificateBasedAuthProperties

The certificate-based authentication properties used to authenticate SAML 2.0 Identity Provider (IdP) user identities to Active Directory domain-joined streaming instances. Fallback is turned on by default when certificate-based authentication is **Enabled**. Fallback allows users to log in using their AD domain password if certificate-based authentication is unsuccessful, or to unlock a desktop lock screen. **Enabled\_no\_directory\_login\_fallback** enables certificate-based authentication, but does not allow users to log in using their AD domain password. Users will be disconnected to re-authenticate using certificates.

Type: [CertificateBasedAuthProperties](#) object

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

Length Constraints: Maximum length of 2000.

Required: Yes

## ServiceAccountCredentials

The credentials for the service account used by the fleet or image builder to connect to the directory.

Type: [ServiceAccountCredentials](#) object

Required: No

## Response Syntax

```
{
  "DirectoryName": {
    "CertificateBasedAuthProperties": {
      "CertificateAuthorityArn": "string",
      "Status": "string"
    },
    "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

Information about the directory configuration.

Type: [DirectoryConfig](#) object

## Errors

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

### **InvalidAccountStatusException**

The resource cannot be created because your AWS account is suspended. For assistance, contact AWS Support.

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

### **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 v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# CreateEntitlement

Creates a new entitlement. Entitlements control access to specific applications within a stack, based on user attributes. Entitlements apply to SAML 2.0 federated user identities. Amazon AppStream 2.0 user pool and streaming URL users are entitled to all applications in a stack. Entitlements don't apply to the desktop stream view application, or to applications managed by a dynamic app provider using the Dynamic Application Framework.

## Request Syntax

```
{
  "AppVisibility": "string",
  "Attributes": [
    {
      "Name": "string",
      "Value": "string"
    }
  ],
  "Description": "string",
  "Name": "string",
  "StackName": "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.

### AppVisibility

Specifies whether all or selected apps are entitled.

Type: String

Valid Values: ALL | ASSOCIATED

Required: Yes

### Attributes

The attributes of the entitlement.

Type: Array of [EntitlementAttribute](#) objects

Array Members: Minimum number of 1 item.

Required: Yes

### Description

The description of the entitlement.

Type: String

Length Constraints: Maximum length of 256.

Required: No

### Name

The name of the entitlement.

Type: String

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

Required: Yes

### StackName

The name of the stack with which the entitlement is associated.

Type: String

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

Required: Yes

## Response Syntax

```
{
  "Entitlement": {
    "AppVisibility": "string",
    "Attributes": [
      {
        "Name": "string",
        "Value": "string"
      }
    ]
  }
}
```

```
    }  
  ],  
  "CreatedTime": number,  
  "Description": "string",  
  "LastModifiedTime": number,  
  "Name": "string",  
  "StackName": "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.

### Entitlement

The entitlement.

Type: [Entitlement](#) object

## Errors

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

### **EntitlementAlreadyExistsException**

The entitlement already exists.

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 v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# CreateFleet

Creates a fleet. A fleet consists of streaming instances that your users access for their applications and desktops.

## Request Syntax

```
{
  "ComputeCapacity": {
    "DesiredInstances": number,
    "DesiredSessions": number
  },
  "Description": "string",
  "DisconnectTimeoutInSeconds": number,
  "DisplayName": "string",
  "DomainJoinInfo": {
    "DirectoryName": "string",
    "OrganizationalUnitDistinguishedName": "string"
  },
  "EnableDefaultInternetAccess": boolean,
  "FleetType": "string",
  "IamRoleArn": "string",
  "IdleDisconnectTimeoutInSeconds": number,
  "ImageArn": "string",
  "ImageName": "string",
  "InstanceType": "string",
  "MaxConcurrentSessions": number,
  "MaxSessionsPerInstance": number,
  "MaxUserDurationInSeconds": number,
  "Name": "string",
  "Platform": "string",
  "SessionScriptS3Location": {
    "S3Bucket": "string",
    "S3Key": "string"
  },
  "StreamView": "string",
  "Tags": {
    "string" : "string"
  },
  "UsbDeviceFilterStrings": [ "string" ],
  "VpcConfig": {
    "SecurityGroupIds": [ "string" ],
    "SubnetIds": [ "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.

### ComputeCapacity

The desired capacity for the fleet. This is not allowed for Elastic fleets. For Elastic fleets, specify `MaxConcurrentSessions` instead.

Type: [ComputeCapacity](#) object

Required: No

### Description

The description to display.

Type: String

Length Constraints: Maximum length of 256.

Required: No

### DisconnectTimeoutInSeconds

The amount of time that a streaming session remains active after users disconnect. If users try to reconnect to the streaming session after a disconnection or network interruption within this time interval, they are connected to their previous session. Otherwise, they are connected to a new session with a new streaming instance.

Specify a value between 60 and 36000.

Type: Integer

Required: No

### DisplayName

The fleet name to display.

Type: String

Length Constraints: Maximum length of 100.

Required: No

### DomainJoinInfo

The name of the directory and organizational unit (OU) to use to join the fleet to a Microsoft Active Directory domain. This is not allowed for Elastic fleets.

Type: [DomainJoinInfo](#) object

Required: No

### EnableDefaultInternetAccess

Enables or disables default internet access for the fleet.

Type: Boolean

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 | ELASTIC

Required: No

### IamRoleArn

The Amazon Resource Name (ARN) of the IAM role to apply to the fleet. To assume a role, a fleet instance calls the AWS Security Token Service (STS) AssumeRole API operation and passes the ARN of the role to use. The operation creates a new session with temporary credentials.



AppStream 2.0 retrieves the temporary credentials and creates the **appstream\_machine\_role** credential profile on the instance.

For more information, see [Using an IAM Role to Grant Permissions to Applications and Scripts Running on AppStream 2.0 Streaming Instances](#) in the *Amazon AppStream 2.0 Administration Guide*.

Type: String

Pattern: `^arn:aws(?:\-cn|\-iso\-b|\-iso|\-us\-gov)?:[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

### **IdleDisconnectTimeoutInSeconds**

The amount of time that users can be idle (inactive) before they are disconnected from their streaming session and the `DisconnectTimeoutInSeconds` time interval begins. Users are notified before they are disconnected due to inactivity. If they try to reconnect to the streaming session before the time interval specified in `DisconnectTimeoutInSeconds` elapses, they are connected to their previous session. Users are considered idle when they stop providing keyboard or mouse input during their streaming session. File uploads and downloads, audio in, audio out, and pixels changing do not qualify as user activity. If users continue to be idle after the time interval in `IdleDisconnectTimeoutInSeconds` elapses, they are disconnected.

To prevent users from being disconnected due to inactivity, specify a value of 0. Otherwise, specify a value between 60 and 36000. The default value is 0.

#### **Note**

If you enable this feature, we recommend that you specify a value that corresponds exactly to a whole number of minutes (for example, 60, 120, and 180). If you don't do this, the value is rounded to the nearest minute. For example, if you specify a value of 70, users are disconnected after 1 minute of inactivity. If you specify a value that is at the midpoint between two different minutes, the value is rounded up. For example, if you specify a value of 90, users are disconnected after 2 minutes of inactivity.

Type: Integer

Required: No

### ImageArn

The ARN of the public, private, or shared image to use.

Type: String

Pattern: `^arn:aws(?:\-cn|\-iso\-b|\-iso|\-us\-gov)?:[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

### ImageName

The name of the image used to create the fleet.

Type: String

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

Required: No

### InstanceType

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

- stream.standard.small
- stream.standard.medium
- stream.standard.large
- stream.standard.xlarge
- stream.standard.2xlarge
- 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.memory.z1d.large`
- `stream.memory.z1d.xlarge`
- `stream.memory.z1d.2xlarge`
- `stream.memory.z1d.3xlarge`
- `stream.memory.z1d.6xlarge`
- `stream.memory.z1d.12xlarge`
- `stream.graphics-design.large`
- `stream.graphics-design.xlarge`
- `stream.graphics-design.2xlarge`
- `stream.graphics-design.4xlarge`
- `stream.graphics-desktop.2xlarge`
- `stream.graphics.g4dn.xlarge`
- `stream.graphics.g4dn.2xlarge`
- `stream.graphics.g4dn.4xlarge`
- `stream.graphics.g4dn.8xlarge`
- `stream.graphics.g4dn.12xlarge`
- `stream.graphics.g4dn.16xlarge`
- `stream.graphics.g5.xlarge`
- `stream.graphics.g5.2xlarge`
- `stream.graphics.g5.4xlarge`
- `stream.graphics.g5.8xlarge`
- `stream.graphics.g5.12xlarge`
- `stream.graphics.g5.16xlarge`
- `stream.graphics.g5.24xlarge`
- `stream.graphics-pro.4xlarge`
- `stream.graphics-pro.8xlarge`

- `stream.graphics-pro.16xlarge`

The following instance types are available for Elastic fleets:

- `stream.standard.small`
- `stream.standard.medium`
- `stream.standard.large`
- `stream.standard.xlarge`
- `stream.standard.2xlarge`

Type: String

Length Constraints: Minimum length of 1.

Required: Yes

### [MaxConcurrentSessions](#)

The maximum concurrent sessions of the Elastic fleet. This is required for Elastic fleets, and not allowed for other fleet types.

Type: Integer

Required: No

### [MaxSessionsPerInstance](#)

The maximum number of user sessions on an instance. This only applies to multi-session fleets.

Type: Integer

Required: No

### [MaxUserDurationInSeconds](#)

The maximum amount of time that a streaming session can remain active, in seconds. If users are still connected to a streaming instance five minutes before this limit is reached, they are prompted to save any open documents before being disconnected. After this time elapses, the instance is terminated and replaced by a new instance.

Specify a value between 600 and 432000.

Type: Integer

Required: No

### Name

A unique name for the fleet.

Type: String

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

Required: Yes

### Platform

The fleet platform. WINDOWS\_SERVER\_2019 and AMAZON\_LINUX2 are supported for Elastic fleets.

Type: String

Valid Values: WINDOWS | WINDOWS\_SERVER\_2016 | WINDOWS\_SERVER\_2019 | WINDOWS\_SERVER\_2022 | AMAZON\_LINUX2 | RHEL8 | ROCKY\_LINUX8

Required: No

### SessionScriptS3Location

The S3 location of the session scripts configuration zip file. This only applies to Elastic fleets.

Type: [S3Location](#) object

Required: No

### StreamView

The AppStream 2.0 view that is displayed to your users when they stream from the fleet. When APP is specified, only the windows of applications opened by users display. When DESKTOP is specified, the standard desktop that is provided by the operating system displays.

The default value is APP.

Type: String

Valid Values: APP | DESKTOP

Required: No

## Tags

The tags to associate with the fleet. A tag is a key-value pair, and the value is optional. For example, Environment=Test. If you do not specify a value, Environment=.

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

Generally allowed characters are: letters, numbers, and spaces representable in UTF-8, and the following special characters:

`_ . : / = + \ - @`

For more information, see [Tagging Your Resources](#) in the *Amazon AppStream 2.0 Administration Guide*.

Type: String to string map

Map Entries: Maximum number of 50 items.

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: No

## UsbDeviceFilterStrings

The USB device filter strings that specify which USB devices a user can redirect to the fleet streaming session, when using the Windows native client. This is allowed but not required for Elastic fleets.

Type: Array of strings

Length Constraints: Minimum length of 0. Maximum length of 100.

Pattern: `^( (\w*)\s*(\w*)\s*\, \s*(\w*)\s*\, \s*\*?(\w*)\s*\, \s*\*?(\w*)\s*\, \s*\*?\d*\s*\, \s*\*?\d*\s*\, \s*[0-1]\s*\, \s*[0-1]\s* )$`

Required: No

## VpcConfig

The VPC configuration for the fleet. This is required for Elastic fleets, but not required for other fleet types. Elastic fleets require that you specify at least two subnets in different availability zones.

Type: [VpcConfig](#) object

Required: No

## Response Syntax

```
{
  "Fleet": {
    "Arn": "string",
    "ComputeCapacityStatus": {
      "ActiveUserSessions": number,
      "ActualUserSessions": number,
      "Available": number,
      "AvailableUserSessions": number,
      "Desired": number,
      "DesiredUserSessions": 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",
    "IamRoleArn": "string",
```

```
"IdleDisconnectTimeoutInSeconds": number,
"ImageArn": "string",
"ImageName": "string",
"InstanceType": "string",
"MaxConcurrentSessions": number,
"MaxSessionsPerInstance": number,
"MaxUserDurationInSeconds": number,
"Name": "string",
"Platform": "string",
"SessionScriptS3Location": {
  "S3Bucket": "string",
  "S3Key": "string"
},
"State": "string",
"StreamView": "string",
"UsbDeviceFilterStrings": [ "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](#)

Information about the fleet.

Type: [Fleet](#) object

## Errors

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

### **ConcurrentModificationException**

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



HTTP Status Code: 400

### **IncompatibleImageException**

The image can't be updated because it's not compatible for updates.

HTTP Status Code: 400

### **InvalidAccountStatusException**

The resource cannot be created because your AWS account is suspended. For assistance, contact AWS Support.

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

### **RequestLimitExceededException**

AppStream 2.0 can't process the request right now because the Describe calls from your AWS account are being throttled by Amazon EC2. Try again later.

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 v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# CreateImageBuilder

Creates an image builder. An image builder is a virtual machine that is used to create an image.

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

## Request Syntax

```
{
  "AccessEndpoints": [
    {
      "EndpointType": "string",
      "VpceId": "string"
    }
  ],
  "AppstreamAgentVersion": "string",
  "Description": "string",
  "DisplayName": "string",
  "DomainJoinInfo": {
    "DirectoryName": "string",
    "OrganizationalUnitDistinguishedName": "string"
  },
  "EnableDefaultInternetAccess": boolean,
  "IamRoleArn": "string",
  "ImageArn": "string",
  "ImageName": "string",
  "InstanceType": "string",
  "Name": "string",
  "Tags": {
    "string" : "string"
  },
  "VpcConfig": {
    "SecurityGroupIds": [ "string" ],
    "SubnetIds": [ "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.

## AccessEndpoints

The list of interface VPC endpoint (interface endpoint) objects. Administrators can connect to the image builder only through the specified endpoints.

Type: Array of [AccessEndpoint](#) objects

Array Members: Minimum number of 1 item. Maximum number of 4 items.

Required: No

## AppstreamAgentVersion

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

The description to display.

Type: String

Length Constraints: Maximum length of 256.

Required: No

## DisplayName

The image builder name to display.

Type: String

Length Constraints: Maximum length of 100.

Required: No

## DomainJoinInfo

The name of the directory and organizational unit (OU) to use to join the image builder to a Microsoft Active Directory domain.

Type: [DomainJoinInfo](#) object

Required: No

### [EnableDefaultInternetAccess](#)

Enables or disables default internet access for the image builder.

Type: Boolean

Required: No

### [IamRoleArn](#)

The Amazon Resource Name (ARN) of the IAM role to apply to the image builder. To assume a role, the image builder calls the AWS Security Token Service (STS) AssumeRole API operation and passes the ARN of the role to use. The operation creates a new session with temporary credentials. AppStream 2.0 retrieves the temporary credentials and creates the **appstream\_machine\_role** credential profile on the instance.

For more information, see [Using an IAM Role to Grant Permissions to Applications and Scripts Running on AppStream 2.0 Streaming Instances](#) in the *Amazon AppStream 2.0 Administration Guide*.

Type: String

Pattern: `^arn:aws(?:\-cn|\-iso\-b|\-iso|\-us\-gov)?:[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

### [ImageArn](#)

The ARN of the public, private, or shared image to use.

Type: String

Pattern: `^arn:aws(?:\-cn|\-iso\-b|\-iso|\-us\-gov)?:[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

## ImageName

The name of the image used to create the image builder.

Type: String

Length Constraints: Minimum length of 1.

Required: No

## InstanceType

The instance type to use when launching the image builder. The following instance types are available:

- stream.standard.small
- 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.memory.z1d.large
- stream.memory.z1d.xlarge
- stream.memory.z1d.2xlarge
- stream.memory.z1d.3xlarge
- stream.memory.z1d.6xlarge
- stream.memory.z1d.12xlarge
- stream.graphics-design.large

- stream.graphics-design.xlarge
- stream.graphics-design.2xlarge
- stream.graphics-design.4xlarge
- stream.graphics-desktop.2xlarge
- stream.graphics.g4dn.xlarge
- stream.graphics.g4dn.2xlarge
- stream.graphics.g4dn.4xlarge
- stream.graphics.g4dn.8xlarge
- stream.graphics.g4dn.12xlarge
- stream.graphics.g4dn.16xlarge
- stream.graphics-pro.4xlarge
- stream.graphics-pro.8xlarge
- stream.graphics-pro.16xlarge

Type: String

Length Constraints: Minimum length of 1.

Required: Yes

### Name

A unique name for the image builder.

Type: String

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

Required: Yes

### Tags

The tags to associate with the image builder. A tag is a key-value pair, and the value is optional. For example, Environment=Test. If you do not specify a value, Environment=.

Generally allowed characters are: letters, numbers, and spaces representable in UTF-8, and the following special characters:

`_ . : / = + \ - @`

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

For more information about tags, see [Tagging Your Resources](#) in the *Amazon AppStream 2.0 Administration Guide*.

Type: String to string map

Map Entries: Maximum number of 50 items.

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

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

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

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

Required: No

## [VpcConfig](#)

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

Type: [VpcConfig](#) object

Required: No

## Response Syntax

```
{
  "ImageBuilder": {
    "AccessEndpoints": [
      {
        "EndpointType": "string",
        "VpceId": "string"
      }
    ],
    "AppstreamAgentVersion": "string",
    "Arn": "string",
    "CreatedTime": number,
    "Description": "string",
    "DisplayName": "string",
    "DomainJoinInfo": {
      "DirectoryName": "string",
```



```

    "OrganizationalUnitDistinguishedName": "string"
  },
  "EnableDefaultInternetAccess": boolean,
  "IamRoleArn": "string",
  "ImageArn": "string",
  "ImageBuilderErrors": [
    {
      "ErrorCode": "string",
      "ErrorMessage": "string",
      "ErrorTimestamp": number
    }
  ],
  "InstanceType": "string",
  "LatestAppstreamAgentVersion": "string",
  "Name": "string",
  "NetworkAccessConfiguration": {
    "EniId": "string",
    "EniPrivateIpAddress": "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

Information about the image builder.

Type: [ImageBuilder](#) object

## Errors

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

### **ConcurrentModificationException**

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

HTTP Status Code: 400

### **IncompatibleImageException**

The image can't be updated because it's not compatible for updates.

HTTP Status Code: 400

### **InvalidAccountStatusException**

The resource cannot be created because your AWS account is suspended. For assistance, contact AWS Support.

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

## RequestLimitExceededException

AppStream 2.0 can't process the request right now because the Describe calls from your AWS account are being throttled by Amazon EC2. Try again later.

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 v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# CreateImageBuilderStreamingURL

Creates a URL to start an image builder streaming session.

## Request Syntax

```
{  
  "Name": "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.

### Name

The name of the image builder.

Type: String

Length Constraints: Minimum length of 1.

Required: Yes

### Validity

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

```
{  
  "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

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

Type: Timestamp

### StreamingURL

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](#).

### **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 v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# CreateStack

Creates a stack to start streaming applications to users. A stack consists of an associated fleet, user access policies, and storage configurations.

## Request Syntax

```
{
  "AccessEndpoints": [
    {
      "EndpointType": "string",
      "VpceId": "string"
    }
  ],
  "ApplicationSettings": {
    "Enabled": boolean,
    "SettingsGroup": "string"
  },
  "Description": "string",
  "DisplayName": "string",
  "EmbedHostDomains": [ "string" ],
  "FeedbackURL": "string",
  "Name": "string",
  "RedirectURL": "string",
  "StorageConnectors": [
    {
      "ConnectorType": "string",
      "Domains": [ "string" ],
      "ResourceIdentifier": "string"
    }
  ],
  "StreamingExperienceSettings": {
    "PreferredProtocol": "string"
  },
  "Tags": {
    "string" : "string"
  },
  "UserSettings": [
    {
      "Action": "string",
      "MaxLength": number,
      "Permission": "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.

### [AccessEndpoints](#)

The list of interface VPC endpoint (interface endpoint) objects. Users of the stack can connect to AppStream 2.0 only through the specified endpoints.

Type: Array of [AccessEndpoint](#) objects

Array Members: Minimum number of 1 item. Maximum number of 4 items.

Required: No

### [ApplicationSettings](#)

The persistent application settings for users of a stack. When these settings are enabled, changes that users make to applications and Windows settings are automatically saved after each session and applied to the next session.

Type: [ApplicationSettings](#) object

Required: No

### [Description](#)

The description to display.

Type: String

Length Constraints: Maximum length of 256.

Required: No

### [DisplayName](#)

The stack name to display.

Type: String



Length Constraints: Maximum length of 100.

Required: No

### EmbedHostDomains

The domains where AppStream 2.0 streaming sessions can be embedded in an iframe. You must approve the domains that you want to host embedded AppStream 2.0 streaming sessions.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 20 items.

Length Constraints: Maximum length of 128.

Pattern: (? : [a-z0-9] (? : [a-z0-9- ] {0,61} [a-z0-9] ) ? \. ) + [a-z0-9] [a-z0-9- ] {0,61} [a-z0-9]

Required: No

### FeedbackURL

The URL that users are redirected to after they click the Send Feedback link. If no URL is specified, no Send Feedback link is displayed.

Type: String

Length Constraints: Maximum length of 1000.

Required: No

### Name

The name of the stack.

Type: String

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

Required: Yes

### RedirectURL

The URL that users are redirected to after their streaming session ends.

Type: String

Length Constraints: Maximum length of 1000.

Required: No

### StorageConnectors

The storage connectors to enable.

Type: Array of [StorageConnector](#) objects

Required: No

### StreamingExperienceSettings

The streaming protocol you want your stack to prefer. This can be UDP or TCP. Currently, UDP is only supported in the Windows native client.

Type: [StreamingExperienceSettings](#) object

Required: No

### Tags

The tags to associate with the stack. A tag is a key-value pair, and the value is optional. For example, Environment=Test. If you do not specify a value, Environment=.

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

Generally allowed characters are: letters, numbers, and spaces representable in UTF-8, and the following special characters:

`_ . : / = + \ - @`

For more information about tags, see [Tagging Your Resources](#) in the *Amazon AppStream 2.0 Administration Guide*.

Type: String to string map

Map Entries: Maximum number of 50 items.

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

Required: No

## UserSettings

The actions that are enabled or disabled for users during their streaming sessions. By default, these actions are enabled.

Type: Array of [UserSetting](#) objects

Array Members: Minimum number of 1 item.

Required: No

## Response Syntax

```
{
  "Stack": {
    "AccessEndpoints": [
      {
        "EndpointType": "string",
        "VpceId": "string"
      }
    ],
    "ApplicationSettings": {
      "Enabled": boolean,
      "S3BucketName": "string",
      "SettingsGroup": "string"
    },
    "Arn": "string",
    "CreatedTime": number,
    "Description": "string",
    "DisplayName": "string",
    "EmbedHostDomains": [ "string" ],
    "FeedbackURL": "string",
    "Name": "string",
    "RedirectURL": "string",
    "StackErrors": [
      {
        "ErrorCode": "string",
        "ErrorMessage": "string"
      }
    ]
  }
}
```

```
    ],
    "StorageConnectors": [
      {
        "ConnectorType": "string",
        "Domains": [ "string" ],
        "ResourceIdentifier": "string"
      }
    ],
    "StreamingExperienceSettings": {
      "PreferredProtocol": "string"
    },
    "UserSettings": [
      {
        "Action": "string",
        "MaximumLength": number,
        "Permission": "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

Information about the stack.

Type: [Stack](#) object

## Errors

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

### **ConcurrentModificationException**

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

HTTP Status Code: 400

### **InvalidAccountStatusException**

The resource cannot be created because your AWS account is suspended. For assistance, contact AWS Support.

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

### **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 v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# CreateStreamingURL

Creates a temporary URL to start an AppStream 2.0 streaming session for the specified user. A streaming URL enables application streaming to be tested without user setup.

## Request Syntax

```
{  
  "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

The name of the application to launch after the session starts. This is the name that you specified as **Name** in the Image Assistant. If your fleet is enabled for the **Desktop** stream view, you can also choose to launch directly to the operating system desktop. To do so, specify **Desktop**.

Type: String

Length Constraints: Minimum length of 1.

Required: No

### FleetName

The name of the fleet.

Type: String

Length Constraints: Minimum length of 1.

Required: Yes

### SessionContext

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

Type: String

Length Constraints: Minimum length of 1.

Required: No

### StackName

The name of the stack.

Type: String

Length Constraints: Minimum length of 1.

Required: Yes

### UserId

The identifier of the user.

Type: String

Length Constraints: Minimum length of 2. Maximum length of 32.

Pattern: `[\w+=, .@- ]*`

Required: Yes

### Validity

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

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

Type: Timestamp

### StreamingURL

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](#).

### **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 v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# CreateThemeForStack

Creates custom branding that customizes the appearance of the streaming application catalog page.

## Request Syntax

```
{
  "FaviconS3Location": {
    "S3Bucket": "string",
    "S3Key": "string"
  },
  "FooterLinks": [
    {
      "DisplayName": "string",
      "FooterLinkURL": "string"
    }
  ],
  "OrganizationLogoS3Location": {
    "S3Bucket": "string",
    "S3Key": "string"
  },
  "StackName": "string",
  "ThemeStyling": "string",
  "TitleText": "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.

### FaviconS3Location

The S3 location of the favicon. The favicon enables users to recognize their application streaming site in a browser full of tabs or bookmarks. It is displayed at the top of the browser tab for the application streaming site during users' streaming sessions.

Type: [S3Location](#) object

Required: Yes

## FooterLinks

The links that are displayed in the footer of the streaming application catalog page. These links are helpful resources for users, such as the organization's IT support and product marketing sites.

Type: Array of [ThemeFooterLink](#) objects

Required: No

## OrganizationLogoS3Location

The organization logo that appears on the streaming application catalog page.

Type: [S3Location](#) object

Required: Yes

## StackName

The name of the stack for the theme.

Type: String

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

Required: Yes

## ThemeStyling

The color theme that is applied to website links, text, and buttons. These colors are also applied as accents in the background for the streaming application catalog page.

Type: String

Valid Values: LIGHT\_BLUE | BLUE | PINK | RED

Required: Yes

## TitleText

The title that is displayed at the top of the browser tab during users' application streaming sessions.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 300.

Pattern: `^[-@./#&+\w\s]*$`

Required: Yes

## Response Syntax

```
{
  "Theme": {
    "CreatedTime": number,
    "StackName": "string",
    "State": "string",
    "ThemeFaviconURL": "string",
    "ThemeFooterLinks": [
      {
        "DisplayName": "string",
        "FooterLinkURL": "string"
      }
    ],
    "ThemeOrganizationLogoURL": "string",
    "ThemeStyling": "string",
    "ThemeTitleText": "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.

### Theme

The theme object that contains the metadata of the custom branding.

Type: [Theme](#) object

## Errors

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

## **ConcurrentModificationException**

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

HTTP Status Code: 400

## **InvalidAccountStatusException**

The resource cannot be created because your AWS account is suspended. For assistance, contact AWS Support.

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

## **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 v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# CreateUpdatedImage

Creates a new image with the latest Windows operating system updates, driver updates, and AppStream 2.0 agent software.

For more information, see the "Update an Image by Using Managed AppStream 2.0 Image Updates" section in [Administer Your AppStream 2.0 Images](#), in the *Amazon AppStream 2.0 Administration Guide*.

## Request Syntax

```
{
  "dryRun": boolean,
  "existingImageName": "string",
  "newImageDescription": "string",
  "newImageDisplayName": "string",
  "newImageName": "string",
  "newImageTags": {
    "string" : "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.

### dryRun

Indicates whether to display the status of image update availability before AppStream 2.0 initiates the process of creating a new updated image. If this value is set to `true`, AppStream 2.0 displays whether image updates are available. If this value is set to `false`, AppStream 2.0 initiates the process of creating a new updated image without displaying whether image updates are available.

Type: Boolean

Required: No



### existingImageName

The name of the image to update.

Type: String

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

Required: Yes

### newImageDescription

The description to display for the new image.

Type: String

Length Constraints: Maximum length of 256.

Required: No

### newImageDisplayName

The name to display for the new image.

Type: String

Length Constraints: Maximum length of 100.

Required: No

### newImageName

The name of the new image. The name must be unique within the AWS account and Region.

Type: String

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

Required: Yes

### newImageTags

The tags to associate with the new image. A tag is a key-value pair, and the value is optional. For example, Environment=Test. If you do not specify a value, Environment=.

Generally allowed characters are: letters, numbers, and spaces representable in UTF-8, and the following special characters:

`_ . : / = + \ - @`

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

For more information about tags, see [Tagging Your Resources](#) in the *Amazon AppStream 2.0 Administration Guide*.

Type: String to string map

Map Entries: Maximum number of 50 items.

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

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

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

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

Required: No

## Response Syntax

```
{
  "canUpdateImage": boolean,
  "image": {
    "Applications": [
      {
        "AppBlockArn": "string",
        "Arn": "string",
        "CreatedTime": number,
        "Description": "string",
        "DisplayName": "string",
        "Enabled": boolean,
        "IconS3Location": {
          "S3Bucket": "string",
          "S3Key": "string"
        },
        "IconURL": "string",
        "InstanceFamilies": [ "string " ],
        "LaunchParameters": "string",
        "LaunchPath": "string",
        "Metadata": {
          "string": "string"
        }
      },

```

```

        "Name": "string",
        "Platforms": [ "string" ],
        "WorkingDirectory": "string"
    }
],
"AppstreamAgentVersion": "string",
"Arn": "string",
"BaseImageArn": "string",
"CreatedTime": number,
"Description": "string",
"DisplayName": "string",
"DynamicAppProvidersEnabled": "string",
"ImageBuilderName": "string",
"ImageBuilderSupported": boolean,
"ImageErrors": [
    {
        "ErrorCode": "string",
        "ErrorMessage": "string",
        "ErrorTimestamp": number
    }
],
"ImagePermissions": {
    "allowFleet": boolean,
    "allowImageBuilder": boolean
},
"ImageSharedWithOthers": "string",
"LatestAppstreamAgentVersion": "string",
"Name": "string",
"Platform": "string",
"PublicBaseImageReleasedDate": number,
"State": "string",
"StateChangeReason": {
    "Code": "string",
    "Message": "string"
},
"SupportedInstanceFamilies": [ "string" ],
"Visibility": "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.

### canUpdateImage

Indicates whether a new image can be created.

Type: Boolean

### image

Describes an image.

Type: [Image](#) object

## Errors

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

### **ConcurrentModificationException**

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

HTTP Status Code: 400

### **IncompatibleImageException**

The image can't be updated because it's not compatible for updates.

HTTP Status Code: 400

### **InvalidAccountStatusException**

The resource cannot be created because your AWS account is suspended. For assistance, contact AWS Support.

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

### **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 v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# CreateUsageReportSubscription

Creates a usage report subscription. Usage reports are generated daily.

## Response Syntax

```
{
  "S3BucketName": "string",
  "Schedule": "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.

### S3BucketName

The Amazon S3 bucket where generated reports are stored.

If you enabled on-instance session scripts and Amazon S3 logging for your session script configuration, AppStream 2.0 created an S3 bucket to store the script output. The bucket is unique to your account and Region. When you enable usage reporting in this case, AppStream 2.0 uses the same bucket to store your usage reports. If you haven't already enabled on-instance session scripts, when you enable usage reports, AppStream 2.0 creates a new S3 bucket.

Type: String

Length Constraints: Minimum length of 1.

### Schedule

The schedule for generating usage reports.

Type: String

Valid Values: DAILY

## Errors

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

### InvalidAccountStatusException

The resource cannot be created because your AWS account is suspended. For assistance, contact AWS Support.

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

## 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 v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# CreateUser

Creates a new user in the user pool.

## Request Syntax

```
{
  "AuthenticationType": "string",
  "FirstName": "string",
  "LastName": "string",
  "MessageAction": "string",
  "UserName": "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.

### AuthenticationType

The authentication type for the user. You must specify USERPOOL.

Type: String

Valid Values: API | SAML | USERPOOL | AWS\_AD

Required: Yes

### FirstName

The first name, or given name, of the user.

Type: String

Length Constraints: Maximum length of 2048.

Pattern: `^[A-Za-z0-9_-\s]+$`

Required: No



## LastName

The last name, or surname, of the user.

Type: String

Length Constraints: Maximum length of 2048.

Pattern: `^[A-Za-z0-9_-\s]+$`

Required: No

## MessageAction

The action to take for the welcome email that is sent to a user after the user is created in the user pool. If you specify SUPPRESS, no email is sent. If you specify RESEND, do not specify the first name or last name of the user. If the value is null, the email is sent.

### Note

The temporary password in the welcome email is valid for only 7 days. If users don't set their passwords within 7 days, you must send them a new welcome email.

Type: String

Valid Values: SUPPRESS | RESEND

Required: No

## UserName

The email address of the user.

### Note

Users' email addresses are case-sensitive. During login, if they specify an email address that doesn't use the same capitalization as the email address specified when their user pool account was created, a "user does not exist" error message displays.

Type: String

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

Pattern: `[\p{L}\p{M}\p{S}\p{N}\p{P}]+`

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](#).

### **InvalidAccountStatusException**

The resource cannot be created because your AWS account is suspended. For assistance, contact AWS Support.

HTTP Status Code: 400

### **InvalidParameterCombinationException**

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

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

### **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 v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# DeleteAppBlock

Deletes an app block.

## Request Syntax

```
{  
  "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 app block.

Type: String

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

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](#).

### **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 v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# DeleteAppBlockBuilder

Deletes an app block builder.

An app block builder can only be deleted when it has no association with an app block.

## Request Syntax

```
{
  "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 app block builder.

Type: String

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

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](#).

### **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 v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# DeleteApplication

Deletes an application.

## Request Syntax

```
{
  "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 application.

Type: String

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

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](#).

### 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 v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# DeleteDirectoryConfig

Deletes the specified Directory Config object from AppStream 2.0. This object includes the information required to join streaming instances to an Active Directory domain.

## Request Syntax

```
{  
  "DirectoryName": "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.

### DirectoryName

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](#).

### 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 v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# DeleteEntitlement

Deletes the specified entitlement.

## Request Syntax

```
{  
  "Name": "string",  
  "StackName": "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 entitlement.

Type: String

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

Required: Yes

### StackName

The name of the stack with which the entitlement is associated.

Type: String

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

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](#).

### **ConcurrentModificationException**

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

HTTP Status Code: 400

### **EntitlementNotFoundException**

The entitlement can't be found.

HTTP Status Code: 400

### **OperationNotPermittedException**

The attempted operation is not permitted.

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 v2](#)

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

# DeleteFleet

Deletes the specified fleet.

## Request Syntax

```
{  
  "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 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](#).

### **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 v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)



# DeleteImage

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

## Request Syntax

```
{  
  "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.

Type: String

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

Required: Yes

## Response Syntax

```
{  
  "Image": {  
    "Applications": [  
      {  
        "AppBlockArn": "string",  
        "Arn": "string",  
        "CreatedTime": number,  
        "Description": "string",  
        "DisplayName": "string",  
        "Enabled": boolean,  
        "IconS3Location": {  
          "S3Bucket": "string",  
          "S3Key": "string"  
        }  
      }  
    ]  
  }  
}
```

```
    },
    "IconURL": "string",
    "InstanceFamilies": [ "string" ],
    "LaunchParameters": "string",
    "LaunchPath": "string",
    "Metadata": {
      "string": "string"
    },
    },
    "Name": "string",
    "Platforms": [ "string" ],
    "WorkingDirectory": "string"
  }
],
"AppstreamAgentVersion": "string",
"Arn": "string",
"BaseImageArn": "string",
"CreatedTime": number,
"Description": "string",
"DisplayName": "string",
"DynamicAppProvidersEnabled": "string",
"ImageBuilderName": "string",
"ImageBuilderSupported": boolean,
"ImageErrors": [
  {
    "ErrorCode": "string",
    "ErrorMessage": "string",
    "ErrorTimestamp": number
  }
],
"ImagePermissions": {
  "allowFleet": boolean,
  "allowImageBuilder": boolean
},
"ImageSharedWithOthers": "string",
"LatestAppstreamAgentVersion": "string",
"Name": "string",
"Platform": "string",
"PublicBaseImageReleasedDate": number,
"State": "string",
"StateChangeReason": {
  "Code": "string",
  "Message": "string"
},
"SupportedInstanceFamilies": [ "string" ],
```

```
    "Visibility": "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.

### Image

Information about the image.

Type: [Image](#) object

## Errors

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

### **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 v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# DeleteImageBuilder

Deletes the specified image builder and releases the capacity.

## Request Syntax

```
{
  "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

```
{
  "ImageBuilder": {
    "AccessEndpoints": [
      {
        "EndpointType": "string",
        "VpceId": "string"
      }
    ],
    "AppstreamAgentVersion": "string",
    "Arn": "string",
    "CreatedTime": number,
    "Description": "string",
    "DisplayName": "string",

```

```

    "DomainJoinInfo": {
      "DirectoryName": "string",
      "OrganizationalUnitDistinguishedName": "string"
    },
    "EnableDefaultInternetAccess": boolean,
    "IamRoleArn": "string",
    "ImageArn": "string",
    "ImageBuilderErrors": [
      {
        "ErrorCode": "string",
        "ErrorMessage": "string",
        "ErrorTimestamp": number
      }
    ],
    "InstanceType": "string",
    "LatestAppstreamAgentVersion": "string",
    "Name": "string",
    "NetworkAccessConfiguration": {
      "EniId": "string",
      "EniPrivateIpAddress": "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

Information about the image builder.

Type: [ImageBuilder](#) object

## Errors

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

### **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 v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# DeleteImagePermissions

Deletes permissions for the specified private image. After you delete permissions for an image, AWS accounts to which you previously granted these permissions can no longer use the image.

## Request Syntax

```
{
  "Name": "string",
  "SharedAccountId": "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 private image.

Type: String

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

Required: Yes

### SharedAccountId

The 12-digit identifier of the AWS account for which to delete image permissions.

Type: String

Pattern: `^\d+$`

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](#).

### 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 v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# DeleteStack

Deletes the specified stack. After the stack is deleted, the application streaming environment provided by the stack is no longer available to users. Also, any reservations made for application streaming sessions 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](#).

The request accepts the following data in JSON format.

### Name

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](#).

### **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 v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# DeleteThemeForStack

Deletes custom branding that customizes the appearance of the streaming application catalog page.

## Request Syntax

```
{
  "StackName": "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.

### StackName

The name of the stack for the theme.

Type: String

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

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](#).

### **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 v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# DeleteUsageReportSubscription

Disables usage report generation.

## 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](#).

### InvalidAccountStatusException

The resource cannot be created because your AWS account is suspended. For assistance, contact AWS Support.

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 v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)

- [AWS SDK for Ruby V3](#)

# DeleteUser

Deletes a user from the user pool.

## Request Syntax

```
{  
  "AuthenticationType": "string",  
  "UserName": "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.

### [AuthenticationType](#)

The authentication type for the user. You must specify USERPOOL.

Type: String

Valid Values: API | SAML | USERPOOL | AWS\_AD

Required: Yes

### [UserName](#)

The email address of the user.

#### Note

Users' email addresses are case-sensitive.

Type: String

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

Pattern: `[\p{L}\p{M}\p{S}\p{N}\p{P}]+`



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](#).

### 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 v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# DescribeAppBlockBuilderAppBlockAssociations

Retrieves a list that describes one or more app block builder associations.

## Request Syntax

```
{
  "AppBlockArn": "string",
  "AppBlockBuilderName": "string",
  "MaxResults": number,
  "NextToken": "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.

### AppBlockArn

The ARN of the app block.

Type: String

Pattern: `^arn:aws(?:\-cn|\-iso\-b|\-iso|\-us\-gov)?:[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

### AppBlockBuilderName

The name of the app block builder.

Type: String

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

Required: No

### MaxResults

The maximum size of each page of results.

Type: Integer

Required: No

### NextToken

The pagination token used to retrieve the next page of results for this operation.

Type: String

Length Constraints: Minimum length of 1.

Required: No

## Response Syntax

```
{
  "AppBlockBuilderAppBlockAssociations": [
    {
      "AppBlockArn": "string",
      "AppBlockBuilderName": "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.

### AppBlockBuilderAppBlockAssociations

This list of app block builders associated with app blocks.

Type: Array of [AppBlockBuilderAppBlockAssociation](#) objects

Array Members: Minimum number of 1 item. Maximum number of 25 items.

### NextToken

The pagination token used to retrieve the next page of results for this operation.

Type: String

Length Constraints: Minimum length of 1.

## Errors

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

### **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

## 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 v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# DescribeAppBlockBuilders

Retrieves a list that describes one or more app block builders.

## Request Syntax

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

### [MaxResults](#)

The maximum size of each page of results. The maximum value is 25.

Type: Integer

Required: No

### [Names](#)

The names of the app block builders.

Type: Array of strings

Length Constraints: Minimum length of 1.

Required: No

### [NextToken](#)

The pagination token used to retrieve the next page of results for this operation.

Type: String

Length Constraints: Minimum length of 1.

Required: No

## Response Syntax

```
{
  "AppBlockBuilders": [
    {
      "AccessEndpoints": [
        {
          "EndpointType": "string",
          "VpceId": "string"
        }
      ],
      "AppBlockBuilderErrors": [
        {
          "ErrorCode": "string",
          "ErrorMessage": "string",
          "ErrorTimestamp": number
        }
      ],
      "Arn": "string",
      "CreatedTime": number,
      "Description": "string",
      "DisplayName": "string",
      "EnableDefaultInternetAccess": boolean,
      "IamRoleArn": "string",
      "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.

### AppBlockBuilders

The list that describes one or more app block builders.

Type: Array of [AppBlockBuilder](#) objects

### NextToken

The pagination token used to retrieve the next page of results for this operation.

Type: String

Length Constraints: Minimum length of 1.

## Errors

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

### **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 v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)



# DescribeAppBlocks

Retrieves a list that describes one or more app blocks.

## Request Syntax

```
{
  "Arns": [ "string" ],
  "MaxResults": number,
  "NextToken": "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.

### Arns

The ARNs of the app blocks.

Type: Array of strings

Pattern: `^arn:aws(?:\-cn|\-iso\-b|\-iso|\-us\-gov)?:[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

### MaxResults

The maximum size of each page of results.

Type: Integer

Required: No

### NextToken

The pagination token used to retrieve the next page of results for this operation.

Type: String

Length Constraints: Minimum length of 1.

Required: No

## Response Syntax

```
{
  "AppBlocks": [
    {
      "AppBlockErrors": [
        {
          "ErrorCode": "string",
          "ErrorMessage": "string"
        }
      ],
      "Arn": "string",
      "CreatedTime": number,
      "Description": "string",
      "DisplayName": "string",
      "Name": "string",
      "PackagingType": "string",
      "PostSetupScriptDetails": {
        "ExecutableParameters": "string",
        "ExecutablePath": "string",
        "ScriptS3Location": {
          "S3Bucket": "string",
          "S3Key": "string"
        }
      },
      "TimeoutInSeconds": number
    },
    "SetupScriptDetails": {
      "ExecutableParameters": "string",
      "ExecutablePath": "string",
      "ScriptS3Location": {
        "S3Bucket": "string",
        "S3Key": "string"
      }
    },
    "TimeoutInSeconds": number
  },
  "SourceS3Location": {
    "S3Bucket": "string",
```

```
        "S3Key": "string"
      },
      "State": "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.

### AppBlocks

The app blocks in the list.

Type: Array of [AppBlock](#) objects

### NextToken

The pagination token used to retrieve the next page of results for this operation.

Type: String

Length Constraints: Minimum length of 1.

## Errors

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

### **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 v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# DescribeApplicationFleetAssociations

Retrieves a list that describes one or more application fleet associations. Either `ApplicationArn` or `FleetName` must be specified.

## Request Syntax

```
{
  "ApplicationArn": "string",
  "FleetName": "string",
  "MaxResults": number,
  "NextToken": "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.

### ApplicationArn

The ARN of the application.

Type: String

Pattern: `^arn:aws(?:\-cn|\-iso\-b|\-iso|\-us\-gov)?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=@.\-]{0,1023}$`

Required: No

### FleetName

The name of the fleet.

Type: String

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

Required: No

## MaxResults

The maximum size of each page of results.

Type: Integer

Required: No

## NextToken

The pagination token used to retrieve the next page of results for this operation.

Type: String

Length Constraints: Minimum length of 1.

Required: No

## Response Syntax

```
{
  "ApplicationFleetAssociations": [
    {
      "ApplicationArn": "string",
      "FleetName": "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.

### ApplicationFleetAssociations

The application fleet associations in the list.

Type: Array of [ApplicationFleetAssociation](#) objects

Array Members: Minimum number of 1 item. Maximum number of 25 items.

## NextToken

The pagination token used to retrieve the next page of results for this operation.

Type: String

Length Constraints: Minimum length of 1.

## Errors

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

### **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

## 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 v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)





# DescribeApplications

Retrieves a list that describes one or more applications.

## Request Syntax

```
{  
  "Arns": [ "string" ],  
  "MaxResults": number,  
  "NextToken": "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.

### Arns

The ARNs for the applications.

Type: Array of strings

Pattern: `^arn:aws(?:\-cn|\-iso\-b|\-iso|\-us\-gov)?:[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

### MaxResults

The maximum size of each page of results.

Type: Integer

Required: No

### NextToken

The pagination token used to retrieve the next page of results for this operation.

Type: String

Length Constraints: Minimum length of 1.

Required: No

## Response Syntax

```
{
  "Applications": [
    {
      "AppBlockArn": "string",
      "Arn": "string",
      "CreatedTime": number,
      "Description": "string",
      "DisplayName": "string",
      "Enabled": boolean,
      "IconS3Location": {
        "S3Bucket": "string",
        "S3Key": "string"
      },
      "IconURL": "string",
      "InstanceFamilies": [ "string" ],
      "LaunchParameters": "string",
      "LaunchPath": "string",
      "Metadata": {
        "string" : "string"
      },
      "Name": "string",
      "Platforms": [ "string" ],
      "WorkingDirectory": "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.

## Applications

The applications in the list.

Type: Array of [Application](#) objects

## NextToken

The pagination token used to retrieve the next page of results for this operation.

Type: String

Length Constraints: Minimum length of 1.

## Errors

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

### **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 v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)

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

# DescribeDirectoryConfigs

Retrieves a list that describes one or more specified Directory Config objects for AppStream 2.0, if the names for these objects are provided. Otherwise, all Directory Config objects in the account are described. These objects include the configuration information required to join fleets and image builders to Microsoft Active Directory domains.

Although the response syntax in this topic includes the account password, this password is not returned in the actual response.

## Request Syntax

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

### DirectoryNames

The directory names.

Type: Array of strings

Required: No

### MaxResults

The maximum size of each page of results.

Type: Integer

Required: No

### NextToken

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": [
    {
      "CertificateBasedAuthProperties": {
        "CertificateAuthorityArn": "string",
        "Status": "string"
      },
      "CreatedTime": number,
      "DirectoryName": "string",
      "OrganizationalUnitDistinguishedNames": [ "string" ],
      "ServiceAccountCredentials": {
        "AccountName": "string",
        "AccountPassword": "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.

### DirectoryConfigs

Information about the directory configurations. Note that although the response syntax in this topic includes the account password, this password is not returned in the actual response.

Type: Array of [DirectoryConfig](#) objects

## NextToken

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](#).

### 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 v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# DescribeEntitlements

Retrieves a list that describes one or more entitlements.

## Request Syntax

```
{  
  "MaxResults": number,  
  "Name": "string",  
  "NextToken": "string",  
  "StackName": "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.

### MaxResults

The maximum size of each page of results.

Type: Integer

Required: No

### Name

The name of the entitlement.

Type: String

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

Required: No

### NextToken

The pagination token used to retrieve the next page of results for this operation.

Type: String

Length Constraints: Minimum length of 1.



Required: No

### StackName

The name of the stack with which the entitlement is associated.

Type: String

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

Required: Yes

## Response Syntax

```
{
  "Entitlements": [
    {
      "AppVisibility": "string",
      "Attributes": [
        {
          "Name": "string",
          "Value": "string"
        }
      ],
      "CreatedTime": number,
      "Description": "string",
      "LastModifiedTime": number,
      "Name": "string",
      "StackName": "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.

### Entitlements

The entitlements.

Type: Array of [Entitlement](#) objects

### [NextToken](#)

The pagination token used to retrieve the next page of results for this operation.

Type: String

Length Constraints: Minimum length of 1.

## Errors

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

### **EntitlementNotFoundException**

The entitlement can't be found.

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 v2](#)
- [AWS SDK for Java V2](#)

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

## DescribeFleets

Retrieves a list that describes one or more specified fleets, if the fleet names are provided. Otherwise, all fleets in the account are described.

### Request Syntax

```
{
  "Names": [ "string" ],
  "NextToken": "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.

#### Names

The names of the fleets to describe.

Type: Array of strings

Length Constraints: Minimum length of 1.

Required: No

#### NextToken

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

```
{
  "Fleets": [
```

```
{
  "Arn": "string",
  "ComputeCapacityStatus": {
    "ActiveUserSessions": number,
    "ActualUserSessions": number,
    "Available": number,
    "AvailableUserSessions": number,
    "Desired": number,
    "DesiredUserSessions": 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",
  "IamRoleArn": "string",
  "IdleDisconnectTimeoutInSeconds": number,
  "ImageArn": "string",
  "ImageName": "string",
  "InstanceType": "string",
  "MaxConcurrentSessions": number,
  "MaxSessionsPerInstance": number,
  "MaxUserDurationInSeconds": number,
  "Name": "string",
  "Platform": "string",
  "SessionScriptS3Location": {
    "S3Bucket": "string",
    "S3Key": "string"
  },
  "State": "string",
  "StreamView": "string",
```

```
    "UsbDeviceFilterStrings": [ "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.

### Fleets

Information about the fleets.

Type: Array of [Fleet](#) objects

### NextToken

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](#).

### **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 v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# DescribeImageBuilders

Retrieves a list that describes one or more specified image builders, if the image builder names are provided. Otherwise, all image builders in the account are described.

## Request Syntax

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

### [MaxResults](#)

The maximum size of each page of results.

Type: Integer

Required: No

### [Names](#)

The names of the image builders to describe.

Type: Array of strings

Length Constraints: Minimum length of 1.

Required: No

### [NextToken](#)

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

```
{
  "ImageBuilders": [
    {
      "AccessEndpoints": [
        {
          "EndpointType": "string",
          "VpceId": "string"
        }
      ],
      "AppstreamAgentVersion": "string",
      "Arn": "string",
      "CreatedTime": number,
      "Description": "string",
      "DisplayName": "string",
      "DomainJoinInfo": {
        "DirectoryName": "string",
        "OrganizationalUnitDistinguishedName": "string"
      },
      "EnableDefaultInternetAccess": boolean,
      "IamRoleArn": "string",
      "ImageArn": "string",
      "ImageBuilderErrors": [
        {
          "ErrorCode": "string",
          "ErrorMessage": "string",
          "ErrorTimestamp": number
        }
      ],
      "InstanceType": "string",
      "LatestAppstreamAgentVersion": "string",
      "Name": "string",
      "NetworkAccessConfiguration": {
        "EniId": "string",
        "EniPrivateIpAddress": "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

Information about the image builders.

Type: Array of [ImageBuilder](#) objects

### NextToken

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](#).

### **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 v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# DescribeImagePermissions

Retrieves a list that describes the permissions for shared AWS account IDs on a private image that you own.

## Request Syntax

```
{  
  "MaxResults": number,  
  "Name": "string",  
  "NextToken": "string",  
  "SharedAwsAccountIds": [ "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.

### MaxResults

The maximum size of each page of results.

Type: Integer

Valid Range: Minimum value of 0. Maximum value of 500.

Required: No

### Name

The name of the private image for which to describe permissions. The image must be one that you own.

Type: String

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

Required: Yes

## NextToken

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

## SharedAwsAccountIds

The 12-digit identifier of one or more AWS accounts with which the image is shared.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 5 items.

Pattern: `^\d+$`

Required: No

## Response Syntax

```
{
  "Name": "string",
  "NextToken": "string",
  "SharedImagePermissionsList": [
    {
      "imagePermissions": {
        "allowFleet": boolean,
        "allowImageBuilder": boolean
      },
      "sharedAccountId": "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.

### Name

The name of the private image.

Type: String

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

### NextToken

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.

### SharedImagePermissionsList

The permissions for a private image that you own.

Type: Array of [SharedImagePermissions](#) objects

## Errors

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

### **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 v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# DescribeImages

Retrieves a list that describes one or more specified images, if the image names or image ARNs are provided. Otherwise, all images in the account are described.

## Request Syntax

```
{
  "Arns": [ "string" ],
  "MaxResults": number,
  "Names": [ "string" ],
  "NextToken": "string",
  "Type": "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.

### Arns

The ARNs of the public, private, and shared images to describe.

Type: Array of strings

Pattern: `^arn:aws(?:\-cn|\-iso\-b|\-iso|\-us\-gov)?:[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

### MaxResults

The maximum size of each page of results.

Type: Integer

Valid Range: Minimum value of 0. Maximum value of 25.

Required: No



## Names

The names of the public or private images to describe.

Type: Array of strings

Length Constraints: Minimum length of 1.

Required: No

## NextToken

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

## Type

The type of image (public, private, or shared) to describe.

Type: String

Valid Values: PUBLIC | PRIVATE | SHARED

Required: No

## Response Syntax

```
{
  "Images": [
    {
      "Applications": [
        {
          "AppBlockArn": "string",
          "Arn": "string",
          "CreatedTime": number,
          "Description": "string",
          "DisplayName": "string",
          "Enabled": boolean,
          "IconS3Location": {
```

```

        "S3Bucket": "string",
        "S3Key": "string"
    },
    "IconURL": "string",
    "InstanceFamilies": [ "string" ],
    "LaunchParameters": "string",
    "LaunchPath": "string",
    "Metadata": {
        "string" : "string"
    },
    "Name": "string",
    "Platforms": [ "string" ],
    "WorkingDirectory": "string"
}
],
"AppstreamAgentVersion": "string",
"Arn": "string",
"BaseImageArn": "string",
"CreatedTime": number,
"Description": "string",
"DisplayName": "string",
"DynamicAppProvidersEnabled": "string",
"ImageBuilderName": "string",
"ImageBuilderSupported": boolean,
"ImageErrors": [
    {
        "ErrorCode": "string",
        "ErrorMessage": "string",
        "ErrorTimestamp": number
    }
],
"ImagePermissions": {
    "allowFleet": boolean,
    "allowImageBuilder": boolean
},
"ImageSharedWithOthers": "string",
"LatestAppstreamAgentVersion": "string",
"Name": "string",
"Platform": "string",
"PublicBaseImageReleasedDate": number,
"State": "string",
"StateChangeReason": {
    "Code": "string",
    "Message": "string"
}

```

```
    },  
    "SupportedInstanceFamilies": [ "string" ],  
    "Visibility": "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.

### Images

Information about the images.

Type: Array of [Image](#) objects

### NextToken

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](#).

### **InvalidParameterCombinationException**

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

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 v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# DescribeSessions

Retrieves a list that describes the streaming sessions for a specified stack and fleet. If a `UserId` is provided for the stack and fleet, only streaming sessions for that user are described. If an authentication type is not provided, the default is to authenticate users using a streaming URL.

## Request Syntax

```
{
  "AuthenticationType": "string",
  "FleetName": "string",
  "InstanceId": "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](#).

The request accepts the following data in JSON format.

### AuthenticationType

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 | AWS\_AD

Required: No

### FleetName

The name of the fleet. This value is case-sensitive.

Type: String

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

Required: Yes

### InstanceId

The identifier for the instance hosting the session.

Type: String

Length Constraints: Minimum length of 1.

Required: No

### Limit

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

Type: Integer

Required: No

### NextToken

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

The name of the stack. This value is case-sensitive.

Type: String

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

Required: Yes

### UserId

The user identifier (ID). If you specify a user ID, you must also specify the authentication type.

Type: String

Length Constraints: Minimum length of 2. Maximum length of 128.

Required: No

## Response Syntax

```
{
  "NextToken": "string",
  "Sessions": [
    {
      "AuthenticationType": "string",
      "ConnectionState": "string",
      "FleetName": "string",
      "Id": "string",
      "InstanceId": "string",
      "MaxExpirationTime": number,
      "NetworkAccessConfiguration": {
        "EniId": "string",
        "EniPrivateIpAddress": "string"
      },
      "StackName": "string",
      "StartTime": number,
      "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

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](#)

Information about the streaming sessions.

Type: Array of [Session](#) objects

## Errors

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

### **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 v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)



# DescribeStacks

Retrieves a list that describes one or more specified stacks, if the stack names are provided. Otherwise, all stacks in the account are described.

## Request Syntax

```
{  
  "Names": [ "string" ],  
  "NextToken": "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.

### Names

The names of the stacks to describe.

Type: Array of strings

Length Constraints: Minimum length of 1.

Required: No

### NextToken

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

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

```
"Stacks": [
  {
    "AccessEndpoints": [
      {
        "EndpointType": "string",
        "VpceId": "string"
      }
    ],
    "ApplicationSettings": {
      "Enabled": boolean,
      "S3BucketName": "string",
      "SettingsGroup": "string"
    },
    "Arn": "string",
    "CreatedTime": number,
    "Description": "string",
    "DisplayName": "string",
    "EmbedHostDomains": [ "string" ],
    "FeedbackURL": "string",
    "Name": "string",
    "RedirectURL": "string",
    "StackErrors": [
      {
        "ErrorCode": "string",
        "ErrorMessage": "string"
      }
    ],
    "StorageConnectors": [
      {
        "ConnectorType": "string",
        "Domains": [ "string" ],
        "ResourceIdentifier": "string"
      }
    ],
    "StreamingExperienceSettings": {
      "PreferredProtocol": "string"
    },
    "UserSettings": [
      {
        "Action": "string",
        "MaximumLength": number,
        "Permission": "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

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

Information about the stacks.

Type: Array of [Stack](#) objects

## Errors

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

### **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 v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# DescribeThemeForStack

Retrieves a list that describes the theme for a specified stack. A theme is custom branding that customizes the appearance of the streaming application catalog page.

## Request Syntax

```
{
  "StackName": "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.

### StackName

The name of the stack for the theme.

Type: String

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

Required: Yes

## Response Syntax

```
{
  "Theme": {
    "CreatedTime": number,
    "StackName": "string",
    "State": "string",
    "ThemeFaviconURL": "string",
    "ThemeFooterLinks": [
      {
        "DisplayName": "string",
        "FooterLinkURL": "string"
      }
    ]
  }
}
```

```
    ],  
    "ThemeOrganizationLogoURL": "string",  
    "ThemeStyling": "string",  
    "ThemeTitleText": "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.

### Theme

The theme object that contains the metadata of the custom branding.

Type: [Theme](#) object

## Errors

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

### **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 v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# DescribeUsageReportSubscriptions

Retrieves a list that describes one or more usage report subscriptions.

## Request Syntax

```
{  
  "MaxResults": number,  
  "NextToken": "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.

### MaxResults

The maximum size of each page of results.

Type: Integer

Required: No

### NextToken

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

```
{  
  "NextToken": "string",  
  "UsageReportSubscriptions": [  
    ...  
  ]  
}
```



```
{
  "LastGeneratedReportDate": number,
  "S3BucketName": "string",
  "Schedule": "string",
  "SubscriptionErrors": [
    {
      "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

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.

### UsageReportSubscriptions

Information about the usage report subscription.

Type: Array of [UsageReportSubscription](#) objects

## Errors

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

### **InvalidAccountStatusException**

The resource cannot be created because your AWS account is suspended. For assistance, contact AWS Support.

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 v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# DescribeUsers

Retrieves a list that describes one or more specified users in the user pool.

## Request Syntax

```
{
  "AuthenticationType": "string",
  "MaxResults": number,
  "NextToken": "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.

### AuthenticationType

The authentication type for the users in the user pool to describe. You must specify USERPOOL.

Type: String

Valid Values: API | SAML | USERPOOL | AWS\_AD

Required: Yes

### MaxResults

The maximum size of each page of results.

Type: Integer

Required: No

### NextToken

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

```
{
  "NextToken": "string",
  "Users": [
    {
      "Arn": "string",
      "AuthenticationType": "string",
      "CreatedTime": number,
      "Enabled": boolean,
      "FirstName": "string",
      "LastName": "string",
      "Status": "string",
      "UserName": "string"
    }
  ]
}
```

## Response Elements

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

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

### NextToken

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.

### Users

Information about users in the user pool.

Type: Array of [User](#) objects

## Errors

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

### **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

### **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 v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# DescribeUserStackAssociations

Retrieves a list that describes the UserStackAssociation objects. You must specify either or both of the following:

- The stack name
- The user name (email address of the user associated with the stack) and the authentication type for the user

## Request Syntax

```
{
  "AuthenticationType": "string",
  "MaxResults": number,
  "NextToken": "string",
  "StackName": "string",
  "UserName": "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.

### AuthenticationType

The authentication type for the user who is associated with the stack. You must specify USERPOOL.

Type: String

Valid Values: API | SAML | USERPOOL | AWS\_AD

Required: No

### MaxResults

The maximum size of each page of results.

Type: Integer

Valid Range: Minimum value of 0. Maximum value of 500.

Required: No

### NextToken

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

The name of the stack that is associated with the user.

Type: String

Length Constraints: Minimum length of 1.

Required: No

### UserName

The email address of the user who is associated with the stack.

#### **Note**

Users' email addresses are case-sensitive.

Type: String

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

Pattern: `[\p{L}\p{M}\p{S}\p{N}\p{P}]+`

Required: No

## Response Syntax

```
{
```

```
"NextToken": "string",
"UserStackAssociations": [
  {
    "AuthenticationType": "string",
    "SendEmailNotification": boolean,
    "StackName": "string",
    "UserName": "string"
  }
]
```

## Response Elements

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

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

### NextToken

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.

### UserStackAssociations

The UserStackAssociation objects.

Type: Array of [UserStackAssociation](#) objects

Array Members: Minimum number of 1 item. Maximum number of 25 items.

## Errors

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

### **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

## 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 v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# DisableUser

Disables the specified user in the user pool. Users can't sign in to AppStream 2.0 until they are re-enabled. This action does not delete the user.

## Request Syntax

```
{
  "AuthenticationType": "string",
  "UserName": "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.

### AuthenticationType

The authentication type for the user. You must specify USERPOOL.

Type: String

Valid Values: API | SAML | USERPOOL | AWS\_AD

Required: Yes

### UserName

The email address of the user.

#### Note

Users' email addresses are case-sensitive.

Type: String

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

Pattern: `[\p{L}\p{M}\p{S}\p{N}\p{P}]+`

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](#).

### 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 v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# DisassociateAppBlockBuilderAppBlock

Disassociates a specified app block builder from a specified app block.

## Request Syntax

```
{
  "AppBlockArn": "string",
  "AppBlockBuilderName": "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.

### AppBlockArn

The ARN of the app block.

Type: String

Pattern: `^arn:aws(?:\-cn|\-iso\-b|\-iso|\-us\-gov)?:[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

### AppBlockBuilderName

The name of the app block builder.

Type: String

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

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](#).

### **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

### **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 v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)

- [AWS SDK for Ruby V3](#)

# DisassociateApplicationFleet

Disassociates the specified application from the fleet.

## Request Syntax

```
{  
  "ApplicationArn": "string",  
  "FleetName": "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.

### ApplicationArn

The ARN of the application.

Type: String

Pattern: `^arn:aws(?:\-cn|\-iso\-b|\-iso|\-us\-gov)?:[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

### FleetName

The name of the fleet.

Type: String

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

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](#).

### **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

### **OperationNotPermittedException**

The attempted operation is not permitted.

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 v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)



# DisassociateApplicationFromEntitlement

Deletes the specified application from the specified entitlement.

## Request Syntax

```
{  
  "ApplicationIdentifier": "string",  
  "EntitlementName": "string",  
  "StackName": "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.

### ApplicationIdentifier

The identifier of the application to remove from the entitlement.

Type: String

Length Constraints: Minimum length of 1.

Required: Yes

### EntitlementName

The name of the entitlement.

Type: String

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

Required: Yes

### StackName

The name of the stack with which the entitlement is associated.

Type: String

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

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](#).

### EntitlementNotFoundException

The entitlement can't be found.

HTTP Status Code: 400

### OperationNotPermittedException

The attempted operation is not permitted.

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 v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# 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](#).

The request accepts the following data in JSON format.

### FleetName

The name of the fleet.

Type: String

Length Constraints: Minimum length of 1.

Required: Yes

### StackName

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](#).

### **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 v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)

- [AWS SDK for Ruby V3](#)

# EnableUser

Enables a user in the user pool. After being enabled, users can sign in to AppStream 2.0 and open applications from the stacks to which they are assigned.

## Request Syntax

```
{  
  "AuthenticationType": "string",  
  "UserName": "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.

### AuthenticationType

The authentication type for the user. You must specify USERPOOL.

Type: String

Valid Values: API | SAML | USERPOOL | AWS\_AD

Required: Yes

### UserName

The email address of the user.

#### Note

Users' email addresses are case-sensitive. During login, if they specify an email address that doesn't use the same capitalization as the email address specified when their user pool account was created, a "user does not exist" error message displays.

Type: String

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

Pattern: `[\p{L}\p{M}\p{S}\p{N}\p{P}]+`

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](#).

### InvalidAccountStatusException

The resource cannot be created because your AWS account is suspended. For assistance, contact AWS Support.

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 v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)



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

# ExpireSession

Immediately stops the specified streaming session.

## Request Syntax

```
{  
  "SessionId": "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.

### SessionId

The identifier 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](#).

## 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 v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# ListAssociatedFleets

Retrieves the name of the fleet that is associated with the specified stack.

## Request Syntax

```
{  
  "NextToken": "string",  
  "StackName": "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.

### NextToken

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

The name of the stack.

Type: String

Length Constraints: Minimum length of 1.

Required: Yes

## Response Syntax

```
{
```

```
"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

The name of the fleet.

Type: Array of strings

Length Constraints: Minimum length of 1.

### NextToken

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](#).

## 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 v2](#)

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

# ListAssociatedStacks

Retrieves the name of the stack with which the specified fleet is associated.

## Request Syntax

```
{  
  "FleetName": "string",  
  "NextToken": "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.

### FleetName

The name of the fleet.

Type: String

Length Constraints: Minimum length of 1.

Required: Yes

### NextToken

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

```
{
```

```
"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

The name of the stack.

Type: Array of strings

Length Constraints: Minimum length of 1.

### NextToken

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](#).

## 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 v2](#)



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

# ListEntitledApplications

Retrieves a list of entitled applications.

## Request Syntax

```
{
  "EntitlementName": "string",
  "MaxResults": number,
  "NextToken": "string",
  "StackName": "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.

### EntitlementName

The name of the entitlement.

Type: String

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

Required: Yes

### MaxResults

The maximum size of each page of results.

Type: Integer

Required: No

### NextToken

The pagination token used to retrieve the next page of results for this operation.

Type: String

Length Constraints: Minimum length of 1.

Required: No

### StackName

The name of the stack with which the entitlement is associated.

Type: String

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

Required: Yes

## Response Syntax

```
{
  "EntitledApplications": [
    {
      "ApplicationIdentifier": "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.

### EntitledApplications

The entitled applications.

Type: Array of [EntitledApplication](#) objects

### NextToken

The pagination token used to retrieve the next page of results for this operation.

Type: String

Length Constraints: Minimum length of 1.

## Errors

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

### EntitlementNotFoundException

The entitlement can't be found.

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 v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# ListTagsForResource

Retrieves a list of all 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 Administration Guide*.

## Request Syntax

```
{  
  "ResourceArn": "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.

### [ResourceArn](#)

The Amazon Resource Name (ARN) of the resource.

Type: String

Pattern: `^arn:aws(?:\-cn|\-iso\-b|\-iso|\-us\-gov)?:[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

## Response Syntax

```
{  
  "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

The information about the tags.

Type: String to string map

Map Entries: Maximum number of 50 items.

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](#).

### **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 v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# StartAppBlockBuilder

Starts an app block builder.

An app block builder can only be started when it's associated with an app block.

Starting an app block builder starts a new instance, which is equivalent to an elastic fleet instance with application builder assistance functionality.

## Request Syntax

```
{
  "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 app block builder.

Type: String

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

Required: Yes

## Response Syntax

```
{
  "AppBlockBuilder": {
    "AccessEndpoints": [
      {
        "EndpointType": "string",
        "VpceId": "string"
      }
    ],
    "AppBlockBuilderErrors": [
```



```
{
  {
    "ErrorCode": "string",
    "ErrorMessage": "string",
    "ErrorTimestamp": number
  }
],
"Arn": "string",
"CreatedTime": number,
"Description": "string",
"DisplayName": "string",
"EnableDefaultInternetAccess": boolean,
"IamRoleArn": "string",
"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.

### AppBlockBuilder

Describes an app block builder.

Type: [AppBlockBuilder](#) object

## Errors

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

## **ConcurrentModificationException**

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

HTTP Status Code: 400

## **InvalidAccountStatusException**

The resource cannot be created because your AWS account is suspended. For assistance, contact AWS Support.

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

## **RequestLimitExceededException**

AppStream 2.0 can't process the request right now because the Describe calls from your AWS account are being throttled by Amazon EC2. Try again later.

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 v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# StartFleet

Starts the specified fleet.

## Request Syntax

```
{  
  "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 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](#).

### **ConcurrentModificationException**

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

HTTP Status Code: 400

**InvalidAccountStatusException**

The resource cannot be created because your AWS account is suspended. For assistance, contact AWS Support.

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

**RequestLimitExceededException**

AppStream 2.0 can't process the request right now because the Describe calls from your AWS account are being throttled by Amazon EC2. Try again later.

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 v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# StartImageBuilder

Starts the specified image builder.

## Request Syntax

```
{
  "AppstreamAgentVersion": "string",
  "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.

### AppstreamAgentVersion

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

The name of the image builder.

Type: String

Length Constraints: Minimum length of 1.

Required: Yes

## Response Syntax

```
{
  "ImageBuilder": {
    "AccessEndpoints": [
```

```

    {
      "EndpointType": "string",
      "VpceId": "string"
    }
  ],
  "AppstreamAgentVersion": "string",
  "Arn": "string",
  "CreatedTime": number,
  "Description": "string",
  "DisplayName": "string",
  "DomainJoinInfo": {
    "DirectoryName": "string",
    "OrganizationalUnitDistinguishedName": "string"
  },
  "EnableDefaultInternetAccess": boolean,
  "IamRoleArn": "string",
  "ImageArn": "string",
  "ImageBuilderErrors": [
    {
      "ErrorCode": "string",
      "ErrorMessage": "string",
      "ErrorTimestamp": number
    }
  ],
  "InstanceType": "string",
  "LatestAppstreamAgentVersion": "string",
  "Name": "string",
  "NetworkAccessConfiguration": {
    "EniId": "string",
    "EniPrivateIpAddress": "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

Information about the image builder.

Type: [ImageBuilder](#) object

## Errors

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

### **ConcurrentModificationException**

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

HTTP Status Code: 400

### **IncompatibleImageException**

The image can't be updated because it's not compatible for updates.

HTTP Status Code: 400

### **InvalidAccountStatusException**

The resource cannot be created because your AWS account is suspended. For assistance, contact AWS Support.

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 v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# StopAppBlockBuilder

Stops an app block builder.

Stopping an app block builder terminates the instance, and the instance state is not persisted.

## Request Syntax

```
{
  "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 app block builder.

Type: String

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

Required: Yes

## Response Syntax

```
{
  "AppBlockBuilder": {
    "AccessEndpoints": [
      {
        "EndpointType": "string",
        "VpceId": "string"
      }
    ],
    "AppBlockBuilderErrors": [
      {
        "ErrorCode": "string",
        "ErrorMessage": "string",

```

```
    "ErrorTimestamp": number
  }
],
"Arn": "string",
"CreatedTime": number,
"Description": "string",
"DisplayName": "string",
"EnableDefaultInternetAccess": boolean,
"IamRoleArn": "string",
"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.

### AppBlockBuilder

Describes an app block builder.

Type: [AppBlockBuilder](#) object

## Errors

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

### **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 v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# StopFleet

Stops the specified fleet.

## Request Syntax

```
{  
  "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 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](#).

### **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 v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# StopImageBuilder

Stops the specified image builder.

## Request Syntax

```
{
  "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

Length Constraints: Minimum length of 1.

Required: Yes

## Response Syntax

```
{
  "ImageBuilder": {
    "AccessEndpoints": [
      {
        "EndpointType": "string",
        "VpceId": "string"
      }
    ],
    "AppstreamAgentVersion": "string",
    "Arn": "string",
    "CreatedTime": number,
    "Description": "string",
    "DisplayName": "string",

```



```

    "DomainJoinInfo": {
      "DirectoryName": "string",
      "OrganizationalUnitDistinguishedName": "string"
    },
    "EnableDefaultInternetAccess": boolean,
    "IamRoleArn": "string",
    "ImageArn": "string",
    "ImageBuilderErrors": [
      {
        "ErrorCode": "string",
        "ErrorMessage": "string",
        "ErrorTimestamp": number
      }
    ],
    "InstanceType": "string",
    "LatestAppstreamAgentVersion": "string",
    "Name": "string",
    "NetworkAccessConfiguration": {
      "EniId": "string",
      "EniPrivateIpAddress": "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

Information about the image builder.

Type: [ImageBuilder](#) object

## Errors

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

### **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 v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# 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](#). To disassociate tags from your resources, use [UntagResource](#).

For more information about tags, see [Tagging Your Resources](#) in the *Amazon AppStream 2.0 Administration Guide*.

## Request Syntax

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

### [ResourceArn](#)

The Amazon Resource Name (ARN) of the resource.

Type: String

Pattern: `^arn:aws(?:\s-cn|\s-iso\b|\s-iso|\s-us\s-gov)?:[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:_/+=@.\s-]{0,1023}$`

Required: Yes

## Tags

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

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

Generally allowed characters are: letters, numbers, and spaces representable in UTF-8, and the following special characters:

`_ . : / = + \ - @`

Type: String to string map

Map Entries: Maximum number of 50 items.

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](#).

### InvalidAccountStatusException

The resource cannot be created because your AWS account is suspended. For assistance, contact AWS Support.

HTTP Status Code: 400

### 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 v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# UntagResource

Disassociates one or more specified tags from the specified AppStream 2.0 resource.

To list the current tags for your resources, use [ListTagsForResource](#).

For more information about tags, see [Tagging Your Resources](#) in the *Amazon AppStream 2.0 Administration Guide*.

## Request Syntax

```
{
  "ResourceArn": "string",
  "TagKeys": [ "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.

### [ResourceArn](#)

The Amazon Resource Name (ARN) of the resource.

Type: String

Pattern: `^arn:aws(?:\-cn|\-iso\-b|\-iso|\-us\-gov)?:[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

### [TagKeys](#)

The tag keys for the tags to disassociate.

Type: Array of strings

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

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

Pattern: `^(^(?!aws:)\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](#).

### 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 v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# UpdateAppBlockBuilder

Updates an app block builder.

If the app block builder is in the STARTING or STOPPING state, you can't update it. If the app block builder is in the RUNNING state, you can only update the DisplayName and Description. If the app block builder is in the STOPPED state, you can update any attribute except the Name.

## Request Syntax

```
{
  "AccessEndpoints": [
    {
      "EndpointType": "string",
      "VpceId": "string"
    }
  ],
  "AttributesToDelete": [ "string" ],
  "Description": "string",
  "DisplayName": "string",
  "EnableDefaultInternetAccess": boolean,
  "IamRoleArn": "string",
  "InstanceType": "string",
  "Name": "string",
  "Platform": "string",
  "VpcConfig": {
    "SecurityGroupIds": [ "string" ],
    "SubnetIds": [ "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.

### [AccessEndpoints](#)

The list of interface VPC endpoint (interface endpoint) objects. Administrators can connect to the app block builder only through the specified endpoints.



Type: Array of [AccessEndpoint](#) objects

Array Members: Minimum number of 1 item. Maximum number of 4 items.

Required: No

### [AttributesToDelete](#)

The attributes to delete from the app block builder.

Type: Array of strings

Valid Values: IAM\_ROLE\_ARN | ACCESS\_ENDPOINTS |  
VPC\_CONFIGURATION\_SECURITY\_GROUP\_IDS

Required: No

### [Description](#)

The description of the app block builder.

Type: String

Length Constraints: Maximum length of 256.

Required: No

### [DisplayName](#)

The display name of the app block builder.

Type: String

Length Constraints: Maximum length of 100.

Required: No

### [EnableDefaultInternetAccess](#)

Enables or disables default internet access for the app block builder.

Type: Boolean

Required: No

## IamRoleArn

The Amazon Resource Name (ARN) of the IAM role to apply to the app block builder. To assume a role, the app block builder calls the AWS Security Token Service (STS) AssumeRole API operation and passes the ARN of the role to use. The operation creates a new session with temporary credentials. AppStream 2.0 retrieves the temporary credentials and creates the **appstream\_machine\_role** credential profile on the instance.

For more information, see [Using an IAM Role to Grant Permissions to Applications and Scripts Running on AppStream 2.0 Streaming Instances](#) in the *Amazon AppStream 2.0 Administration Guide*.

Type: String

Pattern: `^arn:aws(?:\-cn|\-iso\-b|\-iso|\-us\-gov)?:[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

## InstanceType

The instance type to use when launching the app block builder. The following instance types are available:

- stream.standard.small
- stream.standard.medium
- stream.standard.large
- stream.standard.xlarge
- stream.standard.2xlarge

Type: String

Length Constraints: Minimum length of 1.

Required: No

## Name

The unique name for the app block builder.

Type: String

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

Required: Yes

## Platform

The platform of the app block builder.

WINDOWS\_SERVER\_2019 is the only valid value.

Type: String

Valid Values: WINDOWS | WINDOWS\_SERVER\_2016 | WINDOWS\_SERVER\_2019 | WINDOWS\_SERVER\_2022 | AMAZON\_LINUX2 | RHEL8 | ROCKY\_LINUX8

Required: No

## VpcConfig

The VPC configuration for the app block builder.

App block builders require that you specify at least two subnets in different availability zones.

Type: [VpcConfig](#) object

Required: No

## Response Syntax

```
{
  "AppBlockBuilder": {
    "AccessEndpoints": [
      {
        "EndpointType": "string",
        "VpceId": "string"
      }
    ],
    "AppBlockBuilderErrors": [
      {
        "ErrorCode": "string",
        "ErrorMessage": "string",
        "ErrorTimestamp": number
      }
    ]
  },
}
```

```
"Arn": "string",
"CreatedTime": number,
"Description": "string",
"DisplayName": "string",
"EnableDefaultInternetAccess": boolean,
"IamRoleArn": "string",
"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.

### AppBlockBuilder

Describes an app block builder.

Type: [AppBlockBuilder](#) object

## Errors

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

### ConcurrentModificationException

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

HTTP Status Code: 400

### **InvalidAccountStatusException**

The resource cannot be created because your AWS account is suspended. For assistance, contact AWS Support.

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

### **RequestLimitExceededException**

AppStream 2.0 can't process the request right now because the Describe calls from your AWS account are being throttled by Amazon EC2. Try again later.

HTTP Status Code: 400

### **ResourceInUseException**

The specified resource is in use.

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 v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# UpdateApplication

Updates the specified application.

## Request Syntax

```
{
  "AppBlockArn": "string",
  "AttributesToDelete": [ "string" ],
  "Description": "string",
  "DisplayName": "string",
  "IconS3Location": {
    "S3Bucket": "string",
    "S3Key": "string"
  },
  "LaunchParameters": "string",
  "LaunchPath": "string",
  "Name": "string",
  "WorkingDirectory": "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.

### AppBlockArn

The ARN of the app block.

Type: String

Pattern: `^arn:aws(?:\-cn|\-iso\-b|\-iso|\-us\-gov)?:[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

### AttributesToDelete

The attributes to delete for an application.

Type: Array of strings

Array Members: Maximum number of 2 items.

Valid Values: LAUNCH\_PARAMETERS | WORKING\_DIRECTORY

Required: No

### Description

The description of the application.

Type: String

Length Constraints: Maximum length of 256.

Required: No

### DisplayName

The display name of the application. This name is visible to users in the application catalog.

Type: String

Length Constraints: Maximum length of 100.

Required: No

### IconS3Location

The icon S3 location of the application.

Type: [S3Location](#) object

Required: No

### LaunchParameters

The launch parameters of the application.

Type: String

Length Constraints: Minimum length of 1.

Required: No



## LaunchPath

The launch path of the application.

Type: String

Length Constraints: Minimum length of 1.

Required: No

## Name

The name of the application. This name is visible to users when display name is not specified.

Type: String

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

Required: Yes

## WorkingDirectory

The working directory of the application.

Type: String

Length Constraints: Minimum length of 1.

Required: No

## Response Syntax

```
{
  "Application": {
    "AppBlockArn": "string",
    "Arn": "string",
    "CreatedTime": number,
    "Description": "string",
    "DisplayName": "string",
    "Enabled": boolean,
    "IconS3Location": {
      "S3Bucket": "string",
      "S3Key": "string"
    }
  },
}
```

```
"IconURL": "string",
"InstanceFamilies": [ "string" ],
"LaunchParameters": "string",
"LaunchPath": "string",
"Metadata": {
  "string" : "string"
},
"Name": "string",
"Platforms": [ "string" ],
"WorkingDirectory": "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.

### Application

Describes an application in the application catalog.

Type: [Application](#) object

## Errors

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

### **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 v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# UpdateDirectoryConfig

Updates the specified Directory Config object in AppStream 2.0. This object includes the configuration information required to join fleets and image builders to Microsoft Active Directory domains.

## Request Syntax

```
{
  "CertificateBasedAuthProperties": {
    "CertificateAuthorityArn": "string",
    "Status": "string"
  },
  "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](#).

The request accepts the following data in JSON format.

### [CertificateBasedAuthProperties](#)

The certificate-based authentication properties used to authenticate SAML 2.0 Identity Provider (IdP) user identities to Active Directory domain-joined streaming instances. Fallback is turned on by default when certificate-based authentication is **Enabled**. Fallback allows users to log in using their AD domain password if certificate-based authentication is unsuccessful, or to unlock a desktop lock screen. **Enabled\_no\_directory\_login\_fallback** enables certificate-based authentication, but does not allow users to log in using their AD domain password. Users will be disconnected to re-authenticate using certificates.

Type: [CertificateBasedAuthProperties](#) object

Required: No

## DirectoryName

The name of the Directory Config object.

Type: String

Required: Yes

## OrganizationalUnitDistinguishedNames

The distinguished names of the organizational units for computer accounts.

Type: Array of strings

Length Constraints: Maximum length of 2000.

Required: No

## ServiceAccountCredentials

The credentials for the service account used by the fleet or image builder to connect to the directory.

Type: [ServiceAccountCredentials](#) object

Required: No

## Response Syntax

```
{
  "DirectoryName": {
    "CertificateBasedAuthProperties": {
      "CertificateAuthorityArn": "string",
      "Status": "string"
    },
    "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

Information about the Directory Config object.

Type: [DirectoryConfig](#) object

## Errors

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

### **ConcurrentModificationException**

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

HTTP Status Code: 400

### **InvalidRoleException**

The specified role is invalid.

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 v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# UpdateEntitlement

Updates the specified entitlement.

## Request Syntax

```
{
  "AppVisibility": "string",
  "Attributes": [
    {
      "Name": "string",
      "Value": "string"
    }
  ],
  "Description": "string",
  "Name": "string",
  "StackName": "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.

### AppVisibility

Specifies whether all or only selected apps are entitled.

Type: String

Valid Values: ALL | ASSOCIATED

Required: No

### Attributes

The attributes of the entitlement.

Type: Array of [EntitlementAttribute](#) objects

Array Members: Minimum number of 1 item.



Required: No

### Description

The description of the entitlement.

Type: String

Length Constraints: Maximum length of 256.

Required: No

### Name

The name of the entitlement.

Type: String

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

Required: Yes

### StackName

The name of the stack with which the entitlement is associated.

Type: String

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

Required: Yes

## Response Syntax

```
{
  "Entitlement": {
    "AppVisibility": "string",
    "Attributes": [
      {
        "Name": "string",
        "Value": "string"
      }
    ],
    "CreatedTime": number,
```

```
"Description": "string",
"LastModifiedTime": number,
"Name": "string",
"StackName": "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.

### Entitlement

The entitlement.

Type: [Entitlement](#) object

## Errors

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

### **ConcurrentModificationException**

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

HTTP Status Code: 400

### **EntitlementNotFoundException**

The entitlement can't be found.

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 v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# 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 following based on the fleet type:

- Always-On and On-Demand fleet types

You can update the `DisplayName`, `ComputeCapacity`, `ImageARN`, `ImageName`, `IdleDisconnectTimeoutInSeconds`, and `DisconnectTimeoutInSeconds` attributes.

- Elastic fleet type

You can update the `DisplayName`, `IdleDisconnectTimeoutInSeconds`, `DisconnectTimeoutInSeconds`, `MaxConcurrentSessions`, `SessionScriptS3Location` and `UsbDeviceFilterStrings` attributes.

If the fleet is in the STARTING or STOPPED state, you can't update it.

## Request Syntax

```
{
  "AttributesToDelete": [ "string" ],
  "ComputeCapacity": {
    "DesiredInstances": number,
    "DesiredSessions": number
  },
  "DeleteVpcConfig": boolean,
  "Description": "string",
  "DisconnectTimeoutInSeconds": number,
  "DisplayName": "string",
  "DomainJoinInfo": {
    "DirectoryName": "string",
    "OrganizationalUnitDistinguishedName": "string"
  },
  "EnableDefaultInternetAccess": boolean,
  "IamRoleArn": "string",
  "IdleDisconnectTimeoutInSeconds": number,
  "ImageArn": "string",
  "ImageName": "string",
```

```
"InstanceType": "string",
"MaxConcurrentSessions": number,
"MaxSessionsPerInstance": number,
"MaxUserDurationInSeconds": number,
"Name": "string",
"Platform": "string",
"SessionScriptS3Location": {
  "S3Bucket": "string",
  "S3Key": "string"
},
"StreamView": "string",
"UsbDeviceFilterStrings": [ "string" ],
"VpcConfig": {
  "SecurityGroupIds": [ "string" ],
  "SubnetIds": [ "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

The fleet attributes to delete.

Type: Array of strings

Valid Values: VPC\_CONFIGURATION | VPC\_CONFIGURATION\_SECURITY\_GROUP\_IDS  
| DOMAIN\_JOIN\_INFO | IAM\_ROLE\_ARN | USB\_DEVICE\_FILTER\_STRINGS |  
SESSION\_SCRIPT\_S3\_LOCATION | MAX\_SESSIONS\_PER\_INSTANCE

Required: No

### ComputeCapacity

The desired capacity for the fleet. This is not allowed for Elastic fleets.

Type: [ComputeCapacity](#) object

Required: No

## DeleteVpcConfig

*This parameter has been deprecated.*

Deletes the VPC association for the specified fleet.

Type: Boolean

Required: No

## Description

The description to display.

Type: String

Length Constraints: Maximum length of 256.

Required: No

## DisconnectTimeoutInSeconds

The amount of time that a streaming session remains active after users disconnect. If users try to reconnect to the streaming session after a disconnection or network interruption within this time interval, they are connected to their previous session. Otherwise, they are connected to a new session with a new streaming instance.

Specify a value between 60 and 36000.

Type: Integer

Required: No

## DisplayName

The fleet name to display.

Type: String

Length Constraints: Maximum length of 100.

Required: No

## DomainJoinInfo

The name of the directory and organizational unit (OU) to use to join the fleet to a Microsoft Active Directory domain.

Type: [DomainJoinInfo](#) object

Required: No

### [EnableDefaultInternetAccess](#)

Enables or disables default internet access for the fleet.

Type: Boolean

Required: No

### [IamRoleArn](#)

The Amazon Resource Name (ARN) of the IAM role to apply to the fleet. To assume a role, a fleet instance calls the AWS Security Token Service (STS) `AssumeRole` API operation and passes the ARN of the role to use. The operation creates a new session with temporary credentials. AppStream 2.0 retrieves the temporary credentials and creates the **appstream\_machine\_role** credential profile on the instance.

For more information, see [Using an IAM Role to Grant Permissions to Applications and Scripts Running on AppStream 2.0 Streaming Instances](#) in the *Amazon AppStream 2.0 Administration Guide*.

Type: String

Pattern: `^arn:aws(?:\-cn|\-iso\-b|\-iso|\-us\-gov)?:[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

### [IdleDisconnectTimeoutInSeconds](#)

The amount of time that users can be idle (inactive) before they are disconnected from their streaming session and the `DisconnectTimeoutInSeconds` time interval begins. Users are notified before they are disconnected due to inactivity. If users try to reconnect to the streaming session before the time interval specified in `DisconnectTimeoutInSeconds` elapses, they are connected to their previous session. Users are considered idle when they stop providing keyboard or mouse input during their streaming session. File uploads and downloads, audio in, audio out, and pixels changing do not qualify as user activity. If users continue to be idle after the time interval in `IdleDisconnectTimeoutInSeconds` elapses, they are disconnected.

To prevent users from being disconnected due to inactivity, specify a value of 0. Otherwise, specify a value between 60 and 36000. The default value is 0.

**Note**

If you enable this feature, we recommend that you specify a value that corresponds exactly to a whole number of minutes (for example, 60, 120, and 180). If you don't do this, the value is rounded to the nearest minute. For example, if you specify a value of 70, users are disconnected after 1 minute of inactivity. If you specify a value that is at the midpoint between two different minutes, the value is rounded up. For example, if you specify a value of 90, users are disconnected after 2 minutes of inactivity.

Type: Integer

Required: No

### ImageArn

The ARN of the public, private, or shared image to use.

Type: String

Pattern: `^arn:aws(?:\-cn|\-iso\-b|\-iso|\-us\-gov)?:[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

### ImageName

The name of the image used to create the fleet.

Type: String

Length Constraints: Minimum length of 1.

Required: No

### InstanceType

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

- `stream.standard.small`



- `stream.standard.medium`
- `stream.standard.large`
- `stream.standard.xlarge`
- `stream.standard.2xlarge`
- `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.memory.z1d.large`
- `stream.memory.z1d.xlarge`
- `stream.memory.z1d.2xlarge`
- `stream.memory.z1d.3xlarge`
- `stream.memory.z1d.6xlarge`
- `stream.memory.z1d.12xlarge`
- `stream.graphics-design.large`
- `stream.graphics-design.xlarge`
- `stream.graphics-design.2xlarge`
- `stream.graphics-design.4xlarge`
- `stream.graphics-desktop.2xlarge`
- `stream.graphics.g4dn.xlarge`
- `stream.graphics.g4dn.2xlarge`
- `stream.graphics.g4dn.4xlarge`
- `stream.graphics.g4dn.8xlarge`
- `stream.graphics.g4dn.12xlarge`

- `stream.graphics.g4dn.16xlarge`
- `stream.graphics-pro.4xlarge`
- `stream.graphics-pro.8xlarge`
- `stream.graphics-pro.16xlarge`

The following instance types are available for Elastic fleets:

- `stream.standard.small`
- `stream.standard.medium`
- `stream.standard.large`
- `stream.standard.xlarge`
- `stream.standard.2xlarge`

Type: String

Length Constraints: Minimum length of 1.

Required: No

### MaxConcurrentSessions

The maximum number of concurrent sessions for a fleet.

Type: Integer

Required: No

### MaxSessionsPerInstance

The maximum number of user sessions on an instance. This only applies to multi-session fleets.

Type: Integer

Required: No

### MaxUserDurationInSeconds

The maximum amount of time that a streaming session can remain active, in seconds. If users are still connected to a streaming instance five minutes before this limit is reached, they are prompted to save any open documents before being disconnected. After this time elapses, the instance is terminated and replaced by a new instance.

Specify a value between 600 and 432000.

Type: Integer

Required: No

### Name

A unique name for the fleet.

Type: String

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

Required: No

### Platform

The platform of the fleet. WINDOWS\_SERVER\_2019 and AMAZON\_LINUX2 are supported for Elastic fleets.

Type: String

Valid Values: WINDOWS | WINDOWS\_SERVER\_2016 | WINDOWS\_SERVER\_2019 | WINDOWS\_SERVER\_2022 | AMAZON\_LINUX2 | RHEL8 | ROCKY\_LINUX8

Required: No

### SessionScriptS3Location

The S3 location of the session scripts configuration zip file. This only applies to Elastic fleets.

Type: [S3Location](#) object

Required: No

### StreamView

The AppStream 2.0 view that is displayed to your users when they stream from the fleet. When APP is specified, only the windows of applications opened by users display. When DESKTOP is specified, the standard desktop that is provided by the operating system displays.

The default value is APP.

Type: String

Valid Values: APP | DESKTOP

Required: No

## UsbDeviceFilterStrings

The USB device filter strings that specify which USB devices a user can redirect to the fleet streaming session, when using the Windows native client. This is allowed but not required for Elastic fleets.

Type: Array of strings

Length Constraints: Minimum length of 0. Maximum length of 100.

Pattern: `^((\w*)\s*(\w*)\s*\, \s*(\w*)\s*\, \s*\*?(\w*)\s*\, \s*\*?(\w*)\s*\, \s*\*?\d*\s*\, \s*\*?\d*\s*\, \s*[0-1]\s*\, \s*[0-1]\s*)$`

Required: No

## VpcConfig

The VPC configuration for the fleet. This is required for Elastic fleets, but not required for other fleet types. Elastic fleets require that you specify at least two subnets in different availability zones.

Type: [VpcConfig](#) object

Required: No

## Response Syntax

```
{
  "Fleet": {
    "Arn": "string",
    "ComputeCapacityStatus": {
      "ActiveUserSessions": number,
      "ActualUserSessions": number,
      "Available": number,
      "AvailableUserSessions": number,
      "Desired": number,
      "DesiredUserSessions": 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",
    "IamRoleArn": "string",
    "IdleDisconnectTimeoutInSeconds": number,
    "ImageArn": "string",
    "ImageName": "string",
    "InstanceType": "string",
    "MaxConcurrentSessions": number,
    "MaxSessionsPerInstance": number,
    "MaxUserDurationInSeconds": number,
    "Name": "string",
    "Platform": "string",
    "SessionScriptS3Location": {
        "S3Bucket": "string",
        "S3Key": "string"
    },
    "State": "string",
    "StreamView": "string",
    "UsbDeviceFilterStrings": [ "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

Information about the fleet.

Type: [Fleet](#) object

## Errors

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

### **ConcurrentModificationException**

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

HTTP Status Code: 400

### **IncompatibleImageException**

The image can't be updated because it's not compatible for updates.

HTTP Status Code: 400

### **InvalidAccountStatusException**

The resource cannot be created because your AWS account is suspended. For assistance, contact AWS Support.

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

## RequestLimitExceededException

AppStream 2.0 can't process the request right now because the Describe calls from your AWS account are being throttled by Amazon EC2. Try again later.

HTTP Status Code: 400

## ResourceInUseException

The specified resource is in use.

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 v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)

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



# UpdateImagePermissions

Adds or updates permissions for the specified private image.

## Request Syntax

```
{
  "ImagePermissions": {
    "allowFleet": boolean,
    "allowImageBuilder": boolean
  },
  "Name": "string",
  "SharedAccountId": "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.

### ImagePermissions

The permissions for the image.

Type: [ImagePermissions](#) object

Required: Yes

### Name

The name of the private image.

Type: String

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

Required: Yes

### SharedAccountId

The 12-digit identifier of the AWS account for which you want add or update image permissions.

Type: String

Pattern: `^\d+$`

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](#).

### LimitExceededException

The requested limit exceeds the permitted limit for an account.

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 v2](#)

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

# UpdateStack

Updates the specified fields for the specified stack.

## Request Syntax

```
{
  "AccessEndpoints": [
    {
      "EndpointType": "string",
      "VpceId": "string"
    }
  ],
  "ApplicationSettings": {
    "Enabled": boolean,
    "SettingsGroup": "string"
  },
  "AttributesToDelete": [ "string" ],
  "DeleteStorageConnectors": boolean,
  "Description": "string",
  "DisplayName": "string",
  "EmbedHostDomains": [ "string" ],
  "FeedbackURL": "string",
  "Name": "string",
  "RedirectURL": "string",
  "StorageConnectors": [
    {
      "ConnectorType": "string",
      "Domains": [ "string" ],
      "ResourceIdentifier": "string"
    }
  ],
  "StreamingExperienceSettings": {
    "PreferredProtocol": "string"
  },
  "UserSettings": [
    {
      "Action": "string",
      "MaximumLength": number,
      "Permission": "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.

### [AccessEndpoints](#)

The list of interface VPC endpoint (interface endpoint) objects. Users of the stack can connect to AppStream 2.0 only through the specified endpoints.

Type: Array of [AccessEndpoint](#) objects

Array Members: Minimum number of 1 item. Maximum number of 4 items.

Required: No

### [ApplicationSettings](#)

The persistent application settings for users of a stack. When these settings are enabled, changes that users make to applications and Windows settings are automatically saved after each session and applied to the next session.

Type: [ApplicationSettings](#) object

Required: No

### [AttributesToDelete](#)

The stack attributes to delete.

Type: Array of strings

Valid Values: STORAGE\_CONNECTORS | STORAGE\_CONNECTOR\_HOMEFOLDERS | STORAGE\_CONNECTOR\_GOOGLE\_DRIVE | STORAGE\_CONNECTOR\_ONE\_DRIVE | REDIRECT\_URL | FEEDBACK\_URL | THEME\_NAME | USER\_SETTINGS | EMBED\_HOST\_DOMAINS | IAM\_ROLE\_ARN | ACCESS\_ENDPOINTS | STREAMING\_EXPERIENCE\_SETTINGS

Required: No

## DeleteStorageConnectors

*This parameter has been deprecated.*

Deletes the storage connectors currently enabled for the stack.

Type: Boolean

Required: No

## Description

The description to display.

Type: String

Length Constraints: Maximum length of 256.

Required: No

## DisplayName

The stack name to display.

Type: String

Length Constraints: Maximum length of 100.

Required: No

## EmbedHostDomains

The domains where AppStream 2.0 streaming sessions can be embedded in an iframe. You must approve the domains that you want to host embedded AppStream 2.0 streaming sessions.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 20 items.

Length Constraints: Maximum length of 128.

Pattern: (? : [a-z0-9] (? : [a-z0-9-] {0,61} [a-z0-9] ) ? \. ) + [a-z0-9] [a-z0-9-] {0,61} [a-z0-9]

Required: No

### **FeedbackURL**

The URL that users are redirected to after they choose the Send Feedback link. If no URL is specified, no Send Feedback link is displayed.

Type: String

Length Constraints: Maximum length of 1000.

Required: No

### **Name**

The name of the stack.

Type: String

Length Constraints: Minimum length of 1.

Required: Yes

### **RedirectURL**

The URL that users are redirected to after their streaming session ends.

Type: String

Length Constraints: Maximum length of 1000.

Required: No

### **StorageConnectors**

The storage connectors to enable.

Type: Array of [StorageConnector](#) objects

Required: No

### **StreamingExperienceSettings**

The streaming protocol you want your stack to prefer. This can be UDP or TCP. Currently, UDP is only supported in the Windows native client.

Type: [StreamingExperienceSettings](#) object

Required: No

## [UserSettings](#)

The actions that are enabled or disabled for users during their streaming sessions. By default, these actions are enabled.

Type: Array of [UserSetting](#) objects

Array Members: Minimum number of 1 item.

Required: No

## Response Syntax

```
{
  "Stack": {
    "AccessEndpoints": [
      {
        "EndpointType": "string",
        "VpceId": "string"
      }
    ],
    "ApplicationSettings": {
      "Enabled": boolean,
      "S3BucketName": "string",
      "SettingsGroup": "string"
    },
    "Arn": "string",
    "CreatedTime": number,
    "Description": "string",
    "DisplayName": "string",
    "EmbedHostDomains": [ "string" ],
    "FeedbackURL": "string",
    "Name": "string",
    "RedirectURL": "string",
    "StackErrors": [
      {
        "ErrorCode": "string",
        "ErrorMessage": "string"
      }
    ]
  }
}
```



```
    ],
    "StorageConnectors": [
      {
        "ConnectorType": "string",
        "Domains": [ "string" ],
        "ResourceIdentifier": "string"
      }
    ],
    "StreamingExperienceSettings": {
      "PreferredProtocol": "string"
    },
    "UserSettings": [
      {
        "Action": "string",
        "MaximumLength": number,
        "Permission": "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

Information about the stack.

Type: [Stack](#) object

## Errors

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

### **ConcurrentModificationException**

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

HTTP Status Code: 400

### **IncompatibleImageException**

The image can't be updated because it's not compatible for updates.

HTTP Status Code: 400

### **InvalidAccountStatusException**

The resource cannot be created because your AWS account is suspended. For assistance, contact AWS Support.

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 v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# UpdateThemeForStack

Updates custom branding that customizes the appearance of the streaming application catalog page.

## Request Syntax

```
{
  "AttributesToDelete": [ "string" ],
  "FaviconS3Location": {
    "S3Bucket": "string",
    "S3Key": "string"
  },
  "FooterLinks": [
    {
      "DisplayName": "string",
      "FooterLinkURL": "string"
    }
  ],
  "OrganizationLogoS3Location": {
    "S3Bucket": "string",
    "S3Key": "string"
  },
  "StackName": "string",
  "State": "string",
  "ThemeStyling": "string",
  "TitleText": "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

The attributes to delete.

Type: Array of strings

Valid Values: FOOTER\_LINKS

Required: No

### FaviconS3Location

The S3 location of the favicon. The favicon enables users to recognize their application streaming site in a browser full of tabs or bookmarks. It is displayed at the top of the browser tab for the application streaming site during users' streaming sessions.

Type: [S3Location](#) object

Required: No

### FooterLinks

The links that are displayed in the footer of the streaming application catalog page. These links are helpful resources for users, such as the organization's IT support and product marketing sites.

Type: Array of [ThemeFooterLink](#) objects

Required: No

### OrganizationLogoS3Location

The organization logo that appears on the streaming application catalog page.

Type: [S3Location](#) object

Required: No

### StackName

The name of the stack for the theme.

Type: String

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

Required: Yes

### State

Specifies whether custom branding should be applied to catalog page or not.

Type: String

Valid Values: ENABLED | DISABLED

Required: No

### ThemeStyling

The color theme that is applied to website links, text, and buttons. These colors are also applied as accents in the background for the streaming application catalog page.

Type: String

Valid Values: LIGHT\_BLUE | BLUE | PINK | RED

Required: No

### TitleText

The title that is displayed at the top of the browser tab during users' application streaming sessions.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 300.

Pattern: `^[-@./#&+\w\s]*$`

Required: No

## Response Syntax

```
{
  "Theme": {
    "CreatedTime": number,
    "StackName": "string",
    "State": "string",
    "ThemeFaviconURL": "string",
    "ThemeFooterLinks": [
      {
        "DisplayName": "string",
        "FooterLinkURL": "string"
      }
    ],
    "ThemeOrganizationLogoURL": "string",
    "ThemeStyling": "string",
    "ThemeTitleText": "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.

### Theme

The theme object that contains the metadata of the custom branding.

Type: [Theme](#) object

## Errors

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

### **ConcurrentModificationException**

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

HTTP Status Code: 400

### **InvalidAccountStatusException**

The resource cannot be created because your AWS account is suspended. For assistance, contact AWS Support.

HTTP Status Code: 400

### **InvalidParameterCombinationException**

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

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 v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)



# 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:

- [AccessEndpoint](#)
- [AppBlock](#)
- [AppBlockBuilder](#)
- [AppBlockBuilderAppBlockAssociation](#)
- [AppBlockBuilderStateChangeReason](#)
- [Application](#)
- [ApplicationFleetAssociation](#)
- [ApplicationSettings](#)
- [ApplicationSettingsResponse](#)
- [CertificateBasedAuthProperties](#)
- [ComputeCapacity](#)
- [ComputeCapacityStatus](#)
- [DirectoryConfig](#)
- [DomainJoinInfo](#)
- [EntitledApplication](#)
- [Entitlement](#)
- [EntitlementAttribute](#)
- [ErrorDetails](#)
- [Fleet](#)
- [FleetError](#)

- [Image](#)
- [ImageBuilder](#)
- [ImageBuilderStateChangeReason](#)
- [ImagePermissions](#)
- [ImageStateChangeReason](#)
- [LastReportGenerationExecutionError](#)
- [NetworkAccessConfiguration](#)
- [ResourceError](#)
- [S3Location](#)
- [ScriptDetails](#)
- [ServiceAccountCredentials](#)
- [Session](#)
- [SharedImagePermissions](#)
- [Stack](#)
- [StackError](#)
- [StorageConnector](#)
- [StreamingExperienceSettings](#)
- [Theme](#)
- [ThemeFooterLink](#)
- [UsageReportSubscription](#)
- [User](#)
- [UserSetting](#)
- [UserStackAssociation](#)
- [UserStackAssociationError](#)
- [VpcConfig](#)

# AccessEndpoint

Describes an interface VPC endpoint (interface endpoint) that lets you create a private connection between the virtual private cloud (VPC) that you specify and AppStream 2.0. When you specify an interface endpoint for a stack, users of the stack can connect to AppStream 2.0 only through that endpoint. When you specify an interface endpoint for an image builder, administrators can connect to the image builder only through that endpoint.

## Contents

### EndpointType

The type of interface endpoint.

Type: String

Valid Values: STREAMING

Required: Yes

### VpcId

The identifier (ID) of the VPC in which the interface endpoint is used.

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

# AppBlock

Describes an app block.

App blocks are an Amazon AppStream 2.0 resource that stores the details about the virtual hard disk in an S3 bucket. It also stores the setup script with details about how to mount the virtual hard disk. The virtual hard disk includes the application binaries and other files necessary to launch your applications. Multiple applications can be assigned to a single app block.

This is only supported for Elastic fleets.

## Contents

### Arn

The ARN of the app block.

Type: String

Pattern: `^arn:aws(?:\-cn|\-iso\-b|\-iso|\-us\-gov)?:[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

### Name

The name of the app block.

Type: String

Length Constraints: Minimum length of 1.

Required: Yes

### AppBlockErrors

The errors of the app block.

Type: Array of [ErrorDetails](#) objects

Required: No

## CreatedTime

The created time of the app block.

Type: Timestamp

Required: No

## Description

The description of the app block.

Type: String

Length Constraints: Minimum length of 1.

Required: No

## DisplayName

The display name of the app block.

Type: String

Length Constraints: Minimum length of 1.

Required: No

## PackagingType

The packaging type of the app block.

Type: String

Valid Values: CUSTOM | APPSTREAM2

Required: No

## PostSetupScriptDetails

The post setup script details of the app block.

This only applies to app blocks with PackagingType APPSTREAM2.

Type: [ScriptDetails](#) object

Required: No

## SetupScriptDetails

The setup script details of the app block.

This only applies to app blocks with PackagingType CUSTOM.

Type: [ScriptDetails](#) object

Required: No

## SourceS3Location

The source S3 location of the app block.

Type: [S3Location](#) object

Required: No

## State

The state of the app block.

An app block with AppStream 2.0 packaging will be in the INACTIVE state if no application package (VHD) is assigned to it. After an application package (VHD) is created by an app block builder for an app block, it becomes ACTIVE.

Custom app blocks are always in the ACTIVE state and no action is required to use them.

Type: String

Valid Values: INACTIVE | ACTIVE

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



# AppBlockBuilder

Describes an app block builder.

## Contents

### Arn

The ARN of the app block builder.

Type: String

Pattern: `^arn:aws(?:\-cn|\-iso\-b|\-iso|\-us\-gov)?:[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

### InstanceType

The instance type of the app block builder.

Type: String

Length Constraints: Minimum length of 1.

Required: Yes

### Name

The name of the app block builder.

Type: String

Length Constraints: Minimum length of 1.

Required: Yes

### Platform

The platform of the app block builder.

WINDOWS\_SERVER\_2019 is the only valid value.

Type: String



Valid Values: WINDOWS\_SERVER\_2019

Required: Yes

### State

The state of the app block builder.

Type: String

Valid Values: STARTING | RUNNING | STOPPING | STOPPED

Required: Yes

### VpcConfig

The VPC configuration for the app block builder.

Type: [VpcConfig](#) object

Required: Yes

### AccessEndpoints

The list of interface VPC endpoint (interface endpoint) objects. Administrators can connect to the app block builder only through the specified endpoints.

Type: Array of [AccessEndpoint](#) objects

Array Members: Minimum number of 1 item. Maximum number of 4 items.

Required: No

### AppBlockBuilderErrors

The app block builder errors.

Type: Array of [ResourceError](#) objects

Required: No

### CreatedTime

The creation time of the app block builder.

Type: Timestamp

Required: No

### Description

The description of the app block builder.

Type: String

Length Constraints: Minimum length of 1.

Required: No

### DisplayName

The display name of the app block builder.

Type: String

Length Constraints: Minimum length of 1.

Required: No

### EnableDefaultInternetAccess

Indicates whether default internet access is enabled for the app block builder.

Type: Boolean

Required: No

### IamRoleArn

The ARN of the IAM role that is applied to the app block builder.

Type: String

Pattern: `^arn:aws(?:\-cn|\-iso\-b|\-iso|\-us\-gov)?:[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

### StateChangeReason

The state change reason.

Type: [AppBlockBuilderStateChangeReason](#) 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 Java V2](#)
- [AWS SDK for Ruby V3](#)

# AppBlockBuilderAppBlockAssociation

Describes an association between an app block builder and app block.

## Contents

### AppBlockArn

The ARN of the app block.

Type: String

Pattern: `^arn:aws(?:\-cn|\-iso\-b|\-iso|\-us\-gov)?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=@.\-]{0,1023}$`

Required: Yes

### AppBlockBuilderName

The name of the app block builder.

Type: String

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

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

# AppBlockBuilderStateChangeReason

Describes the reason why the last app block builder state change occurred.

## Contents

### Code

The state change reason code.

Type: String

Valid Values: INTERNAL\_ERROR

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

# Application

Describes an application in the application catalog.

## Contents

### AppBlockArn

The app block ARN of the application.

Type: String

Pattern: `^arn:aws(?:\-cn|\-iso\-b|\-iso|\-us\-gov)?:[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

### Arn

The ARN of the application.

Type: String

Pattern: `^arn:aws(?:\-cn|\-iso\-b|\-iso|\-us\-gov)?:[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 at which the application was created within the app block.

Type: Timestamp

Required: No

### Description

The description of the application.

Type: String

Length Constraints: Minimum length of 1.

Required: No

### **DisplayName**

The application name to 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

### **IconS3Location**

The S3 location of the application icon.

Type: [S3Location](#) object

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

### **InstanceFamilies**

The instance families for the application.

Type: Array of strings

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

### **Platforms**

The platforms on which the application can run.



Type: Array of strings

Array Members: Maximum number of 4 items.

Valid Values: WINDOWS | WINDOWS\_SERVER\_2016 | WINDOWS\_SERVER\_2019 |  
WINDOWS\_SERVER\_2022 | AMAZON\_LINUX2 | RHEL8 | ROCKY\_LINUX8

Required: No

### **WorkingDirectory**

The working directory for 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 Java V2](#)
- [AWS SDK for Ruby V3](#)

# ApplicationFleetAssociation

Describes the application fleet association.

## Contents

### ApplicationArn

The ARN of the application associated with the fleet.

Type: String

Pattern: `^arn:aws(?:\-cn|\-iso\-b|\-iso|\-us\-gov)?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=@.\-]{0,1023}$`

Required: Yes

### FleetName

The name of the fleet associated with the application.

Type: String

Length Constraints: Minimum length of 1.

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

# ApplicationSettings

The persistent application settings for users of a stack.

## Contents

### Enabled

Enables or disables persistent application settings for users during their streaming sessions.

Type: Boolean

Required: Yes

### SettingsGroup

The path prefix for the S3 bucket where users' persistent application settings are stored. You can allow the same persistent application settings to be used across multiple stacks by specifying the same settings group for each stack.

Type: String

Length Constraints: Maximum length of 100.

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

# ApplicationSettingsResponse

Describes the persistent application settings for users of a stack.

## Contents

### Enabled

Specifies whether persistent application settings are enabled for users during their streaming sessions.

Type: Boolean

Required: No

### S3BucketName

The S3 bucket where users' persistent application settings are stored. When persistent application settings are enabled for the first time for an account in an AWS Region, an S3 bucket is created. The bucket is unique to the AWS account and the Region.

Type: String

Length Constraints: Minimum length of 1.

Required: No

### SettingsGroup

The path prefix for the S3 bucket where users' persistent application settings are stored.

Type: String

Length Constraints: Maximum length of 100.

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

# CertificateBasedAuthProperties

The certificate-based authentication properties used to authenticate SAML 2.0 Identity Provider (IdP) user identities to Active Directory domain-joined streaming instances. Fallback is turned on by default when certificate-based authentication is **Enabled** . Fallback allows users to log in using their AD domain password if certificate-based authentication is unsuccessful, or to unlock a desktop lock screen. **Enabled\_no\_directory\_login\_fallback** enables certificate-based authentication, but does not allow users to log in using their AD domain password. Users will be disconnected to re-authenticate using certificates.

## Contents

### CertificateAuthorityArn

The ARN of the AWS Certificate Manager Private CA resource.

Type: String

Pattern: `^arn:aws(?:\-cn|\-iso\-b|\-iso|\-us\-gov)?:[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

### Status

The status of the certificate-based authentication properties.

Type: String

Valid Values: `DISABLED` | `ENABLED` | `ENABLED_NO_DIRECTORY_LOGIN_FALLBACK`

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

# ComputeCapacity

Describes the capacity for a fleet.

## Contents

### DesiredInstances

The desired number of streaming instances.

Type: Integer

Required: No

### DesiredSessions

The desired number of user sessions for a multi-session fleet. This is not allowed for single-session fleets.

When you create a fleet, you must set either the `DesiredSessions` or `DesiredInstances` attribute, based on the type of fleet you create. You can't define both attributes or leave both attributes blank.

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



# ComputeCapacityStatus

Describes the capacity status for a fleet.

## Contents

### Desired

The desired number of streaming instances.

Type: Integer

Required: Yes

### ActiveUserSessions

The number of user sessions currently being used for streaming sessions. This only applies to multi-session fleets.

Type: Integer

Required: No

### ActualUserSessions

The total number of session slots that are available for streaming or are currently streaming.

$\text{ActualUserSessionCapacity} = \text{AvailableUserSessionCapacity} + \text{ActiveUserSessions}$

This only applies to multi-session fleets.

Type: Integer

Required: No

### Available

The number of currently available instances that can be used to stream sessions.

Type: Integer

Required: No

### AvailableUserSessions

The number of idle session slots currently available for user sessions.

$\text{AvailableUserSessionCapacity} = \text{ActualUserSessionCapacity} - \text{ActiveUserSessions}$

This only applies to multi-session fleets.

Type: Integer

Required: No

### **DesiredUserSessions**

The total number of sessions slots that are either running or pending. This represents the total number of concurrent streaming sessions your fleet can support in a steady state.

$\text{DesiredUserSessionCapacity} = \text{ActualUserSessionCapacity} + \text{PendingUserSessionCapacity}$

This only applies to multi-session fleets.

Type: Integer

Required: No

### **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 Java V2](#)

- [AWS SDK for Ruby V3](#)

# DirectoryConfig

Describes the configuration information required to join fleets and image builders to Microsoft Active Directory domains.

## Contents

### DirectoryName

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

Type: String

Required: Yes

### CertificateBasedAuthProperties

The certificate-based authentication properties used to authenticate SAML 2.0 Identity Provider (IdP) user identities to Active Directory domain-joined streaming instances. Fallback is turned on by default when certificate-based authentication is **Enabled**. Fallback allows users to log in using their AD domain password if certificate-based authentication is unsuccessful, or to unlock a desktop lock screen. **Enabled\_no\_directory\_login\_fallback** enables certificate-based authentication, but does not allow users to log in using their AD domain password. Users will be disconnected to re-authenticate using certificates.

Type: [CertificateBasedAuthProperties](#) object

Required: No

### CreatedTime

The time the directory configuration was created.

Type: Timestamp

Required: No

### OrganizationalUnitDistinguishedNames

The distinguished names of the organizational units for computer accounts.

Type: Array of strings

Length Constraints: Maximum length of 2000.

Required: No

## **ServiceAccountCredentials**

The credentials for the service account used by the fleet or image builder to connect to the directory.

Type: [ServiceAccountCredentials](#) 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 Java V2](#)
- [AWS SDK for Ruby V3](#)

# DomainJoinInfo

Describes the configuration information required to join fleets and image builders to Microsoft Active Directory domains.

## 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

Length Constraints: Maximum length of 2000.

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

# EntitledApplication

The application associated to an entitlement. Access is controlled based on user attributes.

## Contents

### ApplicationIdentifier

The identifier of the application.

Type: String

Length Constraints: Minimum length of 1.

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

# Entitlement

Specifies an entitlement. Entitlements control access to specific applications within a stack, based on user attributes. Entitlements apply to SAML 2.0 federated user identities. Amazon AppStream 2.0 user pool and streaming URL users are entitled to all applications in a stack. Entitlements don't apply to the desktop stream view application, or to applications managed by a dynamic app provider using the Dynamic Application Framework.

## Contents

### AppVisibility

Specifies whether all or selected apps are entitled.

Type: String

Valid Values: ALL | ASSOCIATED

Required: Yes

### Attributes

The attributes of the entitlement.

Type: Array of [EntitlementAttribute](#) objects

Array Members: Minimum number of 1 item.

Required: Yes

### Name

The name of the entitlement.

Type: String

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

Required: Yes

### StackName

The name of the stack with which the entitlement is associated.



Type: String

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

Required: Yes

### **CreatedTime**

The time when the entitlement was created.

Type: Timestamp

Required: No

### **Description**

The description of the entitlement.

Type: String

Length Constraints: Maximum length of 256.

Required: No

### **LastModifiedTime**

The time when the entitlement was last modified.

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

# EntitlementAttribute

An attribute associated with an entitlement. Application entitlements work by matching a supported SAML 2.0 attribute name to a value when a user identity federates to an Amazon AppStream 2.0 SAML application.

## Contents

### Name

A supported AWS IAM SAML `PrincipalTag` attribute that is matched to the associated value when a user identity federates into an Amazon AppStream 2.0 SAML application.

The following are valid values:

- roles
- department
- organization
- groups
- title
- costCenter
- userType

Type: String

Length Constraints: Minimum length of 1.

Required: Yes

### Value

A value that is matched to a supported SAML attribute name when a user identity federates into an Amazon AppStream 2.0 SAML application.

Type: String

Length Constraints: Minimum length of 1.

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

# ErrorDetails

The error details.

## Contents

### ErrorCode

The error code.

Type: String

Length Constraints: Minimum length of 1.

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

# Fleet

Describes a fleet.

## Contents

### Arn

The Amazon Resource Name (ARN) for the fleet.

Type: String

Pattern: `^arn:aws(?:\-cn|\-iso\-b|\-iso|\-us\-gov)?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[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: [ComputeCapacityStatus](#) object

Required: Yes

### InstanceType

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

- stream.standard.small
- 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.memory.z1d.large
- stream.memory.z1d.xlarge
- stream.memory.z1d.2xlarge
- stream.memory.z1d.3xlarge
- stream.memory.z1d.6xlarge
- stream.memory.z1d.12xlarge
- stream.graphics-design.large
- stream.graphics-design.xlarge
- stream.graphics-design.2xlarge
- stream.graphics-design.4xlarge
- stream.graphics-desktop.2xlarge
- stream.graphics.g4dn.xlarge
- stream.graphics.g4dn.2xlarge
- stream.graphics.g4dn.4xlarge
- stream.graphics.g4dn.8xlarge
- stream.graphics.g4dn.12xlarge
- stream.graphics.g4dn.16xlarge
- stream.graphics-pro.4xlarge
- stream.graphics-pro.8xlarge
- stream.graphics-pro.16xlarge

Type: String

Length Constraints: Minimum length of 1.

Required: Yes

## 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

### **CreatedTime**

The time the fleet was created.

Type: Timestamp

Required: No

### **Description**

The description to display.

Type: String

Length Constraints: Minimum length of 1.

Required: No

### **DisconnectTimeoutInSeconds**

The amount of time that a streaming session remains active after users disconnect. If they try to reconnect to the streaming session after a disconnection or network interruption within this time interval, they are connected to their previous session. Otherwise, they are connected to a new session with a new streaming instance.

Specify a value between 60 and 36000.

Type: Integer

Required: No

### **DisplayName**

The fleet name to display.

Type: String

Length Constraints: Minimum length of 1.

Required: No

### **DomainJoinInfo**

The name of the directory and organizational unit (OU) to use to join the fleet to a Microsoft Active Directory domain.

Type: [DomainJoinInfo](#) 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](#) 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 | ELASTIC

Required: No

## IamRoleArn

The ARN of the IAM role that is applied to the fleet. To assume a role, the fleet instance calls the AWS Security Token Service (STS) AssumeRole API operation and passes the ARN of the role to use. The operation creates a new session with temporary credentials. AppStream 2.0 retrieves the temporary credentials and creates the **appstream\_machine\_role** credential profile on the instance.

For more information, see [Using an IAM Role to Grant Permissions to Applications and Scripts Running on AppStream 2.0 Streaming Instances](#) in the *Amazon AppStream 2.0 Administration Guide*.

Type: String

Pattern: ^arn:aws(?:\-cn|\-iso\-b|\-iso|\-us\-gov)?:[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

## IdleDisconnectTimeoutInSeconds

The amount of time that users can be idle (inactive) before they are disconnected from their streaming session and the DisconnectTimeoutInSeconds time interval begins. Users are notified before they are disconnected due to inactivity. If users try to reconnect to the streaming session before the time interval specified in DisconnectTimeoutInSeconds elapses, they are connected to their previous session. Users are considered idle when they stop providing keyboard or mouse input during their streaming session. File uploads and downloads, audio in, audio out, and pixels changing do not qualify as user activity. If users continue to

be idle after the time interval in `IdleDisconnectTimeoutInSeconds` elapses, they are disconnected.

To prevent users from being disconnected due to inactivity, specify a value of 0. Otherwise, specify a value between 60 and 36000. The default value is 0.

 **Note**

If you enable this feature, we recommend that you specify a value that corresponds exactly to a whole number of minutes (for example, 60, 120, and 180). If you don't do this, the value is rounded to the nearest minute. For example, if you specify a value of 70, users are disconnected after 1 minute of inactivity. If you specify a value that is at the midpoint between two different minutes, the value is rounded up. For example, if you specify a value of 90, users are disconnected after 2 minutes of inactivity.

Type: Integer

Required: No

### ImageArn

The ARN for the public, private, or shared image.

Type: String

Pattern: `^arn:aws(?:\-cn|\-iso\-b|\-iso|\-us\-gov)?:[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

### ImageName

The name of the image used to create the fleet.

Type: String

Length Constraints: Minimum length of 1.

Required: No

## MaxConcurrentSessions

The maximum number of concurrent sessions for the fleet.

Type: Integer

Required: No

## MaxSessionsPerInstance

The maximum number of user sessions on an instance. This only applies to multi-session fleets.

Type: Integer

Required: No

## MaxUserDurationInSeconds

The maximum amount of time that a streaming session can remain active, in seconds. If users are still connected to a streaming instance five minutes before this limit is reached, they are prompted to save any open documents before being disconnected. After this time elapses, the instance is terminated and replaced by a new instance.

Specify a value between 600 and 360000.

Type: Integer

Required: No

## Platform

The platform of the fleet.

Type: String

Valid Values: WINDOWS | WINDOWS\_SERVER\_2016 | WINDOWS\_SERVER\_2019 | WINDOWS\_SERVER\_2022 | AMAZON\_LINUX2 | RHEL8 | ROCKY\_LINUX8

Required: No

## SessionScriptS3Location

The S3 location of the session scripts configuration zip file. This only applies to Elastic fleets.

Type: [S3Location](#) object

Required: No

## StreamView

The AppStream 2.0 view that is displayed to your users when they stream from the fleet. When APP is specified, only the windows of applications opened by users display. When DESKTOP is specified, the standard desktop that is provided by the operating system displays.

The default value is APP.

Type: String

Valid Values: APP | DESKTOP

Required: No

## UsbDeviceFilterStrings

The USB device filter strings associated with the fleet.

Type: Array of strings

Length Constraints: Minimum length of 0. Maximum length of 100.

Pattern: `^((\w*)\s*(\w*)\s*\, \s*(\w*)\s*\, \s*\*?(\w*)\s*\, \s*\*?(\w*)\s*\, \s*\*?\d*\s*\, \s*\*?\d*\s*\, \s*[0-1]\s*\, \s*[0-1]\s*)$`

Required: No

## VpcConfig

The VPC configuration for the fleet.

Type: [VpcConfig](#) 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 Java V2](#)
- [AWS SDK for Ruby V3](#)

# FleetError

Describes a fleet 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 | MACHINE\_ROLE\_IS\_MISSING | STS\_DISABLED\_IN\_REGION | 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 | FLEET\_STOPPED | FLEET\_INSTANCE\_PROVISIONING\_FAILURE | 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

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

# Image

Describes an image.

## Contents

### Name

The name of the image.

Type: String

Length Constraints: Minimum length of 1.

Required: Yes

### Applications

The applications associated with the image.

Type: Array of [Application](#) 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(?:\-cn|\-iso\-b|\-iso|\-us\-gov)?:[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(?:\-cn|\-iso\-b|\-iso|\-us\-gov)?:[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 to display.

Type: String

Length Constraints: Minimum length of 1.

Required: No

## DisplayName

The image name to display.

Type: String

Length Constraints: Minimum length of 1.

Required: No

## DynamicAppProvidersEnabled

Indicates whether dynamic app providers are enabled within an AppStream 2.0 image or not.

Type: String

Valid Values: ENABLED | DISABLED

Required: No

### **ImageBuilderName**

The name of the image builder that was used to create the private image. If the image is shared, this value is null.

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

### **ImageErrors**

Describes the errors that are returned when a new image can't be created.

Type: Array of [ResourceError](#) objects

Required: No

### **ImagePermissions**

The permissions to provide to the destination AWS account for the specified image.

Type: [ImagePermissions](#) object

Required: No

### **ImageSharedWithOthers**

Indicates whether the image is shared with another account ID.

Type: String

Valid Values: TRUE | FALSE

Required: No

## LatestAppstreamAgentVersion

Indicates whether the image is using the latest AppStream 2.0 agent version or not.

Type: String

Valid Values: TRUE | FALSE

Required: No

## Platform

The operating system platform of the image.

Type: String

Valid Values: WINDOWS | WINDOWS\_SERVER\_2016 | WINDOWS\_SERVER\_2019 | WINDOWS\_SERVER\_2022 | AMAZON\_LINUX2 | RHEL8 | ROCKY\_LINUX8

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 | COPYING | DELETING | CREATING | IMPORTING

Required: No

## StateChangeReason

The reason why the last state change occurred.

Type: [ImageStateChangeReason](#) object

Required: No

### SupportedInstanceFamilies

The supported instances families that determine which image a customer can use when the customer launches a fleet or image builder. The following instances families are supported:

- General Purpose
- Compute Optimized
- Memory Optimized
- Graphics
- Graphics Design
- Graphics Pro
- Graphics G4
- Graphics G5

Type: Array of strings

Length Constraints: Minimum length of 1.

Required: No

### Visibility

Indicates whether the image is public or private.

Type: String

Valid Values: PUBLIC | PRIVATE | SHARED

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 Java V2](#)

- [AWS SDK for Ruby V3](#)

# ImageBuilder

Describes a virtual machine that is used to create an image.

## Contents

### Name

The name of the image builder.

Type: String

Length Constraints: Minimum length of 1.

Required: Yes

### AccessEndpoints

The list of virtual private cloud (VPC) interface endpoint objects. Administrators can connect to the image builder only through the specified endpoints.

Type: Array of [AccessEndpoint](#) objects

Array Members: Minimum number of 1 item. Maximum number of 4 items.

Required: No

### AppstreamAgentVersion

The version of the AppStream 2.0 agent that is currently being used by the 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(?:\-cn|\-iso\-b|\-iso|\-us\-gov)?:[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 to display.

Type: String

Length Constraints: Minimum length of 1.

Required: No

### **DisplayName**

The image builder name to display.

Type: String

Length Constraints: Minimum length of 1.

Required: No

### **DomainJoinInfo**

The name of the directory and organizational unit (OU) to use to join the image builder to a Microsoft Active Directory domain.

Type: [DomainJoinInfo](#) object

Required: No

### **EnableDefaultInternetAccess**

Enables or disables default internet access for the image builder.

Type: Boolean

Required: No

## IamRoleArn

The ARN of the IAM role that is applied to the image builder. To assume a role, the image builder calls the AWS Security Token Service (STS) `AssumeRole` API operation and passes the ARN of the role to use. The operation creates a new session with temporary credentials. AppStream 2.0 retrieves the temporary credentials and creates the `appstream_machine_role` credential profile on the instance.

For more information, see [Using an IAM Role to Grant Permissions to Applications and Scripts Running on AppStream 2.0 Streaming Instances](#) in the *Amazon AppStream 2.0 Administration Guide*.

Type: String

Pattern: `^arn:aws(?:\-cn|\-iso\-b|\-iso|\-us\-gov)?:[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

## ImageArn

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

Type: String

Pattern: `^arn:aws(?:\-cn|\-iso\-b|\-iso|\-us\-gov)?:[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](#) objects

Required: No

## InstanceType

The instance type for the image builder. The following instance types are available:



- `stream.standard.small`
- `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.memory.z1d.large`
- `stream.memory.z1d.xlarge`
- `stream.memory.z1d.2xlarge`
- `stream.memory.z1d.3xlarge`
- `stream.memory.z1d.6xlarge`
- `stream.memory.z1d.12xlarge`
- `stream.graphics-design.large`
- `stream.graphics-design.xlarge`
- `stream.graphics-design.2xlarge`
- `stream.graphics-design.4xlarge`
- `stream.graphics-desktop.2xlarge`
- `stream.graphics.g4dn.xlarge`
- `stream.graphics.g4dn.2xlarge`
- `stream.graphics.g4dn.4xlarge`
- `stream.graphics.g4dn.8xlarge`
- `stream.graphics.g4dn.12xlarge`
- `stream.graphics.g4dn.16xlarge`

- stream.graphics-pro.4xlarge
- stream.graphics-pro.8xlarge
- stream.graphics-pro.16xlarge

Type: String

Length Constraints: Minimum length of 1.

Required: No

### **LatestAppstreamAgentVersion**

Indicates whether the image builder is using the latest AppStream 2.0 agent version or not.

Type: String

Valid Values: TRUE | FALSE

Required: No

### **NetworkAccessConfiguration**

Describes the network details of the fleet or image builder instance.

Type: [NetworkAccessConfiguration](#) object

Required: No

### **Platform**

The operating system platform of the image builder.

Type: String

Valid Values: WINDOWS | WINDOWS\_SERVER\_2016 | WINDOWS\_SERVER\_2019 | WINDOWS\_SERVER\_2022 | AMAZON\_LINUX2 | RHEL8 | ROCKY\_LINUX8

Required: No

### **State**

The state of the image builder.

Type: String

Valid Values: PENDING | UPDATING\_AGENT | RUNNING | STOPPING | STOPPED  
| REBOOTING | SNAPSHOTTING | DELETING | FAILED | UPDATING |  
PENDING\_QUALIFICATION

Required: No

### **StateChangeReason**

The reason why the last state change occurred.

Type: [ImageBuilderStateChangeReason](#) object

Required: No

### **VpcConfig**

The VPC configuration of the image builder.

Type: [VpcConfig](#) 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 Java V2](#)
- [AWS SDK for Ruby V3](#)

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

# ImagePermissions

Describes the permissions for an image.

## Contents

### **allowFleet**

Indicates whether the image can be used for a fleet.

Type: Boolean

Required: No

### **allowImageBuilder**

Indicates whether the image can be used for an image builder.

Type: Boolean

Required: No

## See Also

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

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

# 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 | IMAGE\_COPY\_FAILURE

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

# LastReportGenerationExecutionError

Describes the error that is returned when a usage report can't be generated.

## Contents

### ErrorCode

The error code for the error that is returned when a usage report can't be generated.

Type: String

Valid Values: RESOURCE\_NOT\_FOUND | ACCESS\_DENIED | INTERNAL\_SERVICE\_ERROR

Required: No

### ErrorMessage

The error message for the error that is returned when a usage report can't be generated.

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

# NetworkAccessConfiguration

Describes the network details of the fleet or image builder instance.

## Contents

### EniId

The resource identifier of the elastic network interface that is attached to instances in your VPC. All network interfaces have the eni-xxxxxxx resource identifier.

Type: String

Length Constraints: Minimum length of 1.

Required: No

### EniPrivateIpAddress

The private IP address of the elastic network interface that is attached to instances in your VPC.

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



# 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 | MACHINE\_ROLE\_IS\_MISSING | STS\_DISABLED\_IN\_REGION | 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 | FLEET\_STOPPED | FLEET\_INSTANCE\_PROVISIONING\_FAILURE | 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 Java V2](#)
- [AWS SDK for Ruby V3](#)

# S3Location

Describes the S3 location.

## Contents

### S3Bucket

The S3 bucket of the S3 object.

Type: String

Length Constraints: Minimum length of 3. Maximum length of 63.

Pattern: `^[0-9a-z\.\-]*(?<!\. )$`

Required: Yes

### S3Key

The S3 key of the S3 object.

This is required when used for the following:

- IconS3Location (Actions: CreateApplication and UpdateApplication)
- SessionScriptS3Location (Actions: CreateFleet and UpdateFleet)
- ScriptDetails (Actions: CreateAppBlock)
- SourceS3Location when creating an app block with CUSTOM PackagingType (Actions: CreateAppBlock)
- SourceS3Location when creating an app block with APPSTREAM2 PackagingType, and using an existing application package (VHD file). In this case, S3Key refers to the VHD file. If a new application package is required, then S3Key is not required. (Actions: CreateAppBlock)

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1024.

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

# ScriptDetails

Describes the details of the script.

## Contents

### ExecutablePath

The run path for the script.

Type: String

Length Constraints: Minimum length of 1.

Required: Yes

### ScriptS3Location

The S3 object location for the script.

Type: [S3Location](#) object

Required: Yes

### TimeoutInSeconds

The run timeout, in seconds, for the script.

Type: Integer

Required: Yes

### ExecutableParameters

The runtime parameters passed to the run path for the script.

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

# ServiceAccountCredentials

Describes the credentials for the service account used by the fleet or image builder 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

Length Constraints: Minimum length of 1. Maximum length of 127.

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

# Session

Describes a streaming session.

## Contents

### FleetName

The name of the fleet for the streaming session.

Type: String

Length Constraints: Minimum length of 1.

Required: Yes

### Id

The identifier 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



## **UserId**

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

Type: String

Length Constraints: Minimum length of 2. Maximum length of 128.

Required: Yes

## **AuthenticationType**

The authentication method. The user is authenticated using a streaming URL (API) or SAML 2.0 federation (SAML).

Type: String

Valid Values: API | SAML | USERPOOL | AWS\_AD

Required: No

## **ConnectionState**

Specifies whether a user is connected to the streaming session.

Type: String

Valid Values: CONNECTED | NOT\_CONNECTED

Required: No

## **Instanceld**

The identifier for the instance hosting the session.

Type: String

Length Constraints: Minimum length of 1.

Required: No

## **MaxExpirationTime**

The time when the streaming session is set to expire. This time is based on the `MaxUserDurationInSeconds` value, which determines the maximum length of time that a streaming session can run. A streaming session might end earlier than the time specified in

`SessionMaxExpirationTime`, when the `DisconnectTimeoutInSeconds` elapses or the user chooses to end his or her session. If the `DisconnectTimeoutInSeconds` elapses, or the user chooses to end his or her session, the streaming instance is terminated and the streaming session ends.

Type: Timestamp

Required: No

## **NetworkAccessConfiguration**

The network details for the streaming session.

Type: [NetworkAccessConfiguration](#) object

Required: No

## **StartTime**

The time when a streaming instance is dedicated for the user.

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

# SharedImagePermissions

Describes the permissions that are available to the specified AWS account for a shared image.

## Contents

### imagePermissions

Describes the permissions for a shared image.

Type: [ImagePermissions](#) object

Required: Yes

### sharedAccountId

The 12-digit identifier of the AWS account with which the image is shared.

Type: String

Pattern: `^\d+$`

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

# Stack

Describes a stack.

## Contents

### Name

The name of the stack.

Type: String

Length Constraints: Minimum length of 1.

Required: Yes

### AccessEndpoints

The list of virtual private cloud (VPC) interface endpoint objects. Users of the stack can connect to AppStream 2.0 only through the specified endpoints.

Type: Array of [AccessEndpoint](#) objects

Array Members: Minimum number of 1 item. Maximum number of 4 items.

Required: No

### ApplicationSettings

The persistent application settings for users of the stack.

Type: [ApplicationSettingsResponse](#) object

Required: No

### Arn

The ARN of the stack.

Type: String

Pattern: `^arn:aws(?:\-cn|\-iso\-b|\-iso|\-us\-gov)?:[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 to display.

Type: String

Length Constraints: Minimum length of 1.

Required: No

### **DisplayName**

The stack name to display.

Type: String

Length Constraints: Minimum length of 1.

Required: No

### **EmbedHostDomains**

The domains where AppStream 2.0 streaming sessions can be embedded in an iframe. You must approve the domains that you want to host embedded AppStream 2.0 streaming sessions.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 20 items.

Length Constraints: Maximum length of 128.

Pattern: `(?:[a-z0-9](?:[a-z0-9-]{0,61}[a-z0-9])?\.)+[a-z0-9][a-z0-9-]{0,61}[a-z0-9]`

Required: No

## FeedbackURL

The URL that users are redirected to after they click the Send Feedback link. If no URL is specified, no Send Feedback link is displayed.

Type: String

Length Constraints: Maximum length of 1000.

Required: No

## RedirectURL

The URL that users are redirected to after their streaming session ends.

Type: String

Length Constraints: Maximum length of 1000.

Required: No

## StackErrors

The errors for the stack.

Type: Array of [StackError](#) objects

Required: No

## StorageConnectors

The storage connectors to enable.

Type: Array of [StorageConnector](#) objects

Required: No

## StreamingExperienceSettings

The streaming protocol you want your stack to prefer. This can be UDP or TCP. Currently, UDP is only supported in the Windows native client.

Type: [StreamingExperienceSettings](#) object

Required: No

## UserSettings

The actions that are enabled or disabled for users during their streaming sessions. By default these actions are enabled.

Type: Array of [UserSetting](#) objects

Array Members: Minimum number of 1 item.

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

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



# StorageConnector

Describes a connector that enables persistent storage for users.

## Contents

### ConnectorType

The type of storage connector.

Type: String

Valid Values: HOMEFOLDERS | GOOGLE\_DRIVE | ONE\_DRIVE

Required: Yes

### Domains

The names of the domains for the account.

Type: Array of strings

Array Members: Maximum number of 50 items.

Length Constraints: Minimum length of 1. Maximum length of 64.

Required: No

### ResourceIdentifier

The ARN of the storage connector.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

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

# StreamingExperienceSettings

The streaming protocol you want your stack to prefer. This can be UDP or TCP. Currently, UDP is only supported in the Windows native client.

## Contents

### PreferredProtocol

The preferred protocol that you want to use while streaming your application.

Type: String

Valid Values: TCP | UDP

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

# Theme

The custom branding theme, which might include a custom logo, website links, and other branding to display to users.

## Contents

### CreatedTime

The time the theme was created.

Type: Timestamp

Required: No

### StackName

The stack that has the custom branding theme.

Type: String

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

Required: No

### State

The state of the theme.

Type: String

Valid Values: ENABLED | DISABLED

Required: No

### ThemeFaviconURL

The URL of the icon that displays at the top of a user's browser tab during streaming sessions.

Type: String

Length Constraints: Minimum length of 1.

Required: No

## ThemeFooterLinks

The website links that display in the catalog page footer.

Type: Array of [ThemeFooterLink](#) objects

Required: No

## ThemeOrganizationLogoURL

The URL of the logo that displays in the catalog page header.

Type: String

Length Constraints: Minimum length of 1.

Required: No

## ThemeStyling

The color that is used for the website links, text, buttons, and catalog page background.

Type: String

Valid Values: LIGHT\_BLUE | BLUE | PINK | RED

Required: No

## ThemeTitleText

The browser tab page title.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 300.

Pattern: `^[-@./#&+\w\s]*$`

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

# ThemeFooterLink

The website links that display in the catalog page footer.

## Contents

### DisplayName

The name of the websites that display in the catalog page footer.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 300.

Pattern: `^[-@./#&+\w\s]*$`

Required: No

### FooterLinkURL

The URL of the websites that display in the catalog page footer.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1000.

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

# UsageReportSubscription

Describes information about the usage report subscription.

## Contents

### LastGeneratedReportDate

The time when the last usage report was generated.

Type: Timestamp

Required: No

### S3BucketName

The Amazon S3 bucket where generated reports are stored.

If you enabled on-instance session scripts and Amazon S3 logging for your session script configuration, AppStream 2.0 created an S3 bucket to store the script output. The bucket is unique to your account and Region. When you enable usage reporting in this case, AppStream 2.0 uses the same bucket to store your usage reports. If you haven't already enabled on-instance session scripts, when you enable usage reports, AppStream 2.0 creates a new S3 bucket.

Type: String

Length Constraints: Minimum length of 1.

Required: No

### Schedule

The schedule for generating usage reports.

Type: String

Valid Values: DAILY

Required: No

### SubscriptionErrors

The errors that were returned if usage reports couldn't be generated.



Type: Array of [LastReportGenerationExecutionError](#) 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 Java V2](#)
- [AWS SDK for Ruby V3](#)

# User

Describes a user in the user pool.

## Contents

### AuthenticationType

The authentication type for the user.

Type: String

Valid Values: API | SAML | USERPOOL | AWS\_AD

Required: Yes

### Arn

The ARN of the user.

Type: String

Pattern: `^arn:aws(?:\-cn|\-iso\-b|\-iso|\-us\-gov)?:[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 date and time the user was created in the user pool.

Type: Timestamp

Required: No

### Enabled

Specifies whether the user in the user pool is enabled.

Type: Boolean

Required: No

## FirstName

The first name, or given name, of the user.

Type: String

Length Constraints: Maximum length of 2048.

Pattern: `^[A-Za-z0-9_-\s]+$`

Required: No

## LastName

The last name, or surname, of the user.

Type: String

Length Constraints: Maximum length of 2048.

Pattern: `^[A-Za-z0-9_-\s]+$`

Required: No

## Status

The status of the user in the user pool. The status can be one of the following:

- UNCONFIRMED – The user is created but not confirmed.
- CONFIRMED – The user is confirmed.
- ARCHIVED – The user is no longer active.
- COMPROMISED – The user is disabled because of a potential security threat.
- UNKNOWN – The user status is not known.

Type: String

Length Constraints: Minimum length of 1.

Required: No

## UserName

The email address of the user.

**Note**

Users' email addresses are case-sensitive.

Type: String

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

Pattern: `[\p{L}\p{M}\p{S}\p{N}\p{P}]+`

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

# UserSetting

Describes an action and whether the action is enabled or disabled for users during their streaming sessions.

## Contents

### Action

The action that is enabled or disabled.

Type: String

Valid Values: CLIPBOARD\_COPY\_FROM\_LOCAL\_DEVICE | CLIPBOARD\_COPY\_TO\_LOCAL\_DEVICE | FILE\_UPLOAD | FILE\_DOWNLOAD | PRINTING\_TO\_LOCAL\_DEVICE | DOMAIN\_PASSWORD\_SIGNIN | DOMAIN\_SMART\_CARD\_SIGNIN | AUTO\_TIME\_ZONE\_REDIRECTION

Required: Yes

### Permission

Indicates whether the action is enabled or disabled.

Type: String

Valid Values: ENABLED | DISABLED

Required: Yes

### MaximumLength

Specifies the number of characters that can be copied by end users from the local device to the remote session, and to the local device from the remote session.

This can be specified only for the CLIPBOARD\_COPY\_FROM\_LOCAL\_DEVICE and CLIPBOARD\_COPY\_TO\_LOCAL\_DEVICE actions.

This defaults to 20,971,520 (20 MB) when unspecified and the permission is ENABLED. This can't be specified when the permission is DISABLED.

The value can be between 1 and 20,971,520 (20 MB).

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

# UserStackAssociation

Describes a user in the user pool and the associated stack.

## Contents

### AuthenticationType

The authentication type for the user.

Type: String

Valid Values: API | SAML | USERPOOL | AWS\_AD

Required: Yes

### StackName

The name of the stack that is associated with the user.

Type: String

Length Constraints: Minimum length of 1.

Required: Yes

### UserName

The email address of the user who is associated with the stack.

#### Note

Users' email addresses are case-sensitive.

Type: String

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

Pattern: `[\p{L}\p{M}\p{S}\p{N}\p{P}]+`

Required: Yes

## SendEmailNotification

Specifies whether a welcome email is sent to a user after the user is created in the user pool.

Type: Boolean

Required: No

## See Also

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

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



# UserStackAssociationError

Describes the error that is returned when a user can't be associated with or disassociated from a stack.

## Contents

### ErrorCode

The error code for the error that is returned when a user can't be associated with or disassociated from a stack.

Type: String

Valid Values: STACK\_NOT\_FOUND | USER\_NAME\_NOT\_FOUND | DIRECTORY\_NOT\_FOUND | INTERNAL\_ERROR

Required: No

### ErrorMessage

The error message for the error that is returned when a user can't be associated with or disassociated from a stack.

Type: String

Length Constraints: Minimum length of 1.

Required: No

### UserStackAssociation

Information about the user and associated stack.

Type: [UserStackAssociation](#) 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 Java V2](#)
- [AWS SDK for Ruby V3](#)

# VpcConfig

Describes VPC configuration information for fleets and image builders.

## Contents

### SecurityGroupIds

The identifiers of the security groups for the fleet or image builder.

Type: Array of strings

Array Members: Maximum number of 5 items.

Length Constraints: Minimum length of 1.

Required: No

### SubnetIds

The identifiers of the subnets to which a network interface is attached from the fleet instance or image builder instance. Fleet instances use one or more subnets. Image builder instances use one subnet.

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

# Common Parameters

The following list contains the parameters that all actions use for signing Signature Version 4 requests with a query string. Any action-specific parameters are listed in the topic for that action. For more information about Signature Version 4, see [Signing AWS API requests](#) in the *IAM User Guide*.

## 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 [Create a signed AWS API request](#) in the *IAM User Guide*.

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 [Elements of an AWS API request signature](#) in the *IAM User Guide*.

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 STS, see [AWS services that work with IAM](#) in the *IAM User Guide*.

Condition: If you're using temporary security credentials from AWS STS, 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 [Create a signed AWS API request](#) in the *IAM User Guide*.

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

## **NotAuthorized**

You do not have permission to perform this action.

HTTP Status Code: 400

## **OptInRequired**

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

HTTP Status Code: 403

**RequestExpired**

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

HTTP Status Code: 400

**ServiceUnavailable**

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

HTTP Status Code: 503

**ThrottlingException**

The request was denied due to request throttling.

HTTP Status Code: 400

**ValidationError**

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

HTTP Status Code: 400