
AWS OpsWorks

API Reference

API Version 2013-02-18



AWS OpsWorks: API Reference

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Table of Contents

Welcome	1
Actions	3
AssignInstance	5
Request Syntax	5
Request Parameters	5
Response Elements	5
Errors	5
See Also	6
AssignVolume	7
Request Syntax	7
Request Parameters	7
Response Elements	7
Errors	7
See Also	8
AssociateElasticIp	9
Request Syntax	9
Request Parameters	9
Response Elements	9
Errors	9
See Also	10
AttachElasticLoadBalancer	11
Request Syntax	11
Request Parameters	11
Response Elements	11
Errors	11
See Also	12
CloneStack	13
Request Syntax	13
Request Parameters	13
Response Syntax	18
Response Elements	18
Errors	18
See Also	19
CreateApp	20
Request Syntax	20
Request Parameters	20
Response Syntax	22
Response Elements	22
Errors	23
See Also	23
CreateDeployment	24
Request Syntax	24
Request Parameters	24
Response Syntax	25
Response Elements	25
Errors	25
See Also	26
CreateInstance	27
Request Syntax	27
Request Parameters	27
Response Syntax	31
Response Elements	31
Errors	31
See Also	31

CreateLayer	32
Request Syntax	32
Request Parameters	33
Response Syntax	36
Response Elements	36
Errors	36
See Also	36
CreateStack	37
Request Syntax	37
Request Parameters	37
Response Syntax	42
Response Elements	42
Errors	42
See Also	42
CreateUserProfile	44
Request Syntax	44
Request Parameters	44
Response Syntax	45
Response Elements	45
Errors	45
See Also	45
DeleteApp	46
Request Syntax	46
Request Parameters	46
Response Elements	46
Errors	46
See Also	46
DeleteInstance	48
Request Syntax	48
Request Parameters	48
Response Elements	48
Errors	48
See Also	49
DeleteLayer	50
Request Syntax	50
Request Parameters	50
Response Elements	50
Errors	50
See Also	50
DeleteStack	52
Request Syntax	52
Request Parameters	52
Response Elements	52
Errors	52
See Also	52
DeleteUserProfile	54
Request Syntax	54
Request Parameters	54
Response Elements	54
Errors	54
See Also	54
DeregisterEcsCluster	56
Request Syntax	56
Request Parameters	56
Response Elements	56
Errors	56
See Also	56

DeregisterElasticIp	58
Request Syntax	58
Request Parameters	58
Response Elements	58
Errors	58
See Also	58
DeregisterInstance	60
Request Syntax	60
Request Parameters	60
Response Elements	60
Errors	60
See Also	60
DeregisterRdsDbInstance	62
Request Syntax	62
Request Parameters	62
Response Elements	62
Errors	62
See Also	62
DeregisterVolume	64
Request Syntax	64
Request Parameters	64
Response Elements	64
Errors	64
See Also	64
DescribeAgentVersions	66
Request Syntax	66
Request Parameters	66
Response Syntax	66
Response Elements	66
Errors	67
See Also	67
DescribeApps	68
Request Syntax	68
Request Parameters	68
Response Syntax	68
Response Elements	69
Errors	69
See Also	70
DescribeCommands	71
Request Syntax	71
Request Parameters	71
Response Syntax	71
Response Elements	72
Errors	72
See Also	72
DescribeDeployments	74
Request Syntax	74
Request Parameters	74
Response Syntax	74
Response Elements	75
Errors	75
See Also	75
DescribeEcsClusters	77
Request Syntax	77
Request Parameters	77
Response Syntax	78
Response Elements	78

Errors	78
See Also	79
DescribeElasticIps	80
Request Syntax	80
Request Parameters	80
Response Syntax	80
Response Elements	81
Errors	81
See Also	81
DescribeElasticLoadBalancers	82
Request Syntax	82
Request Parameters	82
Response Syntax	82
Response Elements	83
Errors	83
See Also	83
DescribeInstances	84
Request Syntax	84
Request Parameters	84
Response Syntax	84
Response Elements	85
Errors	86
See Also	86
DescribeLayers	87
Request Syntax	87
Request Parameters	87
Response Syntax	87
Response Elements	88
Errors	89
See Also	89
DescribeLoadBasedAutoScaling	90
Request Syntax	90
Request Parameters	90
Response Syntax	90
Response Elements	91
Errors	91
See Also	91
DescribeMyUserProfile	92
Response Syntax	92
Response Elements	92
Errors	92
See Also	92
DescribeOperatingSystems	93
Response Syntax	93
Response Elements	93
Errors	93
See Also	93
DescribePermissions	95
Request Syntax	95
Request Parameters	95
Response Syntax	95
Response Elements	95
Errors	96
See Also	96
DescribeRaidArrays	97
Request Syntax	97
Request Parameters	97

Response Syntax	97
Response Elements	98
Errors	98
See Also	98
DescribeRdsDbInstances	100
Request Syntax	100
Request Parameters	100
Response Syntax	100
Response Elements	101
Errors	101
See Also	101
DescribeServiceErrors	102
Request Syntax	102
Request Parameters	102
Response Syntax	102
Response Elements	103
Errors	103
See Also	103
DescribeStackProvisioningParameters	104
Request Syntax	104
Request Parameters	104
Response Syntax	104
Response Elements	104
Errors	105
See Also	105
DescribeStacks	106
Request Syntax	106
Request Parameters	106
Response Syntax	106
Response Elements	107
Errors	107
See Also	107
DescribeStackSummary	109
Request Syntax	109
Request Parameters	109
Response Syntax	109
Response Elements	110
Errors	110
See Also	110
DescribeTimeBasedAutoScaling	111
Request Syntax	111
Request Parameters	111
Response Syntax	111
Response Elements	112
Errors	112
See Also	112
DescribeUserProfiles	113
Request Syntax	113
Request Parameters	113
Response Syntax	113
Response Elements	113
Errors	114
See Also	114
DescribeVolumes	115
Request Syntax	115
Request Parameters	115
Response Syntax	116

Response Elements	116
Errors	116
See Also	116
DetachElasticLoadBalancer	118
Request Syntax	118
Request Parameters	118
Response Elements	118
Errors	118
See Also	118
DisassociateElasticIp	120
Request Syntax	120
Request Parameters	120
Response Elements	120
Errors	120
See Also	120
GetHostnameSuggestion	122
Request Syntax	122
Request Parameters	122
Response Syntax	122
Response Elements	122
Errors	123
See Also	123
GrantAccess	124
Request Syntax	124
Request Parameters	124
Response Syntax	124
Response Elements	124
Errors	125
See Also	125
ListTags	126
Request Syntax	126
Request Parameters	126
Response Syntax	126
Response Elements	126
Errors	127
See Also	127
RebootInstance	128
Request Syntax	128
Request Parameters	128
Response Elements	128
Errors	128
See Also	128
RegisterEcsCluster	130
Request Syntax	130
Request Parameters	130
Response Syntax	130
Response Elements	130
Errors	131
See Also	131
RegisterElasticIp	132
Request Syntax	132
Request Parameters	132
Response Syntax	132
Response Elements	132
Errors	133
See Also	133
RegisterInstance	134

Request Syntax	134
Request Parameters	134
Response Syntax	135
Response Elements	135
Errors	136
See Also	136
RegisterRdsDbInstance	137
Request Syntax	137
Request Parameters	137
Response Elements	137
Errors	138
See Also	138
RegisterVolume	139
Request Syntax	139
Request Parameters	139
Response Syntax	139
Response Elements	139
Errors	140
See Also	140
SetLoadBasedAutoScaling	141
Request Syntax	141
Request Parameters	141
Response Elements	142
Errors	142
See Also	142
SetPermission	143
Request Syntax	143
Request Parameters	143
Response Elements	144
Errors	144
See Also	144
SetTimeBasedAutoScaling	145
Request Syntax	145
Request Parameters	145
Response Elements	146
Errors	146
See Also	146
StartInstance	147
Request Syntax	147
Request Parameters	147
Response Elements	147
Errors	147
See Also	147
StartStack	149
Request Syntax	149
Request Parameters	149
Response Elements	149
Errors	149
See Also	149
StopInstance	151
Request Syntax	151
Request Parameters	151
Response Elements	151
Errors	151
See Also	152
StopStack	153
Request Syntax	153

Request Parameters	153
Response Elements	153
Errors	153
See Also	153
TagResource	155
Request Syntax	155
Request Parameters	155
Response Elements	155
Errors	155
See Also	156
UnassignInstance	157
Request Syntax	157
Request Parameters	157
Response Elements	157
Errors	157
See Also	157
UnassignVolume	159
Request Syntax	159
Request Parameters	159
Response Elements	159
Errors	159
See Also	159
UntagResource	161
Request Syntax	161
Request Parameters	161
Response Elements	161
Errors	161
See Also	161
UpdateApp	163
Request Syntax	163
Request Parameters	163
Response Elements	165
Errors	165
See Also	165
UpdateElasticIp	167
Request Syntax	167
Request Parameters	167
Response Elements	167
Errors	167
See Also	168
UpdateInstance	169
Request Syntax	169
Request Parameters	169
Response Elements	171
Errors	172
See Also	172
UpdateLayer	173
Request Syntax	173
Request Parameters	174
Response Elements	176
Errors	176
See Also	177
UpdateMyUserProfile	178
Request Syntax	178
Request Parameters	178
Response Elements	178
Errors	178

See Also	178
UpdateRdsDbInstance	180
Request Syntax	180
Request Parameters	180
Response Elements	180
Errors	180
See Also	181
UpdateStack	182
Request Syntax	182
Request Parameters	182
Response Elements	186
Errors	186
See Also	186
UpdateUserProfile	188
Request Syntax	188
Request Parameters	188
Response Elements	189
Errors	189
See Also	189
UpdateVolume	190
Request Syntax	190
Request Parameters	190
Response Elements	190
Errors	190
See Also	191
Data Types	192
AgentVersion	194
Contents	194
See Also	194
App	195
Contents	195
See Also	197
AutoScalingThresholds	198
Contents	198
See Also	199
BlockDeviceMapping	200
Contents	200
See Also	200
ChefConfiguration	201
Contents	201
See Also	201
CloudWatchLogsConfiguration	202
Contents	202
See Also	202
CloudWatchLogsLogStream	203
Contents	203
See Also	205
Command	206
Contents	206
See Also	207
DataSource	208
Contents	208
See Also	208
Deployment	209
Contents	209
See Also	210
DeploymentCommand	211

Contents	211
See Also	212
EbsBlockDevice	213
Contents	213
See Also	213
EcsCluster	215
Contents	215
See Also	215
ElasticIp	216
Contents	216
See Also	216
ElasticLoadBalancer	217
Contents	217
See Also	218
EnvironmentVariable	219
Contents	219
See Also	219
Instance	220
Contents	220
See Also	225
InstanceIdentity	226
Contents	226
See Also	226
InstancesCount	227
Contents	227
See Also	229
Layer	230
Contents	230
See Also	233
LifecycleEventConfiguration	234
Contents	234
See Also	234
LoadBasedAutoScalingConfiguration	235
Contents	235
See Also	235
OperatingSystem	236
Contents	236
See Also	237
OperatingSystemConfigurationManager	238
Contents	238
See Also	238
Permission	239
Contents	239
See Also	239
RaidArray	241
Contents	241
See Also	242
RdsDbInstance	243
Contents	243
See Also	244
Recipes	245
Contents	245
See Also	245
ReportedOs	247
Contents	247
See Also	247
SelfUserProfile	248

Contents	248
See Also	248
ServiceError	249
Contents	249
See Also	249
ShutdownEventConfiguration	251
Contents	251
See Also	251
Source	252
Contents	252
See Also	253
SslConfiguration	254
Contents	254
See Also	254
Stack	255
Contents	255
See Also	258
StackConfigurationManager	259
Contents	259
See Also	259
StackSummary	260
Contents	260
See Also	260
TemporaryCredential	262
Contents	262
See Also	262
TimeBasedAutoScalingConfiguration	263
Contents	263
See Also	263
UserProfile	264
Contents	264
See Also	264
Volume	265
Contents	265
See Also	267
VolumeConfiguration	268
Contents	268
See Also	269
WeeklyAutoScalingSchedule	270
Contents	270
See Also	271
Common Parameters	272
Common Errors	274

Welcome

Welcome to the *AWS OpsWorks Stacks API Reference*. This guide provides descriptions, syntax, and usage examples for AWS OpsWorks Stacks actions and data types, including common parameters and error codes.

AWS OpsWorks Stacks is an application management service that provides an integrated experience for overseeing the complete application lifecycle. For information about this product, go to the [AWS OpsWorks](#) details page.

SDKs and CLI

The most common way to use the AWS OpsWorks Stacks API is by using the AWS Command Line Interface (CLI) or by using one of the AWS SDKs to implement applications in your preferred language. For more information, see:

- [AWS CLI](#)
- [AWS SDK for Java](#)
- [AWS SDK for .NET](#)
- [AWS SDK for PHP 2](#)
- [AWS SDK for Ruby](#)
- [AWS SDK for Node.js](#)
- [AWS SDK for Python\(Boto\)](#)

Endpoints

AWS OpsWorks Stacks supports the following endpoints, all HTTPS. You must connect to one of the following endpoints. Stacks can only be accessed or managed within the endpoint in which they are created.

- opsworks.us-east-1.amazonaws.com
- opsworks.us-east-2.amazonaws.com
- opsworks.us-west-1.amazonaws.com
- opsworks.us-west-2.amazonaws.com
- opsworks.ca-central-1.amazonaws.com (API only; not available in the AWS console)
- opsworks.eu-west-1.amazonaws.com
- opsworks.eu-west-2.amazonaws.com
- opsworks.eu-west-3.amazonaws.com
- opsworks.eu-central-1.amazonaws.com
- opsworks.ap-northeast-1.amazonaws.com
- opsworks.ap-northeast-2.amazonaws.com
- opsworks.ap-south-1.amazonaws.com
- opsworks.ap-southeast-1.amazonaws.com
- opsworks.ap-southeast-2.amazonaws.com
- opsworks.sa-east-1.amazonaws.com

Chef Versions

When you call [CreateStack \(p. 37\)](#), [CloneStack \(p. 13\)](#), or [UpdateStack \(p. 182\)](#) we recommend you use the `ConfigurationManager` parameter to specify the Chef version. The recommended and default value for Linux stacks is currently 12. Windows stacks use Chef 12.2. For more information, see [Chef Versions](#).

Note

You can specify Chef 12, 11.10, or 11.4 for your Linux stack. We recommend migrating your existing Linux stacks to Chef 12 as soon as possible.

This document was last published on November 19, 2018.

Actions

The following actions are supported:

- [AssignInstance](#) (p. 5)
- [AssignVolume](#) (p. 7)
- [AssociateElasticIp](#) (p. 9)
- [AttachElasticLoadBalancer](#) (p. 11)
- [CloneStack](#) (p. 13)
- [CreateApp](#) (p. 20)
- [CreateDeployment](#) (p. 24)
- [CreateInstance](#) (p. 27)
- [CreateLayer](#) (p. 32)
- [CreateStack](#) (p. 37)
- [CreateUserProfile](#) (p. 44)
- [DeleteApp](#) (p. 46)
- [DeleteInstance](#) (p. 48)
- [DeleteLayer](#) (p. 50)
- [DeleteStack](#) (p. 52)
- [DeleteUserProfile](#) (p. 54)
- [DeregisterEcsCluster](#) (p. 56)
- [DeregisterElasticIp](#) (p. 58)
- [DeregisterInstance](#) (p. 60)
- [DeregisterRdsDbInstance](#) (p. 62)
- [DeregisterVolume](#) (p. 64)
- [DescribeAgentVersions](#) (p. 66)
- [DescribeApps](#) (p. 68)
- [DescribeCommands](#) (p. 71)
- [DescribeDeployments](#) (p. 74)
- [DescribeEcsClusters](#) (p. 77)
- [DescribeElasticIps](#) (p. 80)
- [DescribeElasticLoadBalancers](#) (p. 82)
- [DescribeInstances](#) (p. 84)
- [DescribeLayers](#) (p. 87)
- [DescribeLoadBasedAutoScaling](#) (p. 90)
- [DescribeMyUserProfile](#) (p. 92)
- [DescribeOperatingSystems](#) (p. 93)
- [DescribePermissions](#) (p. 95)
- [DescribeRaidArrays](#) (p. 97)
- [DescribeRdsDbInstances](#) (p. 100)
- [DescribeServiceErrors](#) (p. 102)
- [DescribeStackProvisioningParameters](#) (p. 104)
- [DescribeStacks](#) (p. 106)
- [DescribeStackSummary](#) (p. 109)

- [DescribeTimeBasedAutoScaling](#) (p. 111)
- [DescribeUserProfiles](#) (p. 113)
- [DescribeVolumes](#) (p. 115)
- [DetachElasticLoadBalancer](#) (p. 118)
- [DisassociateElasticIp](#) (p. 120)
- [GetHostnameSuggestion](#) (p. 122)
- [GrantAccess](#) (p. 124)
- [ListTags](#) (p. 126)
- [RebootInstance](#) (p. 128)
- [RegisterEcsCluster](#) (p. 130)
- [RegisterElasticIp](#) (p. 132)
- [RegisterInstance](#) (p. 134)
- [RegisterRdsDbInstance](#) (p. 137)
- [RegisterVolume](#) (p. 139)
- [SetLoadBasedAutoScaling](#) (p. 141)
- [SetPermission](#) (p. 143)
- [SetTimeBasedAutoScaling](#) (p. 145)
- [StartInstance](#) (p. 147)
- [StartStack](#) (p. 149)
- [StopInstance](#) (p. 151)
- [StopStack](#) (p. 153)
- [TagResource](#) (p. 155)
- [UnassignInstance](#) (p. 157)
- [UnassignVolume](#) (p. 159)
- [UntagResource](#) (p. 161)
- [UpdateApp](#) (p. 163)
- [UpdateElasticIp](#) (p. 167)
- [UpdateInstance](#) (p. 169)
- [UpdateLayer](#) (p. 173)
- [UpdateMyUserProfile](#) (p. 178)
- [UpdateRdsDbInstance](#) (p. 180)
- [UpdateStack](#) (p. 182)
- [UpdateUserProfile](#) (p. 188)
- [UpdateVolume](#) (p. 190)

AssignInstance

Assign a registered instance to a layer.

- You can assign registered on-premises instances to any layer type.
- You can assign registered Amazon EC2 instances only to custom layers.
- You cannot use this action with instances that were created with AWS OpsWorks Stacks.

Required Permissions: To use this action, an AWS Identity and Access Management (IAM) user must have a Manage permissions level for the stack or an attached policy that explicitly grants permissions. For more information on user permissions, see [Managing User Permissions](#).

Request Syntax

```
{  
  "InstanceId": "string",  
  "LayerIds": [ "string" ]  
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters \(p. 272\)](#).

The request accepts the following data in JSON format.

InstanceId (p. 5)

The instance ID.

Type: String

Required: Yes

LayerIds (p. 5)

The layer ID, which must correspond to a custom layer. You cannot assign a registered instance to a built-in layer.

Type: Array of strings

Required: Yes

Response Elements

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

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 274\)](#).

ResourceNotFoundException

Indicates that a resource was not found.

HTTP Status Code: 400

ValidationException

Indicates that a request was not valid.

HTTP Status Code: 400

See Also

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

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

AssignVolume

Assigns one of the stack's registered Amazon EBS volumes to a specified instance. The volume must first be registered with the stack by calling [RegisterVolume \(p. 139\)](#). After you register the volume, you must call [UpdateVolume \(p. 190\)](#) to specify a mount point before calling `AssignVolume`. For more information, see [Resource Management](#).

Required Permissions: To use this action, an IAM user must have a Manage permissions level for the stack, or an attached policy that explicitly grants permissions. For more information on user permissions, see [Managing User Permissions](#).

Request Syntax

```
{  
  "InstanceId": "string",  
  "VolumeId": "string"  
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters \(p. 272\)](#).

The request accepts the following data in JSON format.

[InstanceId \(p. 7\)](#)

The instance ID.

Type: String

Required: No

[VolumeId \(p. 7\)](#)

The volume ID.

Type: String

Required: Yes

Response Elements

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

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 274\)](#).

ResourceNotFoundException

Indicates that a resource was not found.

HTTP Status Code: 400

ValidationException

Indicates that a request was not valid.

HTTP Status Code: 400

See Also

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

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

AssociateElasticIp

Associates one of the stack's registered Elastic IP addresses with a specified instance. The address must first be registered with the stack by calling [RegisterElasticIp \(p. 132\)](#). For more information, see [Resource Management](#).

Required Permissions: To use this action, an IAM user must have a Manage permissions level for the stack, or an attached policy that explicitly grants permissions. For more information on user permissions, see [Managing User Permissions](#).

Request Syntax

```
{  
  "ElasticIp": "string",  
  "InstanceId": "string"  
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters \(p. 272\)](#).

The request accepts the following data in JSON format.

[ElasticIp \(p. 9\)](#)

The Elastic IP address.

Type: String

Required: Yes

[InstanceId \(p. 9\)](#)

The instance ID.

Type: String

Required: No

Response Elements

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

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 274\)](#).

ResourceNotFoundException

Indicates that a resource was not found.

HTTP Status Code: 400

ValidationException

Indicates that a request was not valid.

HTTP Status Code: 400

See Also

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

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

AttachElasticLoadBalancer

Attaches an Elastic Load Balancing load balancer to a specified layer. AWS OpsWorks Stacks does not support Application Load Balancer. You can only use Classic Load Balancer with AWS OpsWorks Stacks. For more information, see [Elastic Load Balancing](#).

Note

You must create the Elastic Load Balancing instance separately, by using the Elastic Load Balancing console, API, or CLI. For more information, see [Elastic Load Balancing Developer Guide](#).

Required Permissions: To use this action, an IAM user must have a Manage permissions level for the stack, or an attached policy that explicitly grants permissions. For more information on user permissions, see [Managing User Permissions](#).

Request Syntax

```
{
  "ElasticLoadBalancerName": "string",
  "LayerId": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters \(p. 272\)](#).

The request accepts the following data in JSON format.

ElasticLoadBalancerName (p. 11)

The Elastic Load Balancing instance's name.

Type: String

Required: Yes

LayerId (p. 11)

The ID of the layer to which the Elastic Load Balancing instance is to be attached.

Type: String

Required: Yes

Response Elements

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

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 274\)](#).

ResourceNotFoundException

Indicates that a resource was not found.

HTTP Status Code: 400

ValidationException

Indicates that a request was not valid.

HTTP Status Code: 400

See Also

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

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

CloneStack

Creates a clone of a specified stack. For more information, see [Clone a Stack](#). By default, all parameters are set to the values used by the parent stack.

Required Permissions: To use this action, an IAM user must have an attached policy that explicitly grants permissions. For more information about user permissions, see [Managing User Permissions](#).

Request Syntax

```
{
  "AgentVersion": "string",
  "Attributes": {
    "string" : "string"
  },
  "ChefConfiguration": {
    "BerkshelfVersion": "string",
    "ManageBerkshelf": boolean
  },
  "CloneAppIds": [ "string" ],
  "ClonePermissions": boolean,
  "ConfigurationManager": {
    "Name": "string",
    "Version": "string"
  },
  "CustomCookbooksSource": {
    "Password": "string",
    "Revision": "string",
    "SshKey": "string",
    "Type": "string",
    "Url": "string",
    "Username": "string"
  },
  "CustomJson": "string",
  "DefaultAvailabilityZone": "string",
  "DefaultInstanceProfileArn": "string",
  "DefaultOs": "string",
  "DefaultRootDeviceType": "string",
  "DefaultSshKeyName": "string",
  "DefaultSubnetId": "string",
  "HostnameTheme": "string",
  "Name": "string",
  "Region": "string",
  "ServiceRoleArn": "string",
  "SourceStackId": "string",
  "UseCustomCookbooks": boolean,
  "UseOpsworksSecurityGroups": boolean,
  "VpcId": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters \(p. 272\)](#).

The request accepts the following data in JSON format.

AgentVersion (p. 13)

The default AWS OpsWorks Stacks agent version. You have the following options:

- **Auto-update** - Set this parameter to `LATEST`. AWS OpsWorks Stacks automatically installs new agent versions on the stack's instances as soon as they are available.
- **Fixed version** - Set this parameter to your preferred agent version. To update the agent version, you must edit the stack configuration and specify a new version. AWS OpsWorks Stacks then automatically installs that version on the stack's instances.

The default setting is `LATEST`. To specify an agent version, you must use the complete version number, not the abbreviated number shown on the console. For a list of available agent version numbers, call [DescribeAgentVersions](#) (p. 66). AgentVersion cannot be set to Chef 12.2.

Note

You can also specify an agent version when you create or update an instance, which overrides the stack's default setting.

Type: String

Required: No

Attributes (p. 13)

A list of stack attributes and values as key/value pairs to be added to the cloned stack.

Type: String to string map

Valid Keys: `Color`

Required: No

ChefConfiguration (p. 13)

A `ChefConfiguration` object that specifies whether to enable Berkshelf and the Berkshelf version on Chef 11.10 stacks. For more information, see [Create a New Stack](#).

Type: [ChefConfiguration](#) (p. 201) object

Required: No

CloneAppIds (p. 13)

A list of source stack app IDs to be included in the cloned stack.

Type: Array of strings

Required: No

ClonePermissions (p. 13)

Whether to clone the source stack's permissions.

Type: Boolean

Required: No

ConfigurationManager (p. 13)

The configuration manager. When you clone a stack we recommend that you use the configuration manager to specify the Chef version: 12, 11.10, or 11.4 for Linux stacks, or 12.2 for Windows stacks. The default value for Linux stacks is currently 12.

Type: [StackConfigurationManager](#) (p. 259) object

Required: No

CustomCookbooksSource (p. 13)

Contains the information required to retrieve an app or cookbook from a repository. For more information, see [Creating Apps](#) or [Custom Recipes and Cookbooks](#).

Type: [Source \(p. 252\)](#) object

Required: No

CustomJson (p. 13)

A string that contains user-defined, custom JSON. It is used to override the corresponding default stack configuration JSON values. The string should be in the following format:

```
"{\"key1\": \"value1\", \"key2\": \"value2\", ...}\"
```

For more information about custom JSON, see [Use Custom JSON to Modify the Stack Configuration Attributes](#)

Type: String

Required: No

DefaultAvailabilityZone (p. 13)

The cloned stack's default Availability Zone, which must be in the specified region. For more information, see [Regions and Endpoints](#). If you also specify a value for `DefaultSubnetId`, the subnet must be in the same zone. For more information, see the `VpcId` parameter description.

Type: String

Required: No

DefaultInstanceProfileArn (p. 13)

The Amazon Resource Name (ARN) of an IAM profile that is the default profile for all of the stack's EC2 instances. For more information about IAM ARNs, see [Using Identifiers](#).

Type: String

Required: No

DefaultOs (p. 13)

The stack's operating system, which must be set to one of the following.

- A supported Linux operating system: An Amazon Linux version, such as `Amazon Linux 2018.03`, `Amazon Linux 2017.09`, `Amazon Linux 2017.03`, `Amazon Linux 2016.09`, `Amazon Linux 2016.03`, `Amazon Linux 2015.09`, or `Amazon Linux 2015.03`.
- A supported Ubuntu operating system, such as `Ubuntu 16.04 LTS`, `Ubuntu 14.04 LTS`, or `Ubuntu 12.04 LTS`.
- `CentOS Linux 7`
- `Red Hat Enterprise Linux 7`
- `Microsoft Windows Server 2012 R2 Base`, `Microsoft Windows Server 2012 R2 with SQL Server Express`, `Microsoft Windows Server 2012 R2 with SQL Server Standard`, or `Microsoft Windows Server 2012 R2 with SQL Server Web`.
- A custom AMI: `Custom`. You specify the custom AMI you want to use when you create instances. For more information about how to use custom AMIs with OpsWorks, see [Using Custom AMIs](#).

The default option is the parent stack's operating system. For more information about supported operating systems, see [AWS OpsWorks Stacks Operating Systems](#).

Note

You can specify a different Linux operating system for the cloned stack, but you cannot change from Linux to Windows or Windows to Linux.

Type: String

Required: No

DefaultRootDeviceType (p. 13)

The default root device type. This value is used by default for all instances in the cloned stack, but you can override it when you create an instance. For more information, see [Storage for the Root Device](#).

Type: String

Valid Values: `ebs` | `instance-store`

Required: No

DefaultSshKeyName (p. 13)

A default Amazon EC2 key pair name. The default value is none. If you specify a key pair name, AWS OpsWorks installs the public key on the instance and you can use the private key with an SSH client to log in to the instance. For more information, see [Using SSH to Communicate with an Instance](#) and [Managing SSH Access](#). You can override this setting by specifying a different key pair, or no key pair, when you [create an instance](#).

Type: String

Required: No

DefaultSubnetId (p. 13)

The stack's default VPC subnet ID. This parameter is required if you specify a value for the `VpcId` parameter. All instances are launched into this subnet unless you specify otherwise when you create the instance. If you also specify a value for `DefaultAvailabilityZone`, the subnet must be in that zone. For information on default values and when this parameter is required, see the `VpcId` parameter description.

Type: String

Required: No

HostnameTheme (p. 13)

The stack's host name theme, with spaces are replaced by underscores. The theme is used to generate host names for the stack's instances. By default, `HostnameTheme` is set to `Layer_Dependent`, which creates host names by appending integers to the layer's short name. The other themes are:

- `Baked_Goods`
- `Clouds`
- `Europe_Cities`
- `Fruits`
- `Greek_Deities`
- `Legendary_creatures_from_Japan`
- `Planets_and_Moons`
- `Roman_Deities`
- `Scottish_Islands`
- `US_Cities`
- `Wild_Cats`

To obtain a generated host name, call `GetHostNameSuggestion`, which returns a host name based on the current theme.

Type: String

Required: No

Name (p. 13)

The cloned stack name.

Type: String

Required: No

Region (p. 13)

The cloned stack AWS region, such as "ap-northeast-2". For more information about AWS regions, see [Regions and Endpoints](#).

Type: String

Required: No

ServiceRoleArn (p. 13)

The stack AWS Identity and Access Management (IAM) role, which allows AWS OpsWorks Stacks to work with AWS resources on your behalf. You must set this parameter to the Amazon Resource Name (ARN) for an existing IAM role. If you create a stack by using the AWS OpsWorks Stacks console, it creates the role for you. You can obtain an existing stack's IAM ARN programmatically by calling [DescribePermissions \(p. 95\)](#). For more information about IAM ARNs, see [Using Identifiers](#).

Note

You must set this parameter to a valid service role ARN or the action will fail; there is no default value. You can specify the source stack's service role ARN, if you prefer, but you must do so explicitly.

Type: String

Required: Yes

SourceStackId (p. 13)

The source stack ID.

Type: String

Required: Yes

UseCustomCookbooks (p. 13)

Whether to use custom cookbooks.

Type: Boolean

Required: No

UseOpsworksSecurityGroups (p. 13)

Whether to associate the AWS OpsWorks Stacks built-in security groups with the stack's layers.

AWS OpsWorks Stacks provides a standard set of built-in security groups, one for each layer, which are associated with layers by default. With `UseOpsworksSecurityGroups` you can instead provide your own custom security groups. `UseOpsworksSecurityGroups` has the following settings:

- True - AWS OpsWorks Stacks automatically associates the appropriate built-in security group with each layer (default setting). You can associate additional security groups with a layer after you create it but you cannot delete the built-in security group.
- False - AWS OpsWorks Stacks does not associate built-in security groups with layers. You must create appropriate Amazon Elastic Compute Cloud (Amazon EC2) security groups and associate a security group with each layer that you create. However, you can still manually associate a built-in

security group with a layer on creation; custom security groups are required only for those layers that need custom settings.

For more information, see [Create a New Stack](#).

Type: Boolean

Required: No

VpcId (p. 13)

The ID of the VPC that the cloned stack is to be launched into. It must be in the specified region. All instances are launched into this VPC, and you cannot change the ID later.

- If your account supports EC2 Classic, the default value is no VPC.
- If your account does not support EC2 Classic, the default value is the default VPC for the specified region.

If the VPC ID corresponds to a default VPC and you have specified either the `DefaultAvailabilityZone` or the `DefaultSubnetId` parameter only, AWS OpsWorks Stacks infers the value of the other parameter. If you specify neither parameter, AWS OpsWorks Stacks sets these parameters to the first valid Availability Zone for the specified region and the corresponding default VPC subnet ID, respectively.

If you specify a nondefault VPC ID, note the following:

- It must belong to a VPC in your account that is in the specified region.
- You must specify a value for `DefaultSubnetId`.

For more information about how to use AWS OpsWorks Stacks with a VPC, see [Running a Stack in a VPC](#). For more information about default VPC and EC2 Classic, see [Supported Platforms](#).

Type: String

Required: No

Response Syntax

```
{  
  "StackId": "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.

StackId (p. 18)

The cloned stack ID.

Type: String

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 274\)](#).

ResourceNotFoundException

Indicates that a resource was not found.

HTTP Status Code: 400

ValidationException

Indicates that a request was not valid.

HTTP Status Code: 400

See Also

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

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

CreateApp

Creates an app for a specified stack. For more information, see [Creating Apps](#).

Required Permissions: To use this action, an IAM user must have a Manage permissions level for the stack, or an attached policy that explicitly grants permissions. For more information on user permissions, see [Managing User Permissions](#).

Request Syntax

```
{
  "AppSource": {
    "Password": "string",
    "Revision": "string",
    "SshKey": "string",
    "Type": "string",
    "Url": "string",
    "Username": "string"
  },
  "Attributes": {
    "string": "string"
  },
  "DataSources": [
    {
      "Arn": "string",
      "DatabaseName": "string",
      "Type": "string"
    }
  ],
  "Description": "string",
  "Domains": [ "string" ],
  "EnableSsl": boolean,
  "Environment": [
    {
      "Key": "string",
      "Secure": boolean,
      "Value": "string"
    }
  ],
  "Name": "string",
  "Shortname": "string",
  "SslConfiguration": {
    "Certificate": "string",
    "Chain": "string",
    "PrivateKey": "string"
  },
  "StackId": "string",
  "Type": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters \(p. 272\)](#).

The request accepts the following data in JSON format.

AppSource (p. 20)

A Source object that specifies the app repository.

Type: [Source \(p. 252\)](#) object

Required: No

Attributes (p. 20)

One or more user-defined key/value pairs to be added to the stack attributes.

Type: String to string map

Valid Keys: `DocumentRoot` | `RailsEnv` | `AutoBundleOnDeploy` | `AwsFlowRubySettings`

Required: No

DataSources (p. 20)

The app's data source.

Type: Array of [DataSource \(p. 208\)](#) objects

Required: No

Description (p. 20)

A description of the app.

Type: String

Required: No

Domains (p. 20)

The app virtual host settings, with multiple domains separated by commas. For example:
`'www.example.com, example.com'`

Type: Array of strings

Required: No

EnableSsl (p. 20)

Whether to enable SSL for the app.

Type: Boolean

Required: No

Environment (p. 20)

An array of `EnvironmentVariable` objects that specify environment variables to be associated with the app. After you deploy the app, these variables are defined on the associated app server instance. For more information, see [Environment Variables](#).

There is no specific limit on the number of environment variables. However, the size of the associated data structure - which includes the variables' names, values, and protected flag values - cannot exceed 20 KB. This limit should accommodate most if not all use cases. Exceeding it will cause an exception with the message, "Environment: is too large (maximum is 20KB)."

Note

If you have specified one or more environment variables, you cannot modify the stack's Chef version.

Type: Array of [EnvironmentVariable \(p. 219\)](#) objects

Required: No

Name (p. 20)

The app name.

Type: String

Required: Yes

Shortname (p. 20)

The app's short name.

Type: String

Required: No

SslConfiguration (p. 20)

An `SslConfiguration` object with the SSL configuration.

Type: [SslConfiguration \(p. 254\)](#) object

Required: No

StackId (p. 20)

The stack ID.

Type: String

Required: Yes

Type (p. 20)

The app type. Each supported type is associated with a particular layer. For example, PHP applications are associated with a PHP layer. AWS OpsWorks Stacks deploys an application to those instances that are members of the corresponding layer. If your app isn't one of the standard types, or you prefer to implement your own Deploy recipes, specify `other`.

Type: String

Valid Values: `aws-flow-ruby` | `java` | `rails` | `php` | `nodejs` | `static` | `other`

Required: Yes

Response Syntax

```
{  
  "AppId": "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.

AppId (p. 22)

The app ID.

Type: String

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 274\)](#).

ResourceNotFoundException

Indicates that a resource was not found.

HTTP Status Code: 400

ValidationException

Indicates that a request was not valid.

HTTP Status Code: 400

See Also

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

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

CreateDeployment

Runs deployment or stack commands. For more information, see [Deploying Apps](#) and [Run Stack Commands](#).

Required Permissions: To use this action, an IAM user must have a Deploy or Manage permissions level for the stack, or an attached policy that explicitly grants permissions. For more information on user permissions, see [Managing User Permissions](#).

Request Syntax

```
{
  "AppId": "string",
  "Command": {
    "Args": {
      "string" : [ "string" ]
    },
    "Name": "string"
  },
  "Comment": "string",
  "CustomJson": "string",
  "InstanceIds": [ "string" ],
  "LayerIds": [ "string" ],
  "StackId": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 272).

The request accepts the following data in JSON format.

AppId (p. 24)

The app ID. This parameter is required for app deployments, but not for other deployment commands.

Type: String

Required: No

Command (p. 24)

A `DeploymentCommand` object that specifies the deployment command and any associated arguments.

Type: [DeploymentCommand](#) (p. 211) object

Required: Yes

Comment (p. 24)

A user-defined comment.

Type: String

Required: No

CustomJson (p. 24)

A string that contains user-defined, custom JSON. It is used to override the corresponding default stack configuration JSON values. The string should be in the following format:

```
"{\"key1\": \"value1\", \"key2\": \"value2\", ...}\"
```

For more information about custom JSON, see [Use Custom JSON to Modify the Stack Configuration Attributes](#).

Type: String

Required: No

InstanceIds (p. 24)

The instance IDs for the deployment targets.

Type: Array of strings

Required: No

LayerIds (p. 24)

The layer IDs for the deployment targets.

Type: Array of strings

Required: No

StackId (p. 24)

The stack ID.

Type: String

Required: Yes

Response Syntax

```
{  
  "DeploymentId": "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.

DeploymentId (p. 25)

The deployment ID, which can be used with other requests to identify the deployment.

Type: String

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 274\)](#).

ResourceNotFoundException

Indicates that a resource was not found.

HTTP Status Code: 400

ValidationException

Indicates that a request was not valid.

HTTP Status Code: 400

See Also

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

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

CreateInstance

Creates an instance in a specified stack. For more information, see [Adding an Instance to a Layer](#).

Required Permissions: To use this action, an IAM user must have a Manage permissions level for the stack, or an attached policy that explicitly grants permissions. For more information on user permissions, see [Managing User Permissions](#).

Request Syntax

```
{
  "AgentVersion": "string",
  "AmiId": "string",
  "Architecture": "string",
  "AutoScalingType": "string",
  "AvailabilityZone": "string",
  "BlockDeviceMappings": [
    {
      "DeviceName": "string",
      "Ebs": {
        "DeleteOnTermination": boolean,
        "Iops": number,
        "SnapshotId": "string",
        "VolumeSize": number,
        "VolumeType": "string"
      },
      "NoDevice": "string",
      "VirtualName": "string"
    }
  ],
  "EbsOptimized": boolean,
  "Hostname": "string",
  "InstallUpdatesOnBoot": boolean,
  "InstanceType": "string",
  "LayerIds": [ "string" ],
  "Os": "string",
  "RootDeviceType": "string",
  "SshKeyName": "string",
  "StackId": "string",
  "SubnetId": "string",
  "Tenancy": "string",
  "VirtualizationType": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 272).

The request accepts the following data in JSON format.

AgentVersion (p. 27)

The default AWS OpsWorks Stacks agent version. You have the following options:

- `INHERIT` - Use the stack's default agent version setting.
- `version_number` - Use the specified agent version. This value overrides the stack's default setting. To update the agent version, edit the instance configuration and specify a new version. AWS OpsWorks Stacks then automatically installs that version on the instance.

The default setting is `INHERIT`. To specify an agent version, you must use the complete version number, not the abbreviated number shown on the console. For a list of available agent version numbers, call [DescribeAgentVersions](#) (p. 66). AgentVersion cannot be set to Chef 12.2.

Type: String

Required: No

AmiId (p. 27)

A custom AMI ID to be used to create the instance. The AMI should be based on one of the supported operating systems. For more information, see [Using Custom AMIs](#).

Note

If you specify a custom AMI, you must set `Os` to `Custom`.

Type: String

Required: No

Architecture (p. 27)

The instance architecture. The default option is `x86_64`. Instance types do not necessarily support both architectures. For a list of the architectures that are supported by the different instance types, see [Instance Families and Types](#).

Type: String

Valid Values: `x86_64` | `i386`

Required: No

AutoScalingType (p. 27)

For load-based or time-based instances, the type. Windows stacks can use only time-based instances.

Type: String

Valid Values: `load` | `timer`

Required: No

AvailabilityZone (p. 27)

The instance Availability Zone. For more information, see [Regions and Endpoints](#).

Type: String

Required: No

BlockDeviceMappings (p. 27)

An array of `BlockDeviceMapping` objects that specify the instance's block devices. For more information, see [Block Device Mapping](#). Note that block device mappings are not supported for custom AMIs.

Type: Array of [BlockDeviceMapping](#) (p. 200) objects

Required: No

EbsOptimized (p. 27)

Whether to create an Amazon EBS-optimized instance.

Type: Boolean

Required: No

Hostname (p. 27)

The instance host name.

Type: String

Required: No

InstallUpdatesOnBoot (p. 27)

Whether to install operating system and package updates when the instance boots. The default value is `true`. To control when updates are installed, set this value to `false`. You must then update your instances manually by using [CreateDeployment \(p. 24\)](#) to run the `update_dependencies` stack command or by manually running `yum` (Amazon Linux) or `apt-get` (Ubuntu) on the instances.

Note

We strongly recommend using the default value of `true` to ensure that your instances have the latest security updates.

Type: Boolean

Required: No

InstanceType (p. 27)

The instance type, such as `t2.micro`. For a list of supported instance types, open the stack in the console, choose **Instances**, and choose **+ Instance**. The **Size** list contains the currently supported types. For more information, see [Instance Families and Types](#). The parameter values that you use to specify the various types are in the **API Name** column of the **Available Instance Types** table.

Type: String

Required: Yes

LayerIds (p. 27)

An array that contains the instance's layer IDs.

Type: Array of strings

Required: Yes

Os (p. 27)

The instance's operating system, which must be set to one of the following.

- A supported Linux operating system: An Amazon Linux version, such as `Amazon Linux 2018.03`, `Amazon Linux 2017.09`, `Amazon Linux 2017.03`, `Amazon Linux 2016.09`, `Amazon Linux 2016.03`, `Amazon Linux 2015.09`, or `Amazon Linux 2015.03`.
- A supported Ubuntu operating system, such as `Ubuntu 16.04 LTS`, `Ubuntu 14.04 LTS`, or `Ubuntu 12.04 LTS`.
- `CentOS Linux 7`
- `Red Hat Enterprise Linux 7`
- A supported Windows operating system, such as `Microsoft Windows Server 2012 R2 Base`, `Microsoft Windows Server 2012 R2 with SQL Server Express`, `Microsoft Windows Server 2012 R2 with SQL Server Standard`, or `Microsoft Windows Server 2012 R2 with SQL Server Web`.
- A custom AMI: `Custom`.

For more information about the supported operating systems, see [AWS OpsWorks Stacks Operating Systems](#).

The default option is the current Amazon Linux version. If you set this parameter to `Custom`, you must use the [CreateInstance \(p. 27\)](#) action's `Amild` parameter to specify the custom AMI that you want to use. Block device mappings are not supported if the value is `Custom`. For more information about supported operating systems, see [Operating Systems](#). For more information about how to use custom AMIs with AWS OpsWorks Stacks, see [Using Custom AMIs](#).

Type: String

Required: No

RootDeviceType (p. 27)

The instance root device type. For more information, see [Storage for the Root Device](#).

Type: String

Valid Values: `ebs` | `instance-store`

Required: No

SshKeyName (p. 27)

The instance's Amazon EC2 key-pair name.

Type: String

Required: No

StackId (p. 27)

The stack ID.

Type: String

Required: Yes

SubnetId (p. 27)

The ID of the instance's subnet. If the stack is running in a VPC, you can use this parameter to override the stack's default subnet ID value and direct AWS OpsWorks Stacks to launch the instance in a different subnet.

Type: String

Required: No

Tenancy (p. 27)

The instance's tenancy option. The default option is no tenancy, or if the instance is running in a VPC, inherit tenancy settings from the VPC. The following are valid values for this parameter: `dedicated`, `default`, or `host`. Because there are costs associated with changes in tenancy options, we recommend that you research tenancy options before choosing them for your instances. For more information about dedicated hosts, see [Dedicated Hosts Overview](#) and [Amazon EC2 Dedicated Hosts](#). For more information about dedicated instances, see [Dedicated Instances](#) and [Amazon EC2 Dedicated Instances](#).

Type: String

Required: No

VirtualizationType (p. 27)

The instance's virtualization type, `paravirtual` or `hvm`.

Type: String

Required: No

Response Syntax

```
{  
  "InstanceId": "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.

InstanceId (p. 31)

The instance ID.

Type: String

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 274\)](#).

ResourceNotFoundException

Indicates that a resource was not found.

HTTP Status Code: 400

ValidationException

Indicates that a request was not valid.

HTTP Status Code: 400

See Also

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

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

CreateLayer

Creates a layer. For more information, see [How to Create a Layer](#).

Note

You should use **CreateLayer** for noncustom layer types such as PHP App Server only if the stack does not have an existing layer of that type. A stack can have at most one instance of each noncustom layer; if you attempt to create a second instance, **CreateLayer** fails. A stack can have an arbitrary number of custom layers, so you can call **CreateLayer** as many times as you like for that layer type.

Required Permissions: To use this action, an IAM user must have a Manage permissions level for the stack, or an attached policy that explicitly grants permissions. For more information on user permissions, see [Managing User Permissions](#).

Request Syntax

```
{
  "Attributes": {
    "string" : "string"
  },
  "AutoAssignElasticIps": boolean,
  "AutoAssignPublicIps": boolean,
  "CloudWatchLogsConfiguration": {
    "Enabled": boolean,
    "LogStreams": [
      {
        "BatchCount": number,
        "BatchSize": number,
        "BufferDuration": number,
        "DatetimeFormat": "string",
        "Encoding": "string",
        "File": "string",
        "FileFingerprintLines": "string",
        "InitialPosition": "string",
        "LogGroupName": "string",
        "MultiLineStartPattern": "string",
        "TimeZone": "string"
      }
    ]
  },
  "CustomInstanceProfileArn": "string",
  "CustomJson": "string",
  "CustomRecipes": {
    "Configure": [ "string" ],
    "Deploy": [ "string" ],
    "Setup": [ "string" ],
    "Shutdown": [ "string" ],
    "Undeploy": [ "string" ]
  },
  "CustomSecurityGroupIds": [ "string" ],
  "EnableAutoHealing": boolean,
  "InstallUpdatesOnBoot": boolean,
  "LifecycleEventConfiguration": {
    "Shutdown": {
      "DelayUntilElbConnectionsDrained": boolean,
      "ExecutionTimeout": number
    }
  },
  "Name": "string",
  "Packages": [ "string" ],
  "Shortname": "string",
```

```
"StackId": "string",
>Type": "string",
"UseEbsOptimizedInstances": boolean,
"VolumeConfigurations": [
  {
    "Encrypted": boolean,
    "Iops": number,
    "MountPoint": "string",
    "NumberOfDisks": number,
    "RaidLevel": number,
    "Size": number,
    "VolumeType": "string"
  }
]
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 272).

The request accepts the following data in JSON format.

[Attributes](#) (p. 32)

One or more user-defined key-value pairs to be added to the stack attributes.

To create a cluster layer, set the `EcsClusterArn` attribute to the cluster's ARN.

Type: String to string map

Valid Keys: `EcsClusterArn` | `EnableHaproxyStats` | `HaproxyStatsUrl` | `HaproxyStatsUser` | `HaproxyStatsPassword` | `HaproxyHealthCheckUrl` | `HaproxyHealthCheckMethod` | `MysqlRootPassword` | `MysqlRootPasswordUbiquitous` | `GangliaUrl` | `GangliaUser` | `GangliaPassword` | `MemcachedMemory` | `NodejsVersion` | `RubyVersion` | `RubygemsVersion` | `ManageBundler` | `BundlerVersion` | `RailsStack` | `PassengerVersion` | `Jvm` | `JvmVersion` | `JvmOptions` | `JavaAppServer` | `JavaAppServerVersion`

Required: No

[AutoAssignElasticIps](#) (p. 32)

Whether to automatically assign an [Elastic IP address](#) to the layer's instances. For more information, see [How to Edit a Layer](#).

Type: Boolean

Required: No

[AutoAssignPublicIps](#) (p. 32)

For stacks that are running in a VPC, whether to automatically assign a public IP address to the layer's instances. For more information, see [How to Edit a Layer](#).

Type: Boolean

Required: No

[CloudWatchLogsConfiguration](#) (p. 32)

Specifies CloudWatch Logs configuration options for the layer. For more information, see [CloudWatchLogsLogStream](#) (p. 203).

Type: [CloudWatchLogsConfiguration](#) (p. 202) object

Required: No

[CustomInstanceProfileArn](#) (p. 32)

The ARN of an IAM profile to be used for the layer's EC2 instances. For more information about IAM ARNs, see [Using Identifiers](#).

Type: String

Required: No

[CustomJson](#) (p. 32)

A JSON-formatted string containing custom stack configuration and deployment attributes to be installed on the layer's instances. For more information, see [Using Custom JSON](#). This feature is supported as of version 1.7.42 of the AWS CLI.

Type: String

Required: No

[CustomRecipes](#) (p. 32)

A `LayerCustomRecipes` object that specifies the layer custom recipes.

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

Required: No

[CustomSecurityGroupIds](#) (p. 32)

An array containing the layer custom security group IDs.

Type: Array of strings

Required: No

[EnableAutoHealing](#) (p. 32)

Whether to disable auto healing for the layer.

Type: Boolean

Required: No

[InstallUpdatesOnBoot](#) (p. 32)

Whether to install operating system and package updates when the instance boots. The default value is `true`. To control when updates are installed, set this value to `false`. You must then update your instances manually by using [CreateDeployment](#) (p. 24) to run the `update_dependencies` stack command or by manually running `yum` (Amazon Linux) or `apt-get` (Ubuntu) on the instances.

Note

To ensure that your instances have the latest security updates, we strongly recommend using the default value of `true`.

Type: Boolean

Required: No

[LifecycleEventConfiguration](#) (p. 32)

A `LifeCycleEventConfiguration` object that you can use to configure the Shutdown event to specify an execution timeout and enable or disable Elastic Load Balancer connection draining.

Type: [LifecycleEventConfiguration \(p. 234\)](#) object

Required: No

Name (p. 32)

The layer name, which is used by the console.

Type: String

Required: Yes

Packages (p. 32)

An array of `Package` objects that describes the layer packages.

Type: Array of strings

Required: No

Shortname (p. 32)

For custom layers only, use this parameter to specify the layer's short name, which is used internally by AWS OpsWorks Stacks and by Chef recipes. The short name is also used as the name for the directory where your app files are installed. It can have a maximum of 200 characters, which are limited to the alphanumeric characters, '-', '_', and '.'.

The built-in layers' short names are defined by AWS OpsWorks Stacks. For more information, see the [Layer Reference](#).

Type: String

Required: Yes

StackId (p. 32)

The layer stack ID.

Type: String

Required: Yes

Type (p. 32)

The layer type. A stack cannot have more than one built-in layer of the same type. It can have any number of custom layers. Built-in layers are not available in Chef 12 stacks.

Type: String

Valid Values: `aws-flow-ruby` | `ecs-cluster` | `java-app` | `lb` | `web` | `php-app` | `rails-app` | `nodejs-app` | `memcached` | `db-master` | `monitoring-master` | `custom`

Required: Yes

UseEbsOptimizedInstances (p. 32)

Whether to use Amazon EBS-optimized instances.

Type: Boolean

Required: No

VolumeConfigurations (p. 32)

A `VolumeConfigurations` object that describes the layer's Amazon EBS volumes.

Type: Array of [VolumeConfiguration \(p. 268\)](#) objects

Required: No

Response Syntax

```
{  
  "LayerId": "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.

LayerId (p. 36)

The layer ID.

Type: String

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 274\)](#).

ResourceNotFoundException

Indicates that a resource was not found.

HTTP Status Code: 400

ValidationException

Indicates that a request was not valid.

HTTP Status Code: 400

See Also

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

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

CreateStack

Creates a new stack. For more information, see [Create a New Stack](#).

Required Permissions: To use this action, an IAM user must have an attached policy that explicitly grants permissions. For more information about user permissions, see [Managing User Permissions](#).

Request Syntax

```
{
  "AgentVersion": "string",
  "Attributes": {
    "string": "string"
  },
  "ChefConfiguration": {
    "BerkshelfVersion": "string",
    "ManageBerkshelf": boolean
  },
  "ConfigurationManager": {
    "Name": "string",
    "Version": "string"
  },
  "CustomCookbooksSource": {
    "Password": "string",
    "Revision": "string",
    "SshKey": "string",
    "Type": "string",
    "Url": "string",
    "Username": "string"
  },
  "CustomJson": "string",
  "DefaultAvailabilityZone": "string",
  "DefaultInstanceProfileArn": "string",
  "DefaultOs": "string",
  "DefaultRootDeviceType": "string",
  "DefaultSshKeyName": "string",
  "DefaultSubnetId": "string",
  "HostnameTheme": "string",
  "Name": "string",
  "Region": "string",
  "ServiceRoleArn": "string",
  "UseCustomCookbooks": boolean,
  "UseOpsworksSecurityGroups": boolean,
  "VpcId": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 272).

The request accepts the following data in JSON format.

AgentVersion (p. 37)

The default AWS OpsWorks Stacks agent version. You have the following options:

- Auto-update - Set this parameter to `LATEST`. AWS OpsWorks Stacks automatically installs new agent versions on the stack's instances as soon as they are available.

- **Fixed version** - Set this parameter to your preferred agent version. To update the agent version, you must edit the stack configuration and specify a new version. AWS OpsWorks Stacks then automatically installs that version on the stack's instances.

The default setting is the most recent release of the agent. To specify an agent version, you must use the complete version number, not the abbreviated number shown on the console. For a list of available agent version numbers, call [DescribeAgentVersions](#) (p. 66). AgentVersion cannot be set to Chef 12.2.

Note

You can also specify an agent version when you create or update an instance, which overrides the stack's default setting.

Type: String

Required: No

Attributes (p. 37)

One or more user-defined key-value pairs to be added to the stack attributes.

Type: String to string map

Valid Keys: `color`

Required: No

ChefConfiguration (p. 37)

A `ChefConfiguration` object that specifies whether to enable Berkshelf and the Berkshelf version on Chef 11.10 stacks. For more information, see [Create a New Stack](#).

Type: [ChefConfiguration](#) (p. 201) object

Required: No

ConfigurationManager (p. 37)

The configuration manager. When you create a stack we recommend that you use the configuration manager to specify the Chef version: 12, 11.10, or 11.4 for Linux stacks, or 12.2 for Windows stacks. The default value for Linux stacks is currently 12.

Type: [StackConfigurationManager](#) (p. 259) object

Required: No

CustomCookbooksSource (p. 37)

Contains the information required to retrieve an app or cookbook from a repository. For more information, see [Creating Apps](#) or [Custom Recipes and Cookbooks](#).

Type: [Source](#) (p. 252) object

Required: No

CustomJson (p. 37)

A string that contains user-defined, custom JSON. It can be used to override the corresponding default stack configuration attribute values or to pass data to recipes. The string should be in the following format:

```
"{\"key1\": \"value1\", \"key2\": \"value2\", ...}"
```

For more information about custom JSON, see [Use Custom JSON to Modify the Stack Configuration Attributes](#).

Type: String

Required: No

DefaultAvailabilityZone (p. 37)

The stack's default Availability Zone, which must be in the specified region. For more information, see [Regions and Endpoints](#). If you also specify a value for `DefaultSubnetId`, the subnet must be in the same zone. For more information, see the `VpcId` parameter description.

Type: String

Required: No

DefaultInstanceProfileArn (p. 37)

The Amazon Resource Name (ARN) of an IAM profile that is the default profile for all of the stack's EC2 instances. For more information about IAM ARNs, see [Using Identifiers](#).

Type: String

Required: Yes

DefaultOs (p. 37)

The stack's default operating system, which is installed on every instance unless you specify a different operating system when you create the instance. You can specify one of the following.

- A supported Linux operating system: An Amazon Linux version, such as `Amazon Linux 2018.03`, `Amazon Linux 2017.09`, `Amazon Linux 2017.03`, `Amazon Linux 2016.09`, `Amazon Linux 2016.03`, `Amazon Linux 2015.09`, or `Amazon Linux 2015.03`.
- A supported Ubuntu operating system, such as `Ubuntu 16.04 LTS`, `Ubuntu 14.04 LTS`, or `Ubuntu 12.04 LTS`.
- `CentOS Linux 7`
- `Red Hat Enterprise Linux 7`
- A supported Windows operating system, such as `Microsoft Windows Server 2012 R2 Base`, `Microsoft Windows Server 2012 R2 with SQL Server Express`, `Microsoft Windows Server 2012 R2 with SQL Server Standard`, or `Microsoft Windows Server 2012 R2 with SQL Server Web`.
- A custom AMI: `Custom`. You specify the custom AMI you want to use when you create instances. For more information, see [Using Custom AMIs](#).

The default option is the current Amazon Linux version. For more information about supported operating systems, see [AWS OpsWorks Stacks Operating Systems](#).

Type: String

Required: No

DefaultRootDeviceType (p. 37)

The default root device type. This value is the default for all instances in the stack, but you can override it when you create an instance. The default option is `instance-store`. For more information, see [Storage for the Root Device](#).

Type: String

Valid Values: `ebs` | `instance-store`

Required: No

DefaultSshKeyName (p. 37)

A default Amazon EC2 key pair name. The default value is none. If you specify a key pair name, AWS OpsWorks installs the public key on the instance and you can use the private key with an SSH client to log in to the instance. For more information, see [Using SSH to Communicate with an Instance](#) and [Managing SSH Access](#). You can override this setting by specifying a different key pair, or no key pair, when you [create an instance](#).

Type: String

Required: No

DefaultSubnetId (p. 37)

The stack's default VPC subnet ID. This parameter is required if you specify a value for the `VpcId` parameter. All instances are launched into this subnet unless you specify otherwise when you create the instance. If you also specify a value for `DefaultAvailabilityZone`, the subnet must be in that zone. For information on default values and when this parameter is required, see the `VpcId` parameter description.

Type: String

Required: No

HostnameTheme (p. 37)

The stack's host name theme, with spaces replaced by underscores. The theme is used to generate host names for the stack's instances. By default, `HostnameTheme` is set to `Layer_Dependent`, which creates host names by appending integers to the layer's short name. The other themes are:

- `Baked_Goods`
- `Clouds`
- `Europe_Cities`
- `Fruits`
- `Greek_Deities`
- `Legendary_creatures_from_Japan`
- `Planets_and_Moons`
- `Roman_Deities`
- `Scottish_Islands`
- `US_Cities`
- `Wild_Cats`

To obtain a generated host name, call `GetHostNameSuggestion`, which returns a host name based on the current theme.

Type: String

Required: No

Name (p. 37)

The stack name.

Type: String

Required: Yes

Region (p. 37)

The stack's AWS region, such as `ap-south-1`. For more information about Amazon regions, see [Regions and Endpoints](#).

Note

In the AWS CLI, this API maps to the `--stack-region` parameter. If the `--stack-region` parameter and the AWS CLI common parameter `--region` are set to the same value, the stack uses a *regional* endpoint. If the `--stack-region` parameter is not set, but the AWS CLI `--region` parameter is, this also results in a stack with a *regional* endpoint. However, if the `--region` parameter is set to `us-east-1`, and the `--stack-region` parameter is set to one of the following, then the stack uses a legacy or *classic* region: `us-west-1`, `us-west-2`, `sa-east-1`, `eu-central-1`, `eu-west-1`, `ap-northeast-1`, `ap-southeast-1`, `ap-southeast-2`. In this case, the actual API endpoint of the stack is in `us-east-1`. Only the preceding regions are supported as classic regions in the `us-east-1` API endpoint. Because it is a best practice to choose the regional endpoint that is closest to where you manage AWS, we recommend that you use regional endpoints for new stacks. The AWS CLI common `--region` parameter always specifies a regional API endpoint; it cannot be used to specify a classic AWS OpsWorks Stacks region.

Type: String

Required: Yes

[ServiceRoleArn \(p. 37\)](#)

The stack's AWS Identity and Access Management (IAM) role, which allows AWS OpsWorks Stacks to work with AWS resources on your behalf. You must set this parameter to the Amazon Resource Name (ARN) for an existing IAM role. For more information about IAM ARNs, see [Using Identifiers](#).

Type: String

Required: Yes

[UseCustomCookbooks \(p. 37\)](#)

Whether the stack uses custom cookbooks.

Type: Boolean

Required: No

[UseOpsworksSecurityGroups \(p. 37\)](#)

Whether to associate the AWS OpsWorks Stacks built-in security groups with the stack's layers.

AWS OpsWorks Stacks provides a standard set of built-in security groups, one for each layer, which are associated with layers by default. With `UseOpsworksSecurityGroups` you can instead provide your own custom security groups. `UseOpsworksSecurityGroups` has the following settings:

- True - AWS OpsWorks Stacks automatically associates the appropriate built-in security group with each layer (default setting). You can associate additional security groups with a layer after you create it, but you cannot delete the built-in security group.
- False - AWS OpsWorks Stacks does not associate built-in security groups with layers. You must create appropriate EC2 security groups and associate a security group with each layer that you create. However, you can still manually associate a built-in security group with a layer on creation; custom security groups are required only for those layers that need custom settings.

For more information, see [Create a New Stack](#).

Type: Boolean

Required: No

[VpcId \(p. 37\)](#)

The ID of the VPC that the stack is to be launched into. The VPC must be in the stack's region. All instances are launched into this VPC. You cannot change the ID later.

- If your account supports EC2-Classic, the default value is `no` VPC.
- If your account does not support EC2-Classic, the default value is the default VPC for the specified region.

If the VPC ID corresponds to a default VPC and you have specified either the `DefaultAvailabilityZone` or the `DefaultSubnetId` parameter only, AWS OpsWorks Stacks infers the value of the other parameter. If you specify neither parameter, AWS OpsWorks Stacks sets these parameters to the first valid Availability Zone for the specified region and the corresponding default VPC subnet ID, respectively.

If you specify a nondefault VPC ID, note the following:

- It must belong to a VPC in your account that is in the specified region.
- You must specify a value for `DefaultSubnetId`.

For more information about how to use AWS OpsWorks Stacks with a VPC, see [Running a Stack in a VPC](#). For more information about default VPC and EC2-Classic, see [Supported Platforms](#).

Type: String

Required: No

Response Syntax

```
{
  "StackId": "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.

StackId (p. 42)

The stack ID, which is an opaque string that you use to identify the stack when performing actions such as `DescribeStacks`.

Type: String

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 274\)](#).

ValidationException

Indicates that a request was not valid.

HTTP Status Code: 400

See Also

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

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

CreateUserProfile

Creates a new user profile.

Required Permissions: To use this action, an IAM user must have an attached policy that explicitly grants permissions. For more information about user permissions, see [Managing User Permissions](#).

Request Syntax

```
{  
  "AllowSelfManagement": boolean,  
  "IamUserArn": "string",  
  "SshPublicKey": "string",  
  "SshUsername": "string"  
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 272).

The request accepts the following data in JSON format.

[AllowSelfManagement](#) (p. 44)

Whether users can specify their own SSH public key through the My Settings page. For more information, see [Setting an IAM User's Public SSH Key](#).

Type: Boolean

Required: No

[IamUserArn](#) (p. 44)

The user's IAM ARN; this can also be a federated user's ARN.

Type: String

Required: Yes

[SshPublicKey](#) (p. 44)

The user's public SSH key.

Type: String

Required: No

[SshUsername](#) (p. 44)

The user's SSH user name. The allowable characters are [a-z], [A-Z], [0-9], '-', and '_'. If the specified name includes other punctuation marks, AWS OpsWorks Stacks removes them. For example, `my.name` will be changed to `myname`. If you do not specify an SSH user name, AWS OpsWorks Stacks generates one from the IAM user name.

Type: String

Required: No

Response Syntax

```
{  
  "IamUserArn": "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.

IamUserArn (p. 45)

The user's IAM ARN.

Type: String

Errors

For information about the errors that are common to all actions, see [Common Errors](#) (p. 274).

ValidationException

Indicates that a request was not valid.

HTTP Status Code: 400

See Also

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

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

DeleteApp

Deletes a specified app.

Required Permissions: To use this action, an IAM user must have a Manage permissions level for the stack, or an attached policy that explicitly grants permissions. For more information on user permissions, see [Managing User Permissions](#).

Request Syntax

```
{  
  "AppId": "string"  
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters \(p. 272\)](#).

The request accepts the following data in JSON format.

[AppId \(p. 46\)](#)

The app ID.

Type: String

Required: Yes

Response Elements

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

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 274\)](#).

ResourceNotFoundException

Indicates that a resource was not found.

HTTP Status Code: 400

ValidationException

Indicates that a request was not valid.

HTTP Status Code: 400

See Also

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

- [AWS Command Line Interface](#)

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

DeleteInstance

Deletes a specified instance, which terminates the associated Amazon EC2 instance. You must stop an instance before you can delete it.

For more information, see [Deleting Instances](#).

Required Permissions: To use this action, an IAM user must have a Manage permissions level for the stack, or an attached policy that explicitly grants permissions. For more information on user permissions, see [Managing User Permissions](#).

Request Syntax

```
{  
  "DeleteElasticIp": boolean,  
  "DeleteVolumes": boolean,  
  "InstanceId": "string"  
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 272).

The request accepts the following data in JSON format.

DeleteElasticIp (p. 48)

Whether to delete the instance Elastic IP address.

Type: Boolean

Required: No

DeleteVolumes (p. 48)

Whether to delete the instance's Amazon EBS volumes.

Type: Boolean

Required: No

InstanceId (p. 48)

The instance ID.

Type: String

Required: Yes

Response Elements

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

Errors

For information about the errors that are common to all actions, see [Common Errors](#) (p. 274).

ResourceNotFoundException

Indicates that a resource was not found.

HTTP Status Code: 400

ValidationException

Indicates that a request was not valid.

HTTP Status Code: 400

See Also

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

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

DeleteLayer

Deletes a specified layer. You must first stop and then delete all associated instances or unassign registered instances. For more information, see [How to Delete a Layer](#).

Required Permissions: To use this action, an IAM user must have a Manage permissions level for the stack, or an attached policy that explicitly grants permissions. For more information on user permissions, see [Managing User Permissions](#).

Request Syntax

```
{  
  "LayerId": "string"  
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters \(p. 272\)](#).

The request accepts the following data in JSON format.

LayerId (p. 50)

The layer ID.

Type: String

Required: Yes

Response Elements

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

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 274\)](#).

ResourceNotFoundException

Indicates that a resource was not found.

HTTP Status Code: 400

ValidationException

Indicates that a request was not valid.

HTTP Status Code: 400

See Also

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

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

DeleteStack

Deletes a specified stack. You must first delete all instances, layers, and apps or deregister registered instances. For more information, see [Shut Down a Stack](#).

Required Permissions: To use this action, an IAM user must have a Manage permissions level for the stack, or an attached policy that explicitly grants permissions. For more information on user permissions, see [Managing User Permissions](#).

Request Syntax

```
{  
  "StackId": "string"  
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters \(p. 272\)](#).

The request accepts the following data in JSON format.

StackId (p. 52)

The stack ID.

Type: String

Required: Yes

Response Elements

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

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 274\)](#).

ResourceNotFoundException

Indicates that a resource was not found.

HTTP Status Code: 400

ValidationException

Indicates that a request was not valid.

HTTP Status Code: 400

See Also

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

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

DeleteUserProfile

Deletes a user profile.

Required Permissions: To use this action, an IAM user must have an attached policy that explicitly grants permissions. For more information about user permissions, see [Managing User Permissions](#).

Request Syntax

```
{  
  "IamUserArn": "string"  
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 272).

The request accepts the following data in JSON format.

[IamUserArn](#) (p. 54)

The user's IAM ARN. This can also be a federated user's ARN.

Type: String

Required: Yes

Response Elements

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

Errors

For information about the errors that are common to all actions, see [Common Errors](#) (p. 274).

ResourceNotFoundException

Indicates that a resource was not found.

HTTP Status Code: 400

ValidationException

Indicates that a request was not valid.

HTTP Status Code: 400

See Also

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

- [AWS Command Line Interface](#)

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

DeregisterEcsCluster

Deregisters a specified Amazon ECS cluster from a stack. For more information, see [Resource Management](#).

Required Permissions: To use this action, an IAM user must have a Manage permissions level for the stack or an attached policy that explicitly grants permissions. For more information on user permissions, see <https://docs.aws.amazon.com/opsworks/latest/userguide/opsworks-security-users.html>.

Request Syntax

```
{  
  "EcsClusterArn": "string"  
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 272).

The request accepts the following data in JSON format.

EcsClusterArn (p. 56)

The cluster's Amazon Resource Number (ARN).

Type: String

Required: Yes

Response Elements

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

Errors

For information about the errors that are common to all actions, see [Common Errors](#) (p. 274).

ResourceNotFoundException

Indicates that a resource was not found.

HTTP Status Code: 400

ValidationException

Indicates that a request was not valid.

HTTP Status Code: 400

See Also

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

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

DeregisterElasticIp

Deregisters a specified Elastic IP address. The address can then be registered by another stack. For more information, see [Resource Management](#).

Required Permissions: To use this action, an IAM user must have a Manage permissions level for the stack, or an attached policy that explicitly grants permissions. For more information on user permissions, see [Managing User Permissions](#).

Request Syntax

```
{  
  "ElasticIp": "string"  
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters \(p. 272\)](#).

The request accepts the following data in JSON format.

ElasticIp (p. 58)

The Elastic IP address.

Type: String

Required: Yes

Response Elements

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

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 274\)](#).

ResourceNotFoundException

Indicates that a resource was not found.

HTTP Status Code: 400

ValidationException

Indicates that a request was not valid.

HTTP Status Code: 400

See Also

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

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

DeregisterInstance

Deregister a registered Amazon EC2 or on-premises instance. This action removes the instance from the stack and returns it to your control. This action cannot be used with instances that were created with AWS OpsWorks Stacks.

Required Permissions: To use this action, an IAM user must have a Manage permissions level for the stack or an attached policy that explicitly grants permissions. For more information on user permissions, see [Managing User Permissions](#).

Request Syntax

```
{  
  "InstanceId": "string"  
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 272).

The request accepts the following data in JSON format.

InstanceId (p. 60)

The instance ID.

Type: String

Required: Yes

Response Elements

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

Errors

For information about the errors that are common to all actions, see [Common Errors](#) (p. 274).

ResourceNotFoundException

Indicates that a resource was not found.

HTTP Status Code: 400

ValidationException

Indicates that a request was not valid.

HTTP Status Code: 400

See Also

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

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

DeregisterRdsDbInstance

Deregisters an Amazon RDS instance.

Required Permissions: To use this action, an IAM user must have a Manage permissions level for the stack, or an attached policy that explicitly grants permissions. For more information on user permissions, see [Managing User Permissions](#).

Request Syntax

```
{  
  "RdsDbInstanceArn": "string"  
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 272).

The request accepts the following data in JSON format.

RdsDbInstanceArn (p. 62)

The Amazon RDS instance's ARN.

Type: String

Required: Yes

Response Elements

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

Errors

For information about the errors that are common to all actions, see [Common Errors](#) (p. 274).

ResourceNotFoundException

Indicates that a resource was not found.

HTTP Status Code: 400

ValidationException

Indicates that a request was not valid.

HTTP Status Code: 400

See Also

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

- [AWS Command Line Interface](#)

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

DeregisterVolume

Deregisters an Amazon EBS volume. The volume can then be registered by another stack. For more information, see [Resource Management](#).

Required Permissions: To use this action, an IAM user must have a Manage permissions level for the stack, or an attached policy that explicitly grants permissions. For more information on user permissions, see [Managing User Permissions](#).

Request Syntax

```
{  
  "VolumeId": "string"  
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters \(p. 272\)](#).

The request accepts the following data in JSON format.

VolumeId (p. 64)

The AWS OpsWorks Stacks volume ID, which is the GUID that AWS OpsWorks Stacks assigned to the instance when you registered the volume with the stack, not the Amazon EC2 volume ID.

Type: String

Required: Yes

Response Elements

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

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 274\)](#).

ResourceNotFoundException

Indicates that a resource was not found.

HTTP Status Code: 400

ValidationException

Indicates that a request was not valid.

HTTP Status Code: 400

See Also

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

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

DescribeAgentVersions

Describes the available AWS OpsWorks Stacks agent versions. You must specify a stack ID or a configuration manager. `DescribeAgentVersions` returns a list of available agent versions for the specified stack or configuration manager.

Request Syntax

```
{
  "ConfigurationManager": {
    "Name": "string",
    "Version": "string"
  },
  "StackId": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 272).

The request accepts the following data in JSON format.

ConfigurationManager (p. 66)

The configuration manager.

Type: [StackConfigurationManager](#) (p. 259) object

Required: No

StackId (p. 66)

The stack ID.

Type: String

Required: No

Response Syntax

```
{
  "AgentVersions": [
    {
      "ConfigurationManager": {
        "Name": "string",
        "Version": "string"
      },
      "Version": "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.

AgentVersions (p. 66)

The agent versions for the specified stack or configuration manager. Note that this value is the complete version number, not the abbreviated number used by the console.

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

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 274\)](#).

ResourceNotFoundException

Indicates that a resource was not found.

HTTP Status Code: 400

ValidationException

Indicates that a request was not valid.

HTTP Status Code: 400

See Also

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

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

DescribeApps

Requests a description of a specified set of apps.

Note

This call accepts only one resource-identifying parameter.

Required Permissions: To use this action, an IAM user must have a Show, Deploy, or Manage permissions level for the stack, or an attached policy that explicitly grants permissions. For more information about user permissions, see [Managing User Permissions](#).

Request Syntax

```
{  
  "AppIds": [ "string" ],  
  "StackId": "string"  
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 272).

The request accepts the following data in JSON format.

AppIds (p. 68)

An array of app IDs for the apps to be described. If you use this parameter, `DescribeApps` returns a description of the specified apps. Otherwise, it returns a description of every app.

Type: Array of strings

Required: No

StackId (p. 68)

The app stack ID. If you use this parameter, `DescribeApps` returns a description of the apps in the specified stack.

Type: String

Required: No

Response Syntax

```
{  
  "Apps": [  
    {  
      "AppId": "string",  
      "AppSource": {  
        "Password": "string",  
        "Revision": "string",  
        "SshKey": "string",  
        "Type": "string",  
        "Url": "string",  
        "Username": "string"  
      },  
    },  
  ],  
}
```

```

    "Attributes": {
      "string": "string"
    },
    "CreatedAt": "string",
    "DataSources": [
      {
        "Arn": "string",
        "DatabaseName": "string",
        "Type": "string"
      }
    ],
    "Description": "string",
    "Domains": [ "string" ],
    "EnableSsl": boolean,
    "Environment": [
      {
        "Key": "string",
        "Secure": boolean,
        "Value": "string"
      }
    ],
    "Name": "string",
    "Shortname": "string",
    "SslConfiguration": {
      "Certificate": "string",
      "Chain": "string",
      "PrivateKey": "string"
    },
    "StackId": "string",
    "Type": "string"
  }
]
}

```

Response Elements

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

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

Apps (p. 68)

An array of App objects that describe the specified apps.

Type: Array of [App \(p. 195\)](#) objects

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 274\)](#).

ResourceNotFoundException

Indicates that a resource was not found.

HTTP Status Code: 400

ValidationException

Indicates that a request was not valid.

HTTP Status Code: 400

See Also

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

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


```
{
  "AcknowledgedAt": "string",
  "CommandId": "string",
  "CompletedAt": "string",
  "CreatedAt": "string",
  "DeploymentId": "string",
  "ExitCode": number,
  "InstanceId": "string",
  "LogUrl": "string",
  "Status": "string",
  "Type": "string"
}
```

Response Elements

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

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

Commands (p. 71)

An array of `Command` objects that describe each of the specified commands.

Type: Array of [Command](#) (p. 206) objects

Errors

For information about the errors that are common to all actions, see [Common Errors](#) (p. 274).

ResourceNotFoundException

Indicates that a resource was not found.

HTTP Status Code: 400

ValidationException

Indicates that a request was not valid.

HTTP Status Code: 400

See Also

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

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

- [AWS SDK for Ruby V2](#)


```
{
  "AppId": "string",
  "Command": {
    "Args": {
      "string" : [ "string" ]
    },
    "Name": "string"
  },
  "Comment": "string",
  "CompletedAt": "string",
  "CreatedAt": "string",
  "CustomJson": "string",
  "DeploymentId": "string",
  "Duration": number,
  "IamUserArn": "string",
  "InstanceIds": [ "string" ],
  "StackId": "string",
  "Status": "string"
}
]
```

Response Elements

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

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

Deployments (p. 74)

An array of `Deployment` objects that describe the deployments.

Type: Array of [Deployment \(p. 209\)](#) objects

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 274\)](#).

ResourceNotFoundException

Indicates that a resource was not found.

HTTP Status Code: 400

ValidationException

Indicates that a request was not valid.

HTTP Status Code: 400

See Also

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

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

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

DescribeEcsClusters

Describes Amazon ECS clusters that are registered with a stack. If you specify only a stack ID, you can use the `MaxResults` and `NextToken` parameters to paginate the response. However, AWS OpsWorks Stacks currently supports only one cluster per layer, so the result set has a maximum of one element.

Required Permissions: To use this action, an IAM user must have a `Show`, `Deploy`, or `Manage` permissions level for the stack or an attached policy that explicitly grants permission. For more information about user permissions, see [Managing User Permissions](#).

This call accepts only one resource-identifying parameter.

Request Syntax

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

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 272).

The request accepts the following data in JSON format.

[EcsClusterArns](#) (p. 77)

A list of ARNs, one for each cluster to be described.

Type: Array of strings

Required: No

[MaxResults](#) (p. 77)

To receive a paginated response, use this parameter to specify the maximum number of results to be returned with a single call. If the number of available results exceeds this maximum, the response includes a `NextToken` value that you can assign to the `NextToken` request parameter to get the next set of results.

Type: Integer

Required: No

[NextToken](#) (p. 77)

If the previous paginated request did not return all of the remaining results, the response object's `NextToken` parameter value is set to a token. To retrieve the next set of results, call `DescribeEcsClusters` again and assign that token to the request object's `NextToken` parameter. If there are no remaining results, the previous response object's `NextToken` parameter is set to `null`.

Type: String

Required: No

StackId (p. 77)

A stack ID. `DescribeEcsClusters` returns a description of the cluster that is registered with the stack.

Type: String

Required: No

Response Syntax

```
{
  "EcsClusters": [
    {
      "EcsClusterArn": "string",
      "EcsClusterName": "string",
      "RegisteredAt": "string",
      "StackId": "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.

EcsClusters (p. 78)

A list of `EcsCluster` objects containing the cluster descriptions.

Type: Array of [EcsCluster \(p. 215\)](#) objects

NextToken (p. 78)

If a paginated request does not return all of the remaining results, this parameter is set to a token that you can assign to the request object's `NextToken` parameter to retrieve the next set of results. If the previous paginated request returned all of the remaining results, this parameter is set to `null`.

Type: String

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 274\)](#).

ResourceNotFoundException

Indicates that a resource was not found.

HTTP Status Code: 400

ValidationException

Indicates that a request was not valid.

HTTP Status Code: 400

See Also

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

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

DescribeElasticIps

Describes [Elastic IP addresses](#).

Note

This call accepts only one resource-identifying parameter.

Required Permissions: To use this action, an IAM user must have a Show, Deploy, or Manage permissions level for the stack, or an attached policy that explicitly grants permissions. For more information about user permissions, see [Managing User Permissions](#).

Request Syntax

```
{  
  "InstanceId": "string",  
  "Ips": [ "string" ],  
  "StackId": "string"  
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters \(p. 272\)](#).

The request accepts the following data in JSON format.

InstanceId (p. 80)

The instance ID. If you include this parameter, `DescribeElasticIps` returns a description of the Elastic IP addresses associated with the specified instance.

Type: String

Required: No

Ips (p. 80)

An array of Elastic IP addresses to be described. If you include this parameter, `DescribeElasticIps` returns a description of the specified Elastic IP addresses. Otherwise, it returns a description of every Elastic IP address.

Type: Array of strings

Required: No

StackId (p. 80)

A stack ID. If you include this parameter, `DescribeElasticIps` returns a description of the Elastic IP addresses that are registered with the specified stack.

Type: String

Required: No

Response Syntax

```
{
```

```
"ElasticIps": [  
  {  
    "Domain": "string",  
    "InstanceId": "string",  
    "Ip": "string",  
    "Name": "string",  
    "Region": "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.

ElasticIps (p. 80)

An `ElasticIps` object that describes the specified Elastic IP addresses.

Type: Array of [ElasticIp \(p. 216\)](#) objects

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 274\)](#).

ResourceNotFoundException

Indicates that a resource was not found.

HTTP Status Code: 400

ValidationException

Indicates that a request was not valid.

HTTP Status Code: 400

See Also

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

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

DescribeElasticLoadBalancers

Describes a stack's Elastic Load Balancing instances.

Note

This call accepts only one resource-identifying parameter.

Required Permissions: To use this action, an IAM user must have a Show, Deploy, or Manage permissions level for the stack, or an attached policy that explicitly grants permissions. For more information about user permissions, see [Managing User Permissions](#).

Request Syntax

```
{  
  "LayerIds": [ "string" ],  
  "StackId": "string"  
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 272).

The request accepts the following data in JSON format.

LayerIds (p. 82)

A list of layer IDs. The action describes the Elastic Load Balancing instances for the specified layers.

Type: Array of strings

Required: No

StackId (p. 82)

A stack ID. The action describes the stack's Elastic Load Balancing instances.

Type: String

Required: No

Response Syntax

```
{  
  "ElasticLoadBalancers": [  
    {  
      "AvailabilityZones": [ "string" ],  
      "DnsName": "string",  
      "Ec2InstanceIds": [ "string" ],  
      "ElasticLoadBalancerName": "string",  
      "LayerId": "string",  
      "Region": "string",  
      "StackId": "string",  
      "SubnetIds": [ "string" ],  
      "VpcId": "string"  
    }  
  ]  
}
```

```
}
```

Response Elements

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

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

ElasticLoadBalancers (p. 82)

A list of `ElasticLoadBalancer` objects that describe the specified Elastic Load Balancing instances.

Type: Array of [ElasticLoadBalancer](#) (p. 217) objects

Errors

For information about the errors that are common to all actions, see [Common Errors](#) (p. 274).

ResourceNotFoundException

Indicates that a resource was not found.

HTTP Status Code: 400

ValidationException

Indicates that a request was not valid.

HTTP Status Code: 400

See Also

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

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

DescribeInstances

Requests a description of a set of instances.

Note

This call accepts only one resource-identifying parameter.

Required Permissions: To use this action, an IAM user must have a Show, Deploy, or Manage permissions level for the stack, or an attached policy that explicitly grants permissions. For more information about user permissions, see [Managing User Permissions](#).

Request Syntax

```
{
  "InstanceIds": [ "string" ],
  "LayerId": "string",
  "StackId": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 272).

The request accepts the following data in JSON format.

InstanceIds (p. 84)

An array of instance IDs to be described. If you use this parameter, `DescribeInstances` returns a description of the specified instances. Otherwise, it returns a description of every instance.

Type: Array of strings

Required: No

LayerId (p. 84)

A layer ID. If you use this parameter, `DescribeInstances` returns descriptions of the instances associated with the specified layer.

Type: String

Required: No

StackId (p. 84)

A stack ID. If you use this parameter, `DescribeInstances` returns descriptions of the instances associated with the specified stack.

Type: String

Required: No

Response Syntax

```
{
  "Instances": [
    {
      "AgentVersion": "string",
```

```

    "AmiId": "string",
    "Architecture": "string",
    "Arn": "string",
    "AutoScalingType": "string",
    "AvailabilityZone": "string",
    "BlockDeviceMappings": [
      {
        "DeviceName": "string",
        "Ebs": {
          "DeleteOnTermination": boolean,
          "Iops": number,
          "SnapshotId": "string",
          "VolumeSize": number,
          "VolumeType": "string"
        },
        "NoDevice": "string",
        "VirtualName": "string"
      }
    ],
    "CreatedAt": "string",
    "EbsOptimized": boolean,
    "Ec2InstanceId": "string",
    "EcsClusterArn": "string",
    "EcsContainerInstanceArn": "string",
    "ElasticIp": "string",
    "Hostname": "string",
    "InfrastructureClass": "string",
    "InstallUpdatesOnBoot": boolean,
    "InstanceId": "string",
    "InstanceProfileArn": "string",
    "InstanceType": "string",
    "LastServiceErrorId": "string",
    "LayerIds": [ "string" ],
    "Os": "string",
    "Platform": "string",
    "PrivateDns": "string",
    "PrivateIp": "string",
    "PublicDns": "string",
    "PublicIp": "string",
    "RegisteredBy": "string",
    "ReportedAgentVersion": "string",
    "ReportedOs": {
      "Family": "string",
      "Name": "string",
      "Version": "string"
    },
    "RootDeviceType": "string",
    "RootDeviceVolumeId": "string",
    "SecurityGroupIds": [ "string" ],
    "SshHostDsaKeyFingerprint": "string",
    "SshHostRsaKeyFingerprint": "string",
    "SshKeyName": "string",
    "StackId": "string",
    "Status": "string",
    "SubnetId": "string",
    "Tenancy": "string",
    "VirtualizationType": "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.

Instances (p. 84)

An array of Instance objects that describe the instances.

Type: Array of [Instance \(p. 220\)](#) objects

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 274\)](#).

ResourceNotFoundException

Indicates that a resource was not found.

HTTP Status Code: 400

ValidationException

Indicates that a request was not valid.

HTTP Status Code: 400

See Also

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

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

DescribeLayers

Requests a description of one or more layers in a specified stack.

Note

This call accepts only one resource-identifying parameter.

Required Permissions: To use this action, an IAM user must have a Show, Deploy, or Manage permissions level for the stack, or an attached policy that explicitly grants permissions. For more information about user permissions, see [Managing User Permissions](#).

Request Syntax

```
{
  "LayerIds": [ "string" ],
  "StackId": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 272).

The request accepts the following data in JSON format.

LayerIds (p. 87)

An array of layer IDs that specify the layers to be described. If you omit this parameter, DescribeLayers returns a description of every layer in the specified stack.

Type: Array of strings

Required: No

StackId (p. 87)

The stack ID.

Type: String

Required: No

Response Syntax

```
{
  "Layers": [
    {
      "Arn": "string",
      "Attributes": {
        "string": "string"
      },
      "AutoAssignElasticIps": boolean,
      "AutoAssignPublicIps": boolean,
      "CloudWatchLogsConfiguration": {
        "Enabled": boolean,
        "LogStreams": [
          {
            "BatchCount": number,
            "BatchSize": number,
```

```

        "BufferDuration": number,
        "DatetimeFormat": "string",
        "Encoding": "string",
        "File": "string",
        "FileFingerprintLines": "string",
        "InitialPosition": "string",
        "LogGroupName": "string",
        "MultiLineStartPattern": "string",
        "TimeZone": "string"
    }
}
],
},
"CreatedAt": "string",
"CustomInstanceProfileArn": "string",
"CustomJson": "string",
"CustomRecipes": {
    "Configure": [ "string" ],
    "Deploy": [ "string" ],
    "Setup": [ "string" ],
    "Shutdown": [ "string" ],
    "Undeploy": [ "string" ]
},
"CustomSecurityGroupIds": [ "string" ],
"DefaultRecipes": {
    "Configure": [ "string" ],
    "Deploy": [ "string" ],
    "Setup": [ "string" ],
    "Shutdown": [ "string" ],
    "Undeploy": [ "string" ]
},
"DefaultSecurityGroupNames": [ "string" ],
"EnableAutoHealing": boolean,
"InstallUpdatesOnBoot": boolean,
"LayerId": "string",
"LifecycleEventConfiguration": {
    "Shutdown": {
        "DelayUntilElbConnectionsDrained": boolean,
        "ExecutionTimeout": number
    }
},
"Name": "string",
"Packages": [ "string" ],
"Shortname": "string",
"StackId": "string",
"Type": "string",
"UseEbsOptimizedInstances": boolean,
"VolumeConfigurations": [
    {
        "Encrypted": boolean,
        "Iops": number,
        "MountPoint": "string",
        "NumberOfDisks": number,
        "RaidLevel": number,
        "Size": number,
        "VolumeType": "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.

[Layers \(p. 87\)](#)

An array of `Layer` objects that describe the layers.

Type: Array of [Layer \(p. 230\)](#) objects

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 274\)](#).

ResourceNotFoundException

Indicates that a resource was not found.

HTTP Status Code: 400

ValidationException

Indicates that a request was not valid.

HTTP Status Code: 400

See Also

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

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

DescribeLoadBasedAutoScaling

Describes load-based auto scaling configurations for specified layers.

Note

You must specify at least one of the parameters.

Required Permissions: To use this action, an IAM user must have a Show, Deploy, or Manage permissions level for the stack, or an attached policy that explicitly grants permissions. For more information about user permissions, see [Managing User Permissions](#).

Request Syntax

```
{  
  "LayerIds": [ "string" ]  
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 272).

The request accepts the following data in JSON format.

LayerIds (p. 90)

An array of layer IDs.

Type: Array of strings

Required: Yes

Response Syntax

```
{  
  "LoadBasedAutoScalingConfigurations": [  
    {  
      "DownScaling": {  
        "Alarms": [ "string" ],  
        "CpuThreshold": number,  
        "IgnoreMetricsTime": number,  
        "InstanceCount": number,  
        "LoadThreshold": number,  
        "MemoryThreshold": number,  
        "ThresholdsWaitTime": number  
      },  
      "Enable": boolean,  
      "LayerId": "string",  
      "UpScaling": {  
        "Alarms": [ "string" ],  
        "CpuThreshold": number,  
        "IgnoreMetricsTime": number,  
        "InstanceCount": number,  
        "LoadThreshold": number,  
        "MemoryThreshold": number,  
        "ThresholdsWaitTime": number  
      }  
    }  
  ]  
}
```

```
}  
  ]  
}
```

Response Elements

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

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

LoadBasedAutoScalingConfigurations (p. 90)

An array of `LoadBasedAutoScalingConfiguration` objects that describe each layer's configuration.

Type: Array of [LoadBasedAutoScalingConfiguration \(p. 235\)](#) objects

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 274\)](#).

ResourceNotFoundException

Indicates that a resource was not found.

HTTP Status Code: 400

ValidationException

Indicates that a request was not valid.

HTTP Status Code: 400

See Also

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

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

DescribeMyUserProfile

Describes a user's SSH information.

Required Permissions: To use this action, an IAM user must have self-management enabled or an attached policy that explicitly grants permissions. For more information about user permissions, see [Managing User Permissions](#).

Response Syntax

```
{
  "UserProfile": {
    "IamUserArn": "string",
    "Name": "string",
    "SshPublicKey": "string",
    "SshUsername": "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.

UserProfile (p. 92)

A UserProfile object that describes the user's SSH information.

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

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 274\)](#).

See Also

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

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

DescribeOperatingSystems

Describes the operating systems that are supported by AWS OpsWorks Stacks.

Response Syntax

```
{
  "OperatingSystems": [
    {
      "ConfigurationManagers": [
        {
          "Name": "string",
          "Version": "string"
        }
      ],
      "Id": "string",
      "Name": "string",
      "ReportedName": "string",
      "ReportedVersion": "string",
      "Supported": boolean,
      "Type": "string"
    }
  ]
}
```

Response Elements

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

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

OperatingSystems (p. 93)

Contains information in response to a `DescribeOperatingSystems` request.

Type: Array of [OperatingSystem \(p. 236\)](#) objects

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 274\)](#).

See Also

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

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

- [AWS SDK for Ruby V2](#)

DescribePermissions

Describes the permissions for a specified stack.

Required Permissions: To use this action, an IAM user must have a Manage permissions level for the stack, or an attached policy that explicitly grants permissions. For more information on user permissions, see [Managing User Permissions](#).

Request Syntax

```
{  
  "IamUserArn": "string",  
  "StackId": "string"  
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 272).

The request accepts the following data in JSON format.

[IamUserArn](#) (p. 95)

The user's IAM ARN. This can also be a federated user's ARN. For more information about IAM ARNs, see [Using Identifiers](#).

Type: String

Required: No

[StackId](#) (p. 95)

The stack ID.

Type: String

Required: No

Response Syntax

```
{  
  "Permissions": [  
    {  
      "AllowSsh": boolean,  
      "AllowSudo": boolean,  
      "IamUserArn": "string",  
      "Level": "string",  
      "StackId": "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.

Permissions (p. 95)

An array of `Permission` objects that describe the stack permissions.

- If the request object contains only a stack ID, the array contains a `Permission` object with permissions for each of the stack IAM ARNs.
- If the request object contains only an IAM ARN, the array contains a `Permission` object with permissions for each of the user's stack IDs.
- If the request contains a stack ID and an IAM ARN, the array contains a single `Permission` object with permissions for the specified stack and IAM ARN.

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

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 274\)](#).

ResourceNotFoundException

Indicates that a resource was not found.

HTTP Status Code: 400

ValidationException

Indicates that a request was not valid.

HTTP Status Code: 400

See Also

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

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

DescribeRaidArrays

Describe an instance's RAID arrays.

Note

This call accepts only one resource-identifying parameter.

Required Permissions: To use this action, an IAM user must have a Show, Deploy, or Manage permissions level for the stack, or an attached policy that explicitly grants permissions. For more information about user permissions, see [Managing User Permissions](#).

Request Syntax

```
{
  "InstanceId": "string",
  "RaidArrayIds": [ "string" ],
  "StackId": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 272).

The request accepts the following data in JSON format.

InstanceId (p. 97)

The instance ID. If you use this parameter, `DescribeRaidArrays` returns descriptions of the RAID arrays associated with the specified instance.

Type: String

Required: No

RaidArrayIds (p. 97)

An array of RAID array IDs. If you use this parameter, `DescribeRaidArrays` returns descriptions of the specified arrays. Otherwise, it returns a description of every array.

Type: Array of strings

Required: No

StackId (p. 97)

The stack ID.

Type: String

Required: No

Response Syntax

```
{
  "RaidArrays": [
    {
```

```
    "AvailabilityZone": "string",
    "CreatedAt": "string",
    "Device": "string",
    "InstanceId": "string",
    "Iops": number,
    "MountPoint": "string",
    "Name": "string",
    "NumberOfDisks": number,
    "RaidArrayId": "string",
    "RaidLevel": number,
    "Size": number,
    "StackId": "string",
    "VolumeType": "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.

RaidArrays (p. 97)

A `RaidArrays` object that describes the specified RAID arrays.

Type: Array of [RaidArray \(p. 241\)](#) objects

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 274\)](#).

ResourceNotFoundException

Indicates that a resource was not found.

HTTP Status Code: 400

ValidationException

Indicates that a request was not valid.

HTTP Status Code: 400

See Also

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

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

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

DescribeRdsDbInstances

Describes Amazon RDS instances.

Required Permissions: To use this action, an IAM user must have a Show, Deploy, or Manage permissions level for the stack, or an attached policy that explicitly grants permissions. For more information about user permissions, see [Managing User Permissions](#).

This call accepts only one resource-identifying parameter.

Request Syntax

```
{  
  "RdsDbInstanceArns": [ "string" ],  
  "StackId": "string"  
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 272).

The request accepts the following data in JSON format.

[RdsDbInstanceArns](#) (p. 100)

An array containing the ARNs of the instances to be described.

Type: Array of strings

Required: No

[StackId](#) (p. 100)

The ID of the stack with which the instances are registered. The operation returns descriptions of all registered Amazon RDS instances.

Type: String

Required: Yes

Response Syntax

```
{  
  "RdsDbInstances": [  
    {  
      "Address": "string",  
      "DbInstanceIdentifier": "string",  
      "DbPassword": "string",  
      "DbUser": "string",  
      "Engine": "string",  
      "MissingOnRds": boolean,  
      "RdsDbInstanceArn": "string",  
      "Region": "string",  
      "StackId": "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.

RdsDbInstances (p. 100)

An array of `RdsDbInstance` objects that describe the instances.

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

Errors

For information about the errors that are common to all actions, see [Common Errors](#) (p. 274).

ResourceNotFoundException

Indicates that a resource was not found.

HTTP Status Code: 400

ValidationException

Indicates that a request was not valid.

HTTP Status Code: 400

See Also

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

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

DescribeServiceErrors

Describes AWS OpsWorks Stacks service errors.

Required Permissions: To use this action, an IAM user must have a Show, Deploy, or Manage permissions level for the stack, or an attached policy that explicitly grants permissions. For more information about user permissions, see [Managing User Permissions](#).

This call accepts only one resource-identifying parameter.

Request Syntax

```
{  
  "InstanceId": "string",  
  "ServiceErrorIds": [ "string" ],  
  "StackId": "string"  
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 272).

The request accepts the following data in JSON format.

InstanceId (p. 102)

The instance ID. If you use this parameter, `DescribeServiceErrors` returns descriptions of the errors associated with the specified instance.

Type: String

Required: No

ServiceErrorIds (p. 102)

An array of service error IDs. If you use this parameter, `DescribeServiceErrors` returns descriptions of the specified errors. Otherwise, it returns a description of every error.

Type: Array of strings

Required: No

StackId (p. 102)

The stack ID. If you use this parameter, `DescribeServiceErrors` returns descriptions of the errors associated with the specified stack.

Type: String

Required: No

Response Syntax

```
{  
  "ServiceErrors": [  
    {  
      ...  
    }  
  ]  
}
```

```
    "CreatedAt": "string",  
    "InstanceId": "string",  
    "Message": "string",  
    "ServiceErrorId": "string",  
    "StackId": "string",  
    "Type": "string"  
  }  
]  
}
```

Response Elements

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

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

ServiceErrors (p. 102)

An array of `ServiceError` objects that describe the specified service errors.

Type: Array of [ServiceError \(p. 249\)](#) objects

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 274\)](#).

ResourceNotFoundException

Indicates that a resource was not found.

HTTP Status Code: 400

ValidationException

Indicates that a request was not valid.

HTTP Status Code: 400

See Also

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

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

DescribeStackProvisioningParameters

Requests a description of a stack's provisioning parameters.

Required Permissions: To use this action, an IAM user must have a Show, Deploy, or Manage permissions level for the stack or an attached policy that explicitly grants permissions. For more information about user permissions, see [Managing User Permissions](#).

Request Syntax

```
{  
  "StackId": "string"  
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 272).

The request accepts the following data in JSON format.

[StackId](#) (p. 104)

The stack ID.

Type: String

Required: Yes

Response Syntax

```
{  
  "AgentInstallerUrl": "string",  
  "Parameters": {  
    "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.

[AgentInstallerUrl](#) (p. 104)

The AWS OpsWorks Stacks agent installer's URL.

Type: String

[Parameters](#) (p. 104)

An embedded object that contains the provisioning parameters.

Type: String to string map

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 274\)](#).

ResourceNotFoundException

Indicates that a resource was not found.

HTTP Status Code: 400

ValidationException

Indicates that a request was not valid.

HTTP Status Code: 400

See Also

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

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

DescribeStacks

Requests a description of one or more stacks.

Required Permissions: To use this action, an IAM user must have a Show, Deploy, or Manage permissions level for the stack, or an attached policy that explicitly grants permissions. For more information about user permissions, see [Managing User Permissions](#).

Request Syntax

```
{  
  "StackIds": [ "string" ]  
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 272).

The request accepts the following data in JSON format.

StackIds (p. 106)

An array of stack IDs that specify the stacks to be described. If you omit this parameter, DescribeStacks returns a description of every stack.

Type: Array of strings

Required: No

Response Syntax

```
{  
  "Stacks": [  
    {  
      "AgentVersion": "string",  
      "Arn": "string",  
      "Attributes": {  
        "string": "string"  
      },  
      "ChefConfiguration": {  
        "BerkshelfVersion": "string",  
        "ManageBerkshelf": boolean  
      },  
      "ConfigurationManager": {  
        "Name": "string",  
        "Version": "string"  
      },  
      "CreatedAt": "string",  
      "CustomCookbooksSource": {  
        "Password": "string",  
        "Revision": "string",  
        "SshKey": "string",  
        "Type": "string",  
        "Url": "string",  
        "Username": "string"  
      },  
    },  
  ],  
}
```

```
    "CustomJson": "string",
    "DefaultAvailabilityZone": "string",
    "DefaultInstanceProfileArn": "string",
    "DefaultOs": "string",
    "DefaultRootDeviceType": "string",
    "DefaultSshKeyName": "string",
    "DefaultSubnetId": "string",
    "HostnameTheme": "string",
    "Name": "string",
    "Region": "string",
    "ServiceRoleArn": "string",
    "StackId": "string",
    "UseCustomCookbooks": boolean,
    "UseOpsworksSecurityGroups": boolean,
    "VpcId": "string"
  }
]
```

Response Elements

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

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

Stacks (p. 106)

An array of [Stack](#) objects that describe the stacks.

Type: Array of [Stack](#) (p. 255) objects

Errors

For information about the errors that are common to all actions, see [Common Errors](#) (p. 274).

ResourceNotFoundException

Indicates that a resource was not found.

HTTP Status Code: 400

ValidationException

Indicates that a request was not valid.

HTTP Status Code: 400

See Also

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

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

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

DescribeStackSummary

Describes the number of layers and apps in a specified stack, and the number of instances in each state, such as `running_setup` or `online`.

Required Permissions: To use this action, an IAM user must have a Show, Deploy, or Manage permissions level for the stack, or an attached policy that explicitly grants permissions. For more information about user permissions, see [Managing User Permissions](#).

Request Syntax

```
{
  "StackId": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 272).

The request accepts the following data in JSON format.

StackId (p. 109)

The stack ID.

Type: String

Required: Yes

Response Syntax

```
{
  "StackSummary": {
    "AppsCount": number,
    "Arn": "string",
    "InstancesCount": {
      "Assigning": number,
      "Booting": number,
      "ConnectionLost": number,
      "Deregistering": number,
      "Online": number,
      "Pending": number,
      "Rebooting": number,
      "Registered": number,
      "Registering": number,
      "Requested": number,
      "RunningSetup": number,
      "SetupFailed": number,
      "ShuttingDown": number,
      "StartFailed": number,
      "StopFailed": number,
      "Stopped": number,
      "Stopping": number,
      "Terminated": number,
      "Terminating": number,
      "Unassigning": number
    }
  }
}
```

```
    },  
    "LayersCount": number,  
    "Name": "string",  
    "StackId": "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.

StackSummary (p. 109)

A `StackSummary` object that contains the results.

Type: [StackSummary \(p. 260\)](#) object

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 274\)](#).

ResourceNotFoundException

Indicates that a resource was not found.

HTTP Status Code: 400

ValidationException

Indicates that a request was not valid.

HTTP Status Code: 400

See Also

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

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

DescribeTimeBasedAutoScaling

Describes time-based auto scaling configurations for specified instances.

Note

You must specify at least one of the parameters.

Required Permissions: To use this action, an IAM user must have a Show, Deploy, or Manage permissions level for the stack, or an attached policy that explicitly grants permissions. For more information about user permissions, see [Managing User Permissions](#).

Request Syntax

```
{
  "InstanceIds": [ "string" ]
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 272).

The request accepts the following data in JSON format.

InstanceIds (p. 111)

An array of instance IDs.

Type: Array of strings

Required: Yes

Response Syntax

```
{
  "TimeBasedAutoScalingConfigurations": [
    {
      "AutoScalingSchedule": {
        "Friday": {
          "string" : "string"
        },
        "Monday": {
          "string" : "string"
        },
        "Saturday": {
          "string" : "string"
        },
        "Sunday": {
          "string" : "string"
        },
        "Thursday": {
          "string" : "string"
        },
        "Tuesday": {
          "string" : "string"
        },
        "Wednesday": {
```

```
        "string" : "string"
      },
      "InstanceId": "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.

TimeBasedAutoScalingConfigurations (p. 111)

An array of `TimeBasedAutoScalingConfiguration` objects that describe the configuration for the specified instances.

Type: Array of [TimeBasedAutoScalingConfiguration \(p. 263\)](#) objects

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 274\)](#).

ResourceNotFoundException

Indicates that a resource was not found.

HTTP Status Code: 400

ValidationException

Indicates that a request was not valid.

HTTP Status Code: 400

See Also

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

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

DescribeUserProfiles

Describe specified users.

Required Permissions: To use this action, an IAM user must have an attached policy that explicitly grants permissions. For more information about user permissions, see [Managing User Permissions](#).

Request Syntax

```
{  
  "IamUserArns": [ "string" ]  
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters \(p. 272\)](#).

The request accepts the following data in JSON format.

IamUserArns (p. 113)

An array of IAM or federated user ARNs that identify the users to be described.

Type: Array of strings

Required: No

Response Syntax

```
{  
  "UserProfiles": [  
    {  
      "AllowSelfManagement": boolean,  
      "IamUserArn": "string",  
      "Name": "string",  
      "SshPublicKey": "string",  
      "SshUsername": "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.

UserProfiles (p. 113)

A Users object that describes the specified users.

Type: Array of [UserProfile \(p. 264\)](#) objects

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 274\)](#).

ResourceNotFoundException

Indicates that a resource was not found.

HTTP Status Code: 400

ValidationException

Indicates that a request was not valid.

HTTP Status Code: 400

See Also

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

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

DescribeVolumes

Describes an instance's Amazon EBS volumes.

Note

This call accepts only one resource-identifying parameter.

Required Permissions: To use this action, an IAM user must have a Show, Deploy, or Manage permissions level for the stack, or an attached policy that explicitly grants permissions. For more information about user permissions, see [Managing User Permissions](#).

Request Syntax

```
{  
  "InstanceId": "string",  
  "RaidArrayId": "string",  
  "StackId": "string",  
  "VolumeIds": [ "string" ]  
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 272).

The request accepts the following data in JSON format.

InstanceId (p. 115)

The instance ID. If you use this parameter, `DescribeVolumes` returns descriptions of the volumes associated with the specified instance.

Type: String

Required: No

RaidArrayId (p. 115)

The RAID array ID. If you use this parameter, `DescribeVolumes` returns descriptions of the volumes associated with the specified RAID array.

Type: String

Required: No

StackId (p. 115)

A stack ID. The action describes the stack's registered Amazon EBS volumes.

Type: String

Required: No

VolumeIds (p. 115)

An array of volume IDs. If you use this parameter, `DescribeVolumes` returns descriptions of the specified volumes. Otherwise, it returns a description of every volume.

Type: Array of strings

Required: No

Response Syntax

```
{
  "Volumes": [
    {
      "AvailabilityZone": "string",
      "Device": "string",
      "Ec2VolumeId": "string",
      "Encrypted": boolean,
      "InstanceId": "string",
      "Iops": number,
      "MountPoint": "string",
      "Name": "string",
      "RaidArrayId": "string",
      "Region": "string",
      "Size": number,
      "Status": "string",
      "VolumeId": "string",
      "VolumeType": "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.

Volumes (p. 116)

An array of volume IDs.

Type: Array of [Volume \(p. 265\)](#) objects

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 274\)](#).

ResourceNotFoundException

Indicates that a resource was not found.

HTTP Status Code: 400

ValidationException

Indicates that a request was not valid.

HTTP Status Code: 400

See Also

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

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

DetachElasticLoadBalancer

Detaches a specified Elastic Load Balancing instance from its layer.

Required Permissions: To use this action, an IAM user must have a Manage permissions level for the stack, or an attached policy that explicitly grants permissions. For more information on user permissions, see [Managing User Permissions](#).

Request Syntax

```
{  
  "ElasticLoadBalancerName": "string",  
  "LayerId": "string"  
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 272).

The request accepts the following data in JSON format.

ElasticLoadBalancerName (p. 118)

The Elastic Load Balancing instance's name.

Type: String

Required: Yes

LayerId (p. 118)

The ID of the layer that the Elastic Load Balancing instance is attached to.

Type: String

Required: Yes

Response Elements

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

Errors

For information about the errors that are common to all actions, see [Common Errors](#) (p. 274).

ResourceNotFoundException

Indicates that a resource was not found.

HTTP Status Code: 400

See Also

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

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

DisassociateElasticIp

Disassociates an Elastic IP address from its instance. The address remains registered with the stack. For more information, see [Resource Management](#).

Required Permissions: To use this action, an IAM user must have a Manage permissions level for the stack, or an attached policy that explicitly grants permissions. For more information on user permissions, see [Managing User Permissions](#).

Request Syntax

```
{  
  "ElasticIp": "string"  
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters \(p. 272\)](#).

The request accepts the following data in JSON format.

ElasticIp (p. 120)

The Elastic IP address.

Type: String

Required: Yes

Response Elements

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

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 274\)](#).

ResourceNotFoundException

Indicates that a resource was not found.

HTTP Status Code: 400

ValidationException

Indicates that a request was not valid.

HTTP Status Code: 400

See Also

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

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

GetHostnameSuggestion

Gets a generated host name for the specified layer, based on the current host name theme.

Required Permissions: To use this action, an IAM user must have a Manage permissions level for the stack, or an attached policy that explicitly grants permissions. For more information on user permissions, see [Managing User Permissions](#).

Request Syntax

```
{  
  "LayerId": "string"  
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 272).

The request accepts the following data in JSON format.

LayerId (p. 122)

The layer ID.

Type: String

Required: Yes

Response Syntax

```
{  
  "Hostname": "string",  
  "LayerId": "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.

Hostname (p. 122)

The generated host name.

Type: String

LayerId (p. 122)

The layer ID.

Type: String

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 274\)](#).

ResourceNotFoundException

Indicates that a resource was not found.

HTTP Status Code: 400

ValidationException

Indicates that a request was not valid.

HTTP Status Code: 400

See Also

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

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

GrantAccess

Note

This action can be used only with Windows stacks.

Grants RDP access to a Windows instance for a specified time period.

Request Syntax

```
{  
  "InstanceId": "string",  
  "ValidForInMinutes": number  
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters \(p. 272\)](#).

The request accepts the following data in JSON format.

InstanceId (p. 124)

The instance's AWS OpsWorks Stacks ID.

Type: String

Required: Yes

ValidForInMinutes (p. 124)

The length of time (in minutes) that the grant is valid. When the grant expires at the end of this period, the user will no longer be able to use the credentials to log in. If the user is logged in at the time, he or she automatically will be logged out.

Type: Integer

Valid Range: Minimum value of 60. Maximum value of 1440.

Required: No

Response Syntax

```
{  
  "TemporaryCredential": {  
    "InstanceId": "string",  
    "Password": "string",  
    "Username": "string",  
    "ValidForInMinutes": number  
  }  
}
```

Response Elements

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

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

TemporaryCredential (p. 124)

A `TemporaryCredential` object that contains the data needed to log in to the instance by RDP clients, such as the Microsoft Remote Desktop Connection.

Type: [TemporaryCredential \(p. 262\)](#) object

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 274\)](#).

ResourceNotFoundException

Indicates that a resource was not found.

HTTP Status Code: 400

ValidationException

Indicates that a request was not valid.

HTTP Status Code: 400

See Also

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

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

ListTags

Returns a list of tags that are applied to the specified stack or layer.

Request Syntax

```
{  
  "MaxResults": number,  
  "NextToken": "string",  
  "ResourceArn": "string"  
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters \(p. 272\)](#).

The request accepts the following data in JSON format.

MaxResults (p. 126)

Do not use. A validation exception occurs if you add a `MaxResults` parameter to a `ListTagsRequest` call.

Type: Integer

Required: No

NextToken (p. 126)

Do not use. A validation exception occurs if you add a `NextToken` parameter to a `ListTagsRequest` call.

Type: String

Required: No

ResourceArn (p. 126)

The stack or layer's Amazon Resource Number (ARN).

Type: String

Required: Yes

Response Syntax

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

NextToken (p. 126)

If a paginated request does not return all of the remaining results, this parameter is set to a token that you can assign to the request object's `NextToken` parameter to get the next set of results. If the previous paginated request returned all of the remaining results, this parameter is set to `null`.

Type: String

Tags (p. 126)

A set of key-value pairs that contain tag keys and tag values that are attached to a stack or layer.

Type: String to string map

Errors

For information about the errors that are common to all actions, see [Common Errors](#) (p. 274).

ResourceNotFoundException

Indicates that a resource was not found.

HTTP Status Code: 400

ValidationException

Indicates that a request was not valid.

HTTP Status Code: 400

See Also

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

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

RebootInstance

Reboots a specified instance. For more information, see [Starting, Stopping, and Rebooting Instances](#).

Required Permissions: To use this action, an IAM user must have a Manage permissions level for the stack, or an attached policy that explicitly grants permissions. For more information on user permissions, see [Managing User Permissions](#).

Request Syntax

```
{  
  "InstanceId": "string"  
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters \(p. 272\)](#).

The request accepts the following data in JSON format.

InstanceId (p. 128)

The instance ID.

Type: String

Required: Yes

Response Elements

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

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 274\)](#).

ResourceNotFoundException

Indicates that a resource was not found.

HTTP Status Code: 400

ValidationException

Indicates that a request was not valid.

HTTP Status Code: 400

See Also

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

- [AWS Command Line Interface](#)

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

RegisterEcsCluster

Registers a specified Amazon ECS cluster with a stack. You can register only one cluster with a stack. A cluster can be registered with only one stack. For more information, see [Resource Management](#).

Required Permissions: To use this action, an IAM user must have a Manage permissions level for the stack or an attached policy that explicitly grants permissions. For more information on user permissions, see [Managing User Permissions](#).

Request Syntax

```
{  
  "EcsClusterArn": "string",  
  "StackId": "string"  
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 272).

The request accepts the following data in JSON format.

EcsClusterArn (p. 130)

The cluster's ARN.

Type: String

Required: Yes

StackId (p. 130)

The stack ID.

Type: String

Required: Yes

Response Syntax

```
{  
  "EcsClusterArn": "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.

EcsClusterArn (p. 130)

The cluster's ARN.

Type: String

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 274\)](#).

ResourceNotFoundException

Indicates that a resource was not found.

HTTP Status Code: 400

ValidationException

Indicates that a request was not valid.

HTTP Status Code: 400

See Also

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

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

RegisterElasticIp

Registers an Elastic IP address with a specified stack. An address can be registered with only one stack at a time. If the address is already registered, you must first deregister it by calling [DeregisterElasticIp](#) (p. 58). For more information, see [Resource Management](#).

Required Permissions: To use this action, an IAM user must have a Manage permissions level for the stack, or an attached policy that explicitly grants permissions. For more information on user permissions, see [Managing User Permissions](#).

Request Syntax

```
{  
  "ElasticIp": "string",  
  "StackId": "string"  
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 272).

The request accepts the following data in JSON format.

[ElasticIp](#) (p. 132)

The Elastic IP address.

Type: String

Required: Yes

[StackId](#) (p. 132)

The stack ID.

Type: String

Required: Yes

Response Syntax

```
{  
  "ElasticIp": "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.

[ElasticIp](#) (p. 132)

The Elastic IP address.

Type: String

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 274\)](#).

ResourceNotFoundException

Indicates that a resource was not found.

HTTP Status Code: 400

ValidationException

Indicates that a request was not valid.

HTTP Status Code: 400

See Also

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

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

RegisterInstance

Registers instances that were created outside of AWS OpsWorks Stacks with a specified stack.

Note

We do not recommend using this action to register instances. The complete registration operation includes two tasks: installing the AWS OpsWorks Stacks agent on the instance, and registering the instance with the stack. `RegisterInstance` handles only the second step. You should instead use the AWS CLI `register` command, which performs the entire registration operation. For more information, see [Registering an Instance with an AWS OpsWorks Stacks Stack](#).

Registered instances have the same requirements as instances that are created by using the [CreateInstance \(p. 27\)](#) API. For example, registered instances must be running a supported Linux-based operating system, and they must have a supported instance type. For more information about requirements for instances that you want to register, see [Preparing the Instance](#).

Required Permissions: To use this action, an IAM user must have a Manage permissions level for the stack or an attached policy that explicitly grants permissions. For more information on user permissions, see [Managing User Permissions](#).

Request Syntax

```
{
  "Hostname": "string",
  "InstanceId": {
    "Document": "string",
    "Signature": "string"
  },
  "PrivateIp": "string",
  "PublicIp": "string",
  "RsaPublicKey": "string",
  "RsaPublicKeyFingerprint": "string",
  "StackId": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters \(p. 272\)](#).

The request accepts the following data in JSON format.

Hostname (p. 134)

The instance's hostname.

Type: String

Required: No

InstanceId (p. 134)

An InstanceIdentity object that contains the instance's identity.

Type: [InstanceIdentity \(p. 226\)](#) object

Required: No

PrivateIp (p. 134)

The instance's private IP address.

Type: String

Required: No

PublicIp (p. 134)

The instance's public IP address.

Type: String

Required: No

RsaPublicKey (p. 134)

The instances public RSA key. This key is used to encrypt communication between the instance and the service.

Type: String

Required: No

RsaPublicKeyFingerprint (p. 134)

The instances public RSA key fingerprint.

Type: String

Required: No

StackId (p. 134)

The ID of the stack that the instance is to be registered with.

Type: String

Required: Yes

Response Syntax

```
{  
  "InstanceId": "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.

InstanceId (p. 135)

The registered instance's AWS OpsWorks Stacks ID.

Type: String

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 274\)](#).

ResourceNotFoundException

Indicates that a resource was not found.

HTTP Status Code: 400

ValidationException

Indicates that a request was not valid.

HTTP Status Code: 400

See Also

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

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

RegisterRdsDbInstance

Registers an Amazon RDS instance with a stack.

Required Permissions: To use this action, an IAM user must have a Manage permissions level for the stack, or an attached policy that explicitly grants permissions. For more information on user permissions, see [Managing User Permissions](#).

Request Syntax

```
{  
  "DbPassword": "string",  
  "DbUser": "string",  
  "RdsDbInstanceArn": "string",  
  "StackId": "string"  
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 272).

The request accepts the following data in JSON format.

DbPassword (p. 137)

The database password.

Type: String

Required: Yes

DbUser (p. 137)

The database's master user name.

Type: String

Required: Yes

RdsDbInstanceArn (p. 137)

The Amazon RDS instance's ARN.

Type: String

Required: Yes

StackId (p. 137)

The stack ID.

Type: String

Required: Yes

Response Elements

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

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 274\)](#).

ResourceNotFoundException

Indicates that a resource was not found.

HTTP Status Code: 400

ValidationException

Indicates that a request was not valid.

HTTP Status Code: 400

See Also

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

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

RegisterVolume

Registers an Amazon EBS volume with a specified stack. A volume can be registered with only one stack at a time. If the volume is already registered, you must first deregister it by calling [DeregisterVolume](#) (p. 64). For more information, see [Resource Management](#).

Required Permissions: To use this action, an IAM user must have a Manage permissions level for the stack, or an attached policy that explicitly grants permissions. For more information on user permissions, see [Managing User Permissions](#).

Request Syntax

```
{  
  "Ec2VolumeId": "string",  
  "StackId": "string"  
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 272).

The request accepts the following data in JSON format.

[Ec2VolumeId](#) (p. 139)

The Amazon EBS volume ID.

Type: String

Required: No

[StackId](#) (p. 139)

The stack ID.

Type: String

Required: Yes

Response Syntax

```
{  
  "VolumeId": "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.

[VolumeId](#) (p. 139)

The volume ID.

Type: String

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 274\)](#).

ResourceNotFoundException

Indicates that a resource was not found.

HTTP Status Code: 400

ValidationException

Indicates that a request was not valid.

HTTP Status Code: 400

See Also

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

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

SetLoadBasedAutoScaling

Specify the load-based auto scaling configuration for a specified layer. For more information, see [Managing Load with Time-based and Load-based Instances](#).

Note

To use load-based auto scaling, you must create a set of load-based auto scaling instances. Load-based auto scaling operates only on the instances from that set, so you must ensure that you have created enough instances to handle the maximum anticipated load.

Required Permissions: To use this action, an IAM user must have a Manage permissions level for the stack, or an attached policy that explicitly grants permissions. For more information on user permissions, see [Managing User Permissions](#).

Request Syntax

```
{
  "DownScaling": {
    "Alarms": [ "string" ],
    "CpuThreshold": number,
    "IgnoreMetricsTime": number,
    "InstanceCount": number,
    "LoadThreshold": number,
    "MemoryThreshold": number,
    "ThresholdsWaitTime": number
  },
  "Enable": boolean,
  "LayerId": "string",
  "UpScaling": {
    "Alarms": [ "string" ],
    "CpuThreshold": number,
    "IgnoreMetricsTime": number,
    "InstanceCount": number,
    "LoadThreshold": number,
    "MemoryThreshold": number,
    "ThresholdsWaitTime": number
  }
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 272).

The request accepts the following data in JSON format.

DownScaling (p. 141)

An `AutoScalingThresholds` object with the downscaling threshold configuration. If the load falls below these thresholds for a specified amount of time, AWS OpsWorks Stacks stops a specified number of instances.

Type: [AutoScalingThresholds](#) (p. 198) object

Required: No

Enable (p. 141)

Enables load-based auto scaling for the layer.

Type: Boolean

Required: No

LayerId (p. 141)

The layer ID.

Type: String

Required: Yes

UpScaling (p. 141)

An `AutoScalingThresholds` object with the upscaling threshold configuration. If the load exceeds these thresholds for a specified amount of time, AWS OpsWorks Stacks starts a specified number of instances.

Type: [AutoScalingThresholds](#) (p. 198) object

Required: No

Response Elements

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

Errors

For information about the errors that are common to all actions, see [Common Errors](#) (p. 274).

ResourceNotFoundException

Indicates that a resource was not found.

HTTP Status Code: 400

ValidationException

Indicates that a request was not valid.

HTTP Status Code: 400

See Also

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

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

SetPermission

Specifies a user's permissions. For more information, see [Security and Permissions](#).

Required Permissions: To use this action, an IAM user must have a Manage permissions level for the stack, or an attached policy that explicitly grants permissions. For more information on user permissions, see [Managing User Permissions](#).

Request Syntax

```
{  
  "AllowSsh": boolean,  
  "AllowSudo": boolean,  
  "IamUserArn": "string",  
  "Level": "string",  
  "StackId": "string"  
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 272).

The request accepts the following data in JSON format.

[AllowSsh](#) (p. 143)

The user is allowed to use SSH to communicate with the instance.

Type: Boolean

Required: No

[AllowSudo](#) (p. 143)

The user is allowed to use **sudo** to elevate privileges.

Type: Boolean

Required: No

[IamUserArn](#) (p. 143)

The user's IAM ARN. This can also be a federated user's ARN.

Type: String

Required: Yes

[Level](#) (p. 143)

The user's permission level, which must be set to one of the following strings. You cannot set your own permissions level.

- deny
- show
- deploy
- manage
- iam_only

For more information about the permissions associated with these levels, see [Managing User Permissions](#).

Type: String

Required: No

StackId (p. 143)

The stack ID.

Type: String

Required: Yes

Response Elements

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

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 274\)](#).

ResourceNotFoundException

Indicates that a resource was not found.

HTTP Status Code: 400

ValidationException

Indicates that a request was not valid.

HTTP Status Code: 400

See Also

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

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

SetTimeBasedAutoScaling

Specify the time-based auto scaling configuration for a specified instance. For more information, see [Managing Load with Time-based and Load-based Instances](#).

Required Permissions: To use this action, an IAM user must have a Manage permissions level for the stack, or an attached policy that explicitly grants permissions. For more information on user permissions, see [Managing User Permissions](#).

Request Syntax

```
{
  "AutoScalingSchedule": {
    "Friday": {
      "string" : "string"
    },
    "Monday": {
      "string" : "string"
    },
    "Saturday": {
      "string" : "string"
    },
    "Sunday": {
      "string" : "string"
    },
    "Thursday": {
      "string" : "string"
    },
    "Tuesday": {
      "string" : "string"
    },
    "Wednesday": {
      "string" : "string"
    }
  },
  "InstanceId": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 272).

The request accepts the following data in JSON format.

AutoScalingSchedule (p. 145)

An AutoScalingSchedule with the instance schedule.

Type: [WeeklyAutoScalingSchedule](#) (p. 270) object

Required: No

InstanceId (p. 145)

The instance ID.

Type: String

Required: Yes

Response Elements

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

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 274\)](#).

ResourceNotFoundException

Indicates that a resource was not found.

HTTP Status Code: 400

ValidationException

Indicates that a request was not valid.

HTTP Status Code: 400

See Also

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

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

StartInstance

Starts a specified instance. For more information, see [Starting, Stopping, and Rebooting Instances](#).

Required Permissions: To use this action, an IAM user must have a Manage permissions level for the stack, or an attached policy that explicitly grants permissions. For more information on user permissions, see [Managing User Permissions](#).

Request Syntax

```
{  
  "InstanceId": "string"  
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 272).

The request accepts the following data in JSON format.

InstanceId (p. 147)

The instance ID.

Type: String

Required: Yes

Response Elements

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

Errors

For information about the errors that are common to all actions, see [Common Errors](#) (p. 274).

ResourceNotFoundException

Indicates that a resource was not found.

HTTP Status Code: 400

ValidationException

Indicates that a request was not valid.

HTTP Status Code: 400

See Also

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

- [AWS Command Line Interface](#)

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

StartStack

Starts a stack's instances.

Required Permissions: To use this action, an IAM user must have a Manage permissions level for the stack, or an attached policy that explicitly grants permissions. For more information on user permissions, see [Managing User Permissions](#).

Request Syntax

```
{  
  "StackId": "string"  
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 272).

The request accepts the following data in JSON format.

StackId (p. 149)

The stack ID.

Type: String

Required: Yes

Response Elements

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

Errors

For information about the errors that are common to all actions, see [Common Errors](#) (p. 274).

ResourceNotFoundException

Indicates that a resource was not found.

HTTP Status Code: 400

ValidationException

Indicates that a request was not valid.

HTTP Status Code: 400

See Also

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

- [AWS Command Line Interface](#)

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

StopInstance

Stops a specified instance. When you stop a standard instance, the data disappears and must be reinstalled when you restart the instance. You can stop an Amazon EBS-backed instance without losing data. For more information, see [Starting, Stopping, and Rebooting Instances](#).

Required Permissions: To use this action, an IAM user must have a Manage permissions level for the stack, or an attached policy that explicitly grants permissions. For more information on user permissions, see [Managing User Permissions](#).

Request Syntax

```
{  
  "Force": boolean,  
  "InstanceId": "string"  
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters \(p. 272\)](#).

The request accepts the following data in JSON format.

Force (p. 151)

Specifies whether to force an instance to stop. If the instance's root device type is `ebs`, or EBS-backed, adding the `Force` parameter to the `StopInstances` API call disassociates the AWS OpsWorks Stacks instance from EC2, and forces deletion of *only* the OpsWorks Stacks instance. You must also delete the formerly-associated instance in EC2 after troubleshooting and replacing the AWS OpsWorks Stacks instance with a new one.

Type: Boolean

Required: No

InstanceId (p. 151)

The instance ID.

Type: String

Required: Yes

Response Elements

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

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 274\)](#).

ResourceNotFoundException

Indicates that a resource was not found.

HTTP Status Code: 400

ValidationException

Indicates that a request was not valid.

HTTP Status Code: 400

See Also

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

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

StopStack

Stops a specified stack.

Required Permissions: To use this action, an IAM user must have a Manage permissions level for the stack, or an attached policy that explicitly grants permissions. For more information on user permissions, see [Managing User Permissions](#).

Request Syntax

```
{  
  "StackId": "string"  
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 272).

The request accepts the following data in JSON format.

StackId (p. 153)

The stack ID.

Type: String

Required: Yes

Response Elements

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

Errors

For information about the errors that are common to all actions, see [Common Errors](#) (p. 274).

ResourceNotFoundException

Indicates that a resource was not found.

HTTP Status Code: 400

ValidationException

Indicates that a request was not valid.

HTTP Status Code: 400

See Also

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

- [AWS Command Line Interface](#)

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

TagResource

Apply cost-allocation tags to a specified stack or layer in AWS OpsWorks Stacks. For more information about how tagging works, see [Tags](#) in the AWS OpsWorks User Guide.

Request Syntax

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

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 272).

The request accepts the following data in JSON format.

ResourceArn (p. 155)

The stack or layer's Amazon Resource Number (ARN).

Type: String

Required: Yes

Tags (p. 155)

A map that contains tag keys and tag values that are attached to a stack or layer.

- The key cannot be empty.
- The key can be a maximum of 127 characters, and can contain only Unicode letters, numbers, or separators, or the following special characters: + - = . _ : /
- The value can be a maximum 255 characters, and contain only Unicode letters, numbers, or separators, or the following special characters: + - = . _ : /
- Leading and trailing white spaces are trimmed from both the key and value.
- A maximum of 40 tags is allowed for any resource.

Type: String to string map

Required: Yes

Response Elements

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

Errors

For information about the errors that are common to all actions, see [Common Errors](#) (p. 274).

ResourceNotFoundException

Indicates that a resource was not found.

HTTP Status Code: 400

ValidationException

Indicates that a request was not valid.

HTTP Status Code: 400

See Also

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

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

UnassignInstance

Unassigns a registered instance from all layers that are using the instance. The instance remains in the stack as an unassigned instance, and can be assigned to another layer as needed. You cannot use this action with instances that were created with AWS OpsWorks Stacks.

Required Permissions: To use this action, an IAM user must have a Manage permissions level for the stack or an attached policy that explicitly grants permissions. For more information about user permissions, see [Managing User Permissions](#).

Request Syntax

```
{  
  "InstanceId": "string"  
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters \(p. 272\)](#).

The request accepts the following data in JSON format.

InstanceId (p. 157)

The instance ID.

Type: String

Required: Yes

Response Elements

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

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 274\)](#).

ResourceNotFoundException

Indicates that a resource was not found.

HTTP Status Code: 400

ValidationException

Indicates that a request was not valid.

HTTP Status Code: 400

See Also

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

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

UnassignVolume

Unassigns an assigned Amazon EBS volume. The volume remains registered with the stack. For more information, see [Resource Management](#).

Required Permissions: To use this action, an IAM user must have a Manage permissions level for the stack, or an attached policy that explicitly grants permissions. For more information on user permissions, see [Managing User Permissions](#).

Request Syntax

```
{  
  "VolumeId": "string"  
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters \(p. 272\)](#).

The request accepts the following data in JSON format.

VolumeId (p. 159)

The volume ID.

Type: String

Required: Yes

Response Elements

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

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 274\)](#).

ResourceNotFoundException

Indicates that a resource was not found.

HTTP Status Code: 400

ValidationException

Indicates that a request was not valid.

HTTP Status Code: 400

See Also

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

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

UntagResource

Removes tags from a specified stack or layer.

Request Syntax

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

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters \(p. 272\)](#).

The request accepts the following data in JSON format.

ResourceArn (p. 161)

The stack or layer's Amazon Resource Number (ARN).

Type: String

Required: Yes

TagKeys (p. 161)

A list of the keys of tags to be removed from a stack or layer.

Type: Array of strings

Required: Yes

Response Elements

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

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 274\)](#).

ResourceNotFoundException

Indicates that a resource was not found.

HTTP Status Code: 400

ValidationException

Indicates that a request was not valid.

HTTP Status Code: 400

See Also

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

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

UpdateApp

Updates a specified app.

Required Permissions: To use this action, an IAM user must have a Deploy or Manage permissions level for the stack, or an attached policy that explicitly grants permissions. For more information on user permissions, see [Managing User Permissions](#).

Request Syntax

```
{
  "AppId": "string",
  "AppSource": {
    "Password": "string",
    "Revision": "string",
    "SshKey": "string",
    "Type": "string",
    "Url": "string",
    "Username": "string"
  },
  "Attributes": {
    "string": "string"
  },
  "DataSources": [
    {
      "Arn": "string",
      "DatabaseName": "string",
      "Type": "string"
    }
  ],
  "Description": "string",
  "Domains": [ "string" ],
  "EnableSsl": boolean,
  "Environment": [
    {
      "Key": "string",
      "Secure": boolean,
      "Value": "string"
    }
  ],
  "Name": "string",
  "SslConfiguration": {
    "Certificate": "string",
    "Chain": "string",
    "PrivateKey": "string"
  },
  "Type": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 272).

The request accepts the following data in JSON format.

AppId (p. 163)

The app ID.

Type: String

Required: Yes

AppSource (p. 163)

A Source object that specifies the app repository.

Type: [Source \(p. 252\)](#) object

Required: No

Attributes (p. 163)

One or more user-defined key/value pairs to be added to the stack attributes.

Type: String to string map

Valid Keys: DocumentRoot | RailsEnv | AutoBundleOnDeploy | AwsFlowRubySettings

Required: No

DataSources (p. 163)

The app's data sources.

Type: Array of [DataSource \(p. 208\)](#) objects

Required: No

Description (p. 163)

A description of the app.

Type: String

Required: No

Domains (p. 163)

The app's virtual host settings, with multiple domains separated by commas. For example:
'www.example.com, example.com'

Type: Array of strings

Required: No

EnableSsl (p. 163)

Whether SSL is enabled for the app.

Type: Boolean

Required: No

Environment (p. 163)

An array of `EnvironmentVariable` objects that specify environment variables to be associated with the app. After you deploy the app, these variables are defined on the associated app server instances. For more information, see [Environment Variables](#).

There is no specific limit on the number of environment variables. However, the size of the associated data structure - which includes the variables' names, values, and protected flag values - cannot exceed 20 KB. This limit should accommodate most if not all use cases. Exceeding it will cause an exception with the message, "Environment: is too large (maximum is 20 KB)."

Note

If you have specified one or more environment variables, you cannot modify the stack's Chef version.

Type: Array of [EnvironmentVariable \(p. 219\)](#) objects

Required: No

Name (p. 163)

The app name.

Type: String

Required: No

SslConfiguration (p. 163)

An `SslConfiguration` object with the SSL configuration.

Type: [SslConfiguration \(p. 254\)](#) object

Required: No

Type (p. 163)

The app type.

Type: String

Valid Values: `aws-flow-ruby` | `java` | `rails` | `php` | `nodejs` | `static` | `other`

Required: No

Response Elements

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

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 274\)](#).

ResourceNotFoundException

Indicates that a resource was not found.

HTTP Status Code: 400

ValidationException

Indicates that a request was not valid.

HTTP Status Code: 400

See Also

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

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

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

UpdateElasticIp

Updates a registered Elastic IP address's name. For more information, see [Resource Management](#).

Required Permissions: To use this action, an IAM user must have a Manage permissions level for the stack, or an attached policy that explicitly grants permissions. For more information on user permissions, see [Managing User Permissions](#).

Request Syntax

```
{  
  "ElasticIp": "string",  
  "Name": "string"  
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters \(p. 272\)](#).

The request accepts the following data in JSON format.

ElasticIp (p. 167)

The IP address for which you want to update the name.

Type: String

Required: Yes

Name (p. 167)

The new name.

Type: String

Required: No

Response Elements

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

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 274\)](#).

ResourceNotFoundException

Indicates that a resource was not found.

HTTP Status Code: 400

ValidationException

Indicates that a request was not valid.

HTTP Status Code: 400

See Also

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

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

UpdateInstance

Updates a specified instance.

Required Permissions: To use this action, an IAM user must have a Manage permissions level for the stack, or an attached policy that explicitly grants permissions. For more information on user permissions, see [Managing User Permissions](#).

Request Syntax

```
{  
  "AgentVersion": "string",  
  "AmiId": "string",  
  "Architecture": "string",  
  "AutoScalingType": "string",  
  "EbsOptimized": boolean,  
  "Hostname": "string",  
  "InstallUpdatesOnBoot": boolean,  
  "InstanceId": "string",  
  "InstanceType": "string",  
  "LayerIds": [ "string" ],  
  "Os": "string",  
  "SshKeyName": "string"  
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 272).

The request accepts the following data in JSON format.

AgentVersion (p. 169)

The default AWS OpsWorks Stacks agent version. You have the following options:

- **INHERIT** - Use the stack's default agent version setting.
- *version_number* - Use the specified agent version. This value overrides the stack's default setting. To update the agent version, you must edit the instance configuration and specify a new version. AWS OpsWorks Stacks then automatically installs that version on the instance.

The default setting is **INHERIT**. To specify an agent version, you must use the complete version number, not the abbreviated number shown on the console. For a list of available agent version numbers, call [DescribeAgentVersions](#) (p. 66).

AgentVersion cannot be set to Chef 12.2.

Type: String

Required: No

AmiId (p. 169)

The ID of the AMI that was used to create the instance. The value of this parameter must be the same AMI ID that the instance is already using. You cannot apply a new AMI to an instance by running UpdateInstance. UpdateInstance does not work on instances that are using custom AMIs.

Type: String

Required: No

Architecture (p. 169)

The instance architecture. Instance types do not necessarily support both architectures. For a list of the architectures that are supported by the different instance types, see [Instance Families and Types](#).

Type: String

Valid Values: `x86_64` | `i386`

Required: No

AutoScalingType (p. 169)

For load-based or time-based instances, the type. Windows stacks can use only time-based instances.

Type: String

Valid Values: `load` | `timer`

Required: No

EbsOptimized (p. 169)

This property cannot be updated.

Type: Boolean

Required: No

Hostname (p. 169)

The instance host name.

Type: String

Required: No

InstallUpdatesOnBoot (p. 169)

Whether to install operating system and package updates when the instance boots. The default value is `true`. To control when updates are installed, set this value to `false`. You must then update your instances manually by using [CreateDeployment \(p. 24\)](#) to run the `update_dependencies` stack command or by manually running `yum` (Amazon Linux) or `apt-get` (Ubuntu) on the instances.

Note

We strongly recommend using the default value of `true`, to ensure that your instances have the latest security updates.

Type: Boolean

Required: No

InstanceId (p. 169)

The instance ID.

Type: String

Required: Yes

InstanceType (p. 169)

The instance type, such as `t2.micro`. For a list of supported instance types, open the stack in the console, choose **Instances**, and choose **+ Instance**. The **Size** list contains the currently supported

types. For more information, see [Instance Families and Types](#). The parameter values that you use to specify the various types are in the **API Name** column of the **Available Instance Types** table.

Type: String

Required: No

LayerIds (p. 169)

The instance's layer IDs.

Type: Array of strings

Required: No

Os (p. 169)

The instance's operating system, which must be set to one of the following. You cannot update an instance that is using a custom AMI.

- A supported Linux operating system: An Amazon Linux version, such as Amazon Linux 2018.03, Amazon Linux 2017.09, Amazon Linux 2017.03, Amazon Linux 2016.09, Amazon Linux 2016.03, Amazon Linux 2015.09, or Amazon Linux 2015.03.
- A supported Ubuntu operating system, such as Ubuntu 16.04 LTS, Ubuntu 14.04 LTS, or Ubuntu 12.04 LTS.
- CentOS Linux 7
- Red Hat Enterprise Linux 7
- A supported Windows operating system, such as Microsoft Windows Server 2012 R2 Base, Microsoft Windows Server 2012 R2 with SQL Server Express, Microsoft Windows Server 2012 R2 with SQL Server Standard, or Microsoft Windows Server 2012 R2 with SQL Server Web.

For more information about supported operating systems, see [AWS OpsWorks Stacks Operating Systems](#).

The default option is the current Amazon Linux version. If you set this parameter to Custom, you must use the Amild parameter to specify the custom AMI that you want to use. For more information about supported operating systems, see [Operating Systems](#). For more information about how to use custom AMIs with OpsWorks, see [Using Custom AMIs](#).

Note

You can specify a different Linux operating system for the updated stack, but you cannot change from Linux to Windows or Windows to Linux.

Type: String

Required: No

SshKeyName (p. 169)

The instance's Amazon EC2 key name.

Type: String

Required: No

Response Elements

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

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 274\)](#).

ResourceNotFoundException

Indicates that a resource was not found.

HTTP Status Code: 400

ValidationException

Indicates that a request was not valid.

HTTP Status Code: 400

See Also

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

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

UpdateLayer

Updates a specified layer.

Required Permissions: To use this action, an IAM user must have a Manage permissions level for the stack, or an attached policy that explicitly grants permissions. For more information on user permissions, see [Managing User Permissions](#).

Request Syntax

```
{
  "Attributes": {
    "string" : "string"
  },
  "AutoAssignElasticIps": boolean,
  "AutoAssignPublicIps": boolean,
  "CloudWatchLogsConfiguration": {
    "Enabled": boolean,
    "LogStreams": [
      {
        "BatchCount": number,
        "BatchSize": number,
        "BufferDuration": number,
        "DatetimeFormat": "string",
        "Encoding": "string",
        "File": "string",
        "FileFingerprintLines": "string",
        "InitialPosition": "string",
        "LogGroupName": "string",
        "MultiLineStartPattern": "string",
        "TimeZone": "string"
      }
    ]
  },
  "CustomInstanceProfileArn": "string",
  "CustomJson": "string",
  "CustomRecipes": {
    "Configure": [ "string" ],
    "Deploy": [ "string" ],
    "Setup": [ "string" ],
    "Shutdown": [ "string" ],
    "Undeploy": [ "string" ]
  },
  "CustomSecurityGroupIds": [ "string" ],
  "EnableAutoHealing": boolean,
  "InstallUpdatesOnBoot": boolean,
  "LayerId": "string",
  "LifecycleEventConfiguration": {
    "Shutdown": {
      "DelayUntilElbConnectionsDrained": boolean,
      "ExecutionTimeout": number
    }
  },
  "Name": "string",
  "Packages": [ "string" ],
  "Shortname": "string",
  "UseEbsOptimizedInstances": boolean,
  "VolumeConfigurations": [
    {
      "Encrypted": boolean,
      "Iops": number,
      "MountPoint": "string",
```

```
    "NumberOfDisks": number,  
    "RaidLevel": number,  
    "Size": number,  
    "VolumeType": "string"  
  }  
]  
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 272).

The request accepts the following data in JSON format.

[Attributes](#) (p. 173)

One or more user-defined key/value pairs to be added to the stack attributes.

Type: String to string map

Valid Keys: EcsClusterArn | EnableHaproxyStats | HaproxyStatsUrl | HaproxyStatsUser | HaproxyStatsPassword | HaproxyHealthCheckUrl | HaproxyHealthCheckMethod | MysqlRootPassword | MysqlRootPasswordUbiquitous | GangliaUrl | GangliaUser | GangliaPassword | MemcachedMemory | NodejsVersion | RubyVersion | RubygemsVersion | ManageBundler | BundlerVersion | RailsStack | PassengerVersion | Jvm | JvmVersion | JvmOptions | JavaAppServer | JavaAppServerVersion

Required: No

[AutoAssignElasticIps](#) (p. 173)

Whether to automatically assign an [Elastic IP address](#) to the layer's instances. For more information, see [How to Edit a Layer](#).

Type: Boolean

Required: No

[AutoAssignPublicIps](#) (p. 173)

For stacks that are running in a VPC, whether to automatically assign a public IP address to the layer's instances. For more information, see [How to Edit a Layer](#).

Type: Boolean

Required: No

[CloudWatchLogsConfiguration](#) (p. 173)

Specifies CloudWatch Logs configuration options for the layer. For more information, see [CloudWatchLogsLogStream](#) (p. 203).

Type: [CloudWatchLogsConfiguration](#) (p. 202) object

Required: No

[CustomInstanceProfileArn](#) (p. 173)

The ARN of an IAM profile to be used for all of the layer's EC2 instances. For more information about IAM ARNs, see [Using Identifiers](#).

Type: String

Required: No

CustomJson (p. 173)

A JSON-formatted string containing custom stack configuration and deployment attributes to be installed on the layer's instances. For more information, see [Using Custom JSON](#).

Type: String

Required: No

CustomRecipes (p. 173)

A `LayerCustomRecipes` object that specifies the layer's custom recipes.

Type: [Recipes \(p. 245\)](#) object

Required: No

CustomSecurityGroupIds (p. 173)

An array containing the layer's custom security group IDs.

Type: Array of strings

Required: No

EnableAutoHealing (p. 173)

Whether to disable auto healing for the layer.

Type: Boolean

Required: No

InstallUpdatesOnBoot (p. 173)

Whether to install operating system and package updates when the instance boots. The default value is `true`. To control when updates are installed, set this value to `false`. You must then update your instances manually by using [CreateDeployment \(p. 24\)](#) to run the `update_dependencies` stack command or manually running `yum` (Amazon Linux) or `apt-get` (Ubuntu) on the instances.

Note

We strongly recommend using the default value of `true`, to ensure that your instances have the latest security updates.

Type: Boolean

Required: No

LayerId (p. 173)

The layer ID.

Type: String

Required: Yes

LifecycleEventConfiguration (p. 173)

Type: [LifecycleEventConfiguration \(p. 234\)](#) object

Required: No

Name (p. 173)

The layer name, which is used by the console.

Type: String

Required: No

Packages (p. 173)

An array of `Package` objects that describe the layer's packages.

Type: Array of strings

Required: No

Shortname (p. 173)

For custom layers only, use this parameter to specify the layer's short name, which is used internally by AWS OpsWorks Stacks and by Chef. The short name is also used as the name for the directory where your app files are installed. It can have a maximum of 200 characters and must be in the following format: `/\A[a-z0-9\-_\.\.]+\Z/`.

The built-in layers' short names are defined by AWS OpsWorks Stacks. For more information, see the [Layer Reference](#)

Type: String

Required: No

UseEbsOptimizedInstances (p. 173)

Whether to use Amazon EBS-optimized instances.

Type: Boolean

Required: No

VolumeConfigurations (p. 173)

A `VolumeConfigurations` object that describes the layer's Amazon EBS volumes.

Type: Array of [VolumeConfiguration \(p. 268\)](#) objects

Required: No

Response Elements

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

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 274\)](#).

ResourceNotFoundException

Indicates that a resource was not found.

HTTP Status Code: 400

ValidationException

Indicates that a request was not valid.

HTTP Status Code: 400

See Also

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

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

UpdateMyUserProfile

Updates a user's SSH public key.

Required Permissions: To use this action, an IAM user must have self-management enabled or an attached policy that explicitly grants permissions. For more information about user permissions, see [Managing User Permissions](#).

Request Syntax

```
{  
  "SshPublicKey": "string"  
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 272).

The request accepts the following data in JSON format.

SshPublicKey (p. 178)

The user's SSH public key.

Type: String

Required: No

Response Elements

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

Errors

For information about the errors that are common to all actions, see [Common Errors](#) (p. 274).

ValidationException

Indicates that a request was not valid.

HTTP Status Code: 400

See Also

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

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

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

UpdateRdsDbInstance

Updates an Amazon RDS instance.

Required Permissions: To use this action, an IAM user must have a Manage permissions level for the stack, or an attached policy that explicitly grants permissions. For more information on user permissions, see [Managing User Permissions](#).

Request Syntax

```
{  
  "DbPassword": "string",  
  "DbUser": "string",  
  "RdsDbInstanceArn": "string"  
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters \(p. 272\)](#).

The request accepts the following data in JSON format.

DbPassword (p. 180)

The database password.

Type: String

Required: No

DbUser (p. 180)

The master user name.

Type: String

Required: No

RdsDbInstanceArn (p. 180)

The Amazon RDS instance's ARN.

Type: String

Required: Yes

Response Elements

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

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 274\)](#).

ResourceNotFoundException

Indicates that a resource was not found.

HTTP Status Code: 400

ValidationException

Indicates that a request was not valid.

HTTP Status Code: 400

See Also

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

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

UpdateStack

Updates a specified stack.

Required Permissions: To use this action, an IAM user must have a Manage permissions level for the stack, or an attached policy that explicitly grants permissions. For more information on user permissions, see [Managing User Permissions](#).

Request Syntax

```
{
  "AgentVersion": "string",
  "Attributes": {
    "string" : "string"
  },
  "ChefConfiguration": {
    "BerkshelfVersion": "string",
    "ManageBerkshelf": boolean
  },
  "ConfigurationManager": {
    "Name": "string",
    "Version": "string"
  },
  "CustomCookbooksSource": {
    "Password": "string",
    "Revision": "string",
    "SshKey": "string",
    "Type": "string",
    "Url": "string",
    "Username": "string"
  },
  "CustomJson": "string",
  "DefaultAvailabilityZone": "string",
  "DefaultInstanceProfileArn": "string",
  "DefaultOs": "string",
  "DefaultRootDeviceType": "string",
  "DefaultSshKeyName": "string",
  "DefaultSubnetId": "string",
  "HostnameTheme": "string",
  "Name": "string",
  "ServiceRoleArn": "string",
  "StackId": "string",
  "UseCustomCookbooks": boolean,
  "UseOpsworksSecurityGroups": boolean
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 272).

The request accepts the following data in JSON format.

AgentVersion (p. 182)

The default AWS OpsWorks Stacks agent version. You have the following options:

- Auto-update - Set this parameter to `LATEST`. AWS OpsWorks Stacks automatically installs new agent versions on the stack's instances as soon as they are available.

- **Fixed version** - Set this parameter to your preferred agent version. To update the agent version, you must edit the stack configuration and specify a new version. AWS OpsWorks Stacks then automatically installs that version on the stack's instances.

The default setting is `LATEST`. To specify an agent version, you must use the complete version number, not the abbreviated number shown on the console. For a list of available agent version numbers, call [DescribeAgentVersions](#) (p. 66). AgentVersion cannot be set to Chef 12.2.

Note

You can also specify an agent version when you create or update an instance, which overrides the stack's default setting.

Type: String

Required: No

Attributes (p. 182)

One or more user-defined key-value pairs to be added to the stack attributes.

Type: String to string map

Valid Keys: `Color`

Required: No

ChefConfiguration (p. 182)

A `ChefConfiguration` object that specifies whether to enable Berkshelf and the Berkshelf version on Chef 11.10 stacks. For more information, see [Create a New Stack](#).

Type: [ChefConfiguration](#) (p. 201) object

Required: No

ConfigurationManager (p. 182)

The configuration manager. When you update a stack, we recommend that you use the configuration manager to specify the Chef version: 12, 11.10, or 11.4 for Linux stacks, or 12.2 for Windows stacks. The default value for Linux stacks is currently 12.

Type: [StackConfigurationManager](#) (p. 259) object

Required: No

CustomCookbooksSource (p. 182)

Contains the information required to retrieve an app or cookbook from a repository. For more information, see [Creating Apps](#) or [Custom Recipes and Cookbooks](#).

Type: [Source](#) (p. 252) object

Required: No

CustomJson (p. 182)

A string that contains user-defined, custom JSON. It can be used to override the corresponding default stack configuration JSON values or to pass data to recipes. The string should be in the following format:

```
"{\"key1\": \"value1\", \"key2\": \"value2\", ...}"
```

For more information about custom JSON, see [Use Custom JSON to Modify the Stack Configuration Attributes](#).

Type: String

Required: No

DefaultAvailabilityZone (p. 182)

The stack's default Availability Zone, which must be in the stack's region. For more information, see [Regions and Endpoints](#). If you also specify a value for `DefaultSubnetId`, the subnet must be in the same zone. For more information, see [CreateStack \(p. 37\)](#).

Type: String

Required: No

DefaultInstanceProfileArn (p. 182)

The ARN of an IAM profile that is the default profile for all of the stack's EC2 instances. For more information about IAM ARNs, see [Using Identifiers](#).

Type: String

Required: No

DefaultOs (p. 182)

The stack's operating system, which must be set to one of the following:

- A supported Linux operating system: An Amazon Linux version, such as Amazon Linux 2018.03, Amazon Linux 2017.09, Amazon Linux 2017.03, Amazon Linux 2016.09, Amazon Linux 2016.03, Amazon Linux 2015.09, or Amazon Linux 2015.03.
- A supported Ubuntu operating system, such as Ubuntu 16.04 LTS, Ubuntu 14.04 LTS, or Ubuntu 12.04 LTS.
- CentOS Linux 7
- Red Hat Enterprise Linux 7
- A supported Windows operating system, such as Microsoft Windows Server 2012 R2 Base, Microsoft Windows Server 2012 R2 with SQL Server Express, Microsoft Windows Server 2012 R2 with SQL Server Standard, or Microsoft Windows Server 2012 R2 with SQL Server Web.
- A custom AMI: Custom. You specify the custom AMI you want to use when you create instances. For more information about how to use custom AMIs with OpsWorks, see [Using Custom AMIs](#).

The default option is the stack's current operating system. For more information about supported operating systems, see [AWS OpsWorks Stacks Operating Systems](#).

Type: String

Required: No

DefaultRootDeviceType (p. 182)

The default root device type. This value is used by default for all instances in the stack, but you can override it when you create an instance. For more information, see [Storage for the Root Device](#).

Type: String

Valid Values: `ebs` | `instance-store`

Required: No

DefaultSshKeyName (p. 182)

A default Amazon EC2 key-pair name. The default value is `none`. If you specify a key-pair name, AWS OpsWorks Stacks installs the public key on the instance and you can use the private key with an SSH client to log in to the instance. For more information, see [Using SSH to Communicate with an Instance](#) and [Managing SSH Access](#). You can override this setting by specifying a different key pair, or no key pair, when you [create an instance](#).

Type: String

Required: No

DefaultSubnetId (p. 182)

The stack's default VPC subnet ID. This parameter is required if you specify a value for the `VpcId` parameter. All instances are launched into this subnet unless you specify otherwise when you create the instance. If you also specify a value for `DefaultAvailabilityZone`, the subnet must be in that zone. For information on default values and when this parameter is required, see the `VpcId` parameter description.

Type: String

Required: No

HostnameTheme (p. 182)

The stack's new host name theme, with spaces replaced by underscores. The theme is used to generate host names for the stack's instances. By default, `HostnameTheme` is set to `Layer_Dependent`, which creates host names by appending integers to the layer's short name. The other themes are:

- `Baked_Goods`
- `Clouds`
- `Europe_Cities`
- `Fruits`
- `Greek_Deities`
- `Legendary_creatures_from_Japan`
- `Planets_and_Moons`
- `Roman_Deities`
- `Scottish_Islands`
- `US_Cities`
- `Wild_Cats`

To obtain a generated host name, call `GetHostNameSuggestion`, which returns a host name based on the current theme.

Type: String

Required: No

Name (p. 182)

The stack's new name.

Type: String

Required: No

ServiceRoleArn (p. 182)

Do not use this parameter. You cannot update a stack's service role.

Type: String

Required: No

StackId (p. 182)

The stack ID.

Type: String

Required: Yes

UseCustomCookbooks (p. 182)

Whether the stack uses custom cookbooks.

Type: Boolean

Required: No

UseOpsworksSecurityGroups (p. 182)

Whether to associate the AWS OpsWorks Stacks built-in security groups with the stack's layers.

AWS OpsWorks Stacks provides a standard set of built-in security groups, one for each layer, which are associated with layers by default. `UseOpsworksSecurityGroups` allows you to provide your own custom security groups instead of using the built-in groups. `UseOpsworksSecurityGroups` has the following settings:

- True - AWS OpsWorks Stacks automatically associates the appropriate built-in security group with each layer (default setting). You can associate additional security groups with a layer after you create it, but you cannot delete the built-in security group.
- False - AWS OpsWorks Stacks does not associate built-in security groups with layers. You must create appropriate EC2 security groups and associate a security group with each layer that you create. However, you can still manually associate a built-in security group with a layer on. Custom security groups are required only for those layers that need custom settings.

For more information, see [Create a New Stack](#).

Type: Boolean

Required: No

Response Elements

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

Errors

For information about the errors that are common to all actions, see [Common Errors](#) (p. 274).

ResourceNotFoundException

Indicates that a resource was not found.

HTTP Status Code: 400

ValidationException

Indicates that a request was not valid.

HTTP Status Code: 400

See Also

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

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

UpdateUserProfile

Updates a specified user profile.

Required Permissions: To use this action, an IAM user must have an attached policy that explicitly grants permissions. For more information about user permissions, see [Managing User Permissions](#).

Request Syntax

```
{  
  "AllowSelfManagement": boolean,  
  "IamUserArn": "string",  
  "SshPublicKey": "string",  
  "SshUsername": "string"  
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 272).

The request accepts the following data in JSON format.

[AllowSelfManagement](#) (p. 188)

Whether users can specify their own SSH public key through the My Settings page. For more information, see [Managing User Permissions](#).

Type: Boolean

Required: No

[IamUserArn](#) (p. 188)

The user IAM ARN. This can also be a federated user's ARN.

Type: String

Required: Yes

[SshPublicKey](#) (p. 188)

The user's new SSH public key.

Type: String

Required: No

[SshUsername](#) (p. 188)

The user's SSH user name. The allowable characters are [a-z], [A-Z], [0-9], '-', and '_'. If the specified name includes other punctuation marks, AWS OpsWorks Stacks removes them. For example, `my.name` will be changed to `myname`. If you do not specify an SSH user name, AWS OpsWorks Stacks generates one from the IAM user name.

Type: String

Required: No

Response Elements

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

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 274\)](#).

ResourceNotFoundException

Indicates that a resource was not found.

HTTP Status Code: 400

ValidationException

Indicates that a request was not valid.

HTTP Status Code: 400

See Also

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

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

UpdateVolume

Updates an Amazon EBS volume's name or mount point. For more information, see [Resource Management](#).

Required Permissions: To use this action, an IAM user must have a Manage permissions level for the stack, or an attached policy that explicitly grants permissions. For more information on user permissions, see [Managing User Permissions](#).

Request Syntax

```
{  
  "MountPoint": "string",  
  "Name": "string",  
  "VolumeId": "string"  
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters \(p. 272\)](#).

The request accepts the following data in JSON format.

MountPoint (p. 190)

The new mount point.

Type: String

Required: No

Name (p. 190)

The new name.

Type: String

Required: No

VolumeId (p. 190)

The volume ID.

Type: String

Required: Yes

Response Elements

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

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 274\)](#).

ResourceNotFoundException

Indicates that a resource was not found.

HTTP Status Code: 400

ValidationException

Indicates that a request was not valid.

HTTP Status Code: 400

See Also

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

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

Data Types

The AWS OpsWorks 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:

- [AgentVersion](#) (p. 194)
- [App](#) (p. 195)
- [AutoScalingThresholds](#) (p. 198)
- [BlockDeviceMapping](#) (p. 200)
- [ChefConfiguration](#) (p. 201)
- [CloudWatchLogsConfiguration](#) (p. 202)
- [CloudWatchLogsLogStream](#) (p. 203)
- [Command](#) (p. 206)
- [DataSource](#) (p. 208)
- [Deployment](#) (p. 209)
- [DeploymentCommand](#) (p. 211)
- [EbsBlockDevice](#) (p. 213)
- [EcsCluster](#) (p. 215)
- [ElasticIp](#) (p. 216)
- [ElasticLoadBalancer](#) (p. 217)
- [EnvironmentVariable](#) (p. 219)
- [Instance](#) (p. 220)
- [InstanceIdentity](#) (p. 226)
- [InstancesCount](#) (p. 227)
- [Layer](#) (p. 230)
- [LifecycleEventConfiguration](#) (p. 234)
- [LoadBasedAutoScalingConfiguration](#) (p. 235)
- [OperatingSystem](#) (p. 236)
- [OperatingSystemConfigurationManager](#) (p. 238)
- [Permission](#) (p. 239)
- [RaidArray](#) (p. 241)
- [RdsDbInstance](#) (p. 243)
- [Recipes](#) (p. 245)
- [ReportedOs](#) (p. 247)
- [SelfUserProfile](#) (p. 248)
- [ServiceError](#) (p. 249)
- [ShutdownEventConfiguration](#) (p. 251)
- [Source](#) (p. 252)
- [SslConfiguration](#) (p. 254)
- [Stack](#) (p. 255)

- [StackConfigurationManager](#) (p. 259)
- [StackSummary](#) (p. 260)
- [TemporaryCredential](#) (p. 262)
- [TimeBasedAutoScalingConfiguration](#) (p. 263)
- [UserProfile](#) (p. 264)
- [Volume](#) (p. 265)
- [VolumeConfiguration](#) (p. 268)
- [WeeklyAutoScalingSchedule](#) (p. 270)

AgentVersion

Describes an agent version.

Contents

ConfigurationManager

The configuration manager.

Type: [StackConfigurationManager \(p. 259\)](#) object

Required: No

Version

The agent version.

Type: String

Required: No

See Also

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

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

App

A description of the app.

Contents

AppId

The app ID.

Type: String

Required: No

AppSource

A Source object that describes the app repository.

Type: [Source \(p. 252\)](#) object

Required: No

Attributes

The stack attributes.

Type: String to string map

Valid Keys: DocumentRoot | RailsEnv | AutoBundleOnDeploy | AwsFlowRubySettings

Required: No

CreatedAt

When the app was created.

Type: String

Required: No

DataSources

The app's data sources.

Type: Array of [DataSource \(p. 208\)](#) objects

Required: No

Description

A description of the app.

Type: String

Required: No

Domains

The app vhost settings with multiple domains separated by commas. For example:
'www.example.com, example.com'

Type: Array of strings

Required: No

EnableSsl

Whether to enable SSL for the app.

Type: Boolean

Required: No

Environment

An array of `EnvironmentVariable` objects that specify environment variables to be associated with the app. After you deploy the app, these variables are defined on the associated app server instances. For more information, see [Environment Variables](#).

Note

There is no specific limit on the number of environment variables. However, the size of the associated data structure - which includes the variable names, values, and protected flag values - cannot exceed 20 KB. This limit should accommodate most if not all use cases, but if you do exceed it, you will cause an exception (API) with an "Environment: is too large (maximum is 20 KB)" message.

Type: Array of [EnvironmentVariable](#) (p. 219) objects

Required: No

Name

The app name.

Type: String

Required: No

Shortname

The app's short name.

Type: String

Required: No

SslConfiguration

An `SslConfiguration` object with the SSL configuration.

Type: [SslConfiguration](#) (p. 254) object

Required: No

StackId

The app stack ID.

Type: String

Required: No

Type

The app type.

Type: String

Valid Values: `aws-flow-ruby` | `java` | `rails` | `php` | `nodejs` | `static` | `other`

Required: No

See Also

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

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

AutoScalingThresholds

Describes a load-based auto scaling upscaling or downscaling threshold configuration, which specifies when AWS OpsWorks Stacks starts or stops load-based instances.

Contents

Alarms

Custom Cloudwatch auto scaling alarms, to be used as thresholds. This parameter takes a list of up to five alarm names, which are case sensitive and must be in the same region as the stack.

Note

To use custom alarms, you must update your service role to allow `cloudwatch:DescribeAlarms`. You can either have AWS OpsWorks Stacks update the role for you when you first use this feature or you can edit the role manually. For more information, see [Allowing AWS OpsWorks Stacks to Act on Your Behalf](#).

Type: Array of strings

Required: No

CpuThreshold

The CPU utilization threshold, as a percent of the available CPU. A value of -1 disables the threshold.

Type: Double

Required: No

IgnoreMetricsTime

The amount of time (in minutes) after a scaling event occurs that AWS OpsWorks Stacks should ignore metrics and suppress additional scaling events. For example, AWS OpsWorks Stacks adds new instances following an upscaling event but the instances won't start reducing the load until they have been booted and configured. There is no point in raising additional scaling events during that operation, which typically takes several minutes. `IgnoreMetricsTime` allows you to direct AWS OpsWorks Stacks to suppress scaling events long enough to get the new instances online.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 100.

Required: No

InstanceCount

The number of instances to add or remove when the load exceeds a threshold.

Type: Integer

Required: No

LoadThreshold

The load threshold. A value of -1 disables the threshold. For more information about how load is computed, see [Load \(computing\)](#).

Type: Double

Required: No

MemoryThreshold

The memory utilization threshold, as a percent of the available memory. A value of -1 disables the threshold.

Type: Double

Required: No

ThresholdsWaitTime

The amount of time, in minutes, that the load must exceed a threshold before more instances are added or removed.

Type: Integer

Valid Range: Minimum value of 1. Maximum value 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 Go](#)
- [AWS SDK for Java](#)
- [AWS SDK for Ruby V2](#)

BlockDeviceMapping

Describes a block device mapping. This data type maps directly to the Amazon EC2 [BlockDeviceMapping](#) data type.

Contents

DeviceName

The device name that is exposed to the instance, such as `/dev/sdh`. For the root device, you can use the explicit device name or you can set this parameter to `ROOT_DEVICE` and AWS OpsWorks Stacks will provide the correct device name.

Type: String

Required: No

Ebs

An `EBSBlockDevice` that defines how to configure an Amazon EBS volume when the instance is launched.

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

Required: No

NoDevice

Suppresses the specified device included in the AMI's block device mapping.

Type: String

Required: No

VirtualName

The virtual device name. For more information, see [BlockDeviceMapping](#).

Type: String

Required: No

See Also

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

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

ChefConfiguration

Describes the Chef configuration.

Contents

BerkshelfVersion

The Berkshelf version.

Type: String

Required: No

ManageBerkshelf

Whether to enable Berkshelf.

Type: Boolean

Required: No

See Also

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

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

CloudWatchLogsConfiguration

Describes the Amazon CloudWatch logs configuration for a layer.

Contents

Enabled

Whether CloudWatch Logs is enabled for a layer.

Type: Boolean

Required: No

LogStreams

A list of configuration options for CloudWatch Logs.

Type: Array of [CloudWatchLogsLogStream](#) (p. 203) objects

Required: No

See Also

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

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

CloudWatchLogsLogStream

Describes the Amazon CloudWatch logs configuration for a layer. For detailed information about members of this data type, see the [CloudWatch Logs Agent Reference](#).

Contents

BatchCount

Specifies the max number of log events in a batch, up to 10000. The default value is 1000.

Type: Integer

Required: No

BatchSize

Specifies the maximum size of log events in a batch, in bytes, up to 1048576 bytes. The default value is 32768 bytes. This size is calculated as the sum of all event messages in UTF-8, plus 26 bytes for each log event.

Type: Integer

Required: No

BufferDuration

Specifies the time duration for the batching of log events. The minimum value is 5000ms and default value is 5000ms.

Type: Integer

Required: No

DatetimeFormat

Specifies how the time stamp is extracted from logs. For more information, see the [CloudWatch Logs Agent Reference](#).

Type: String

Required: No

Encoding

Specifies the encoding of the log file so that the file can be read correctly. The default is `utf_8`. Encodings supported by `Python codecs.decode()` can be used here.

Type: String

Valid Values: `ascii` | `big5` | `big5hkscs` | `cp037` | `cp424` | `cp437` | `cp500` | `cp720` | `cp737` | `cp775` | `cp850` | `cp852` | `cp855` | `cp856` | `cp857` | `cp858` | `cp860` | `cp861` | `cp862` | `cp863` | `cp864` | `cp865` | `cp866` | `cp869` | `cp874` | `cp875` | `cp932` | `cp949` | `cp950` | `cp1006` | `cp1026` | `cp1140` | `cp1250` | `cp1251` | `cp1252` | `cp1253` | `cp1254` | `cp1255` | `cp1256` | `cp1257` | `cp1258` | `euc_jp` | `euc_jis_2004` | `euc_jisx0213` | `euc_kr` | `gb2312` | `gbk` | `gb18030` | `hz` | `iso2022_jp` | `iso2022_jp_1` | `iso2022_jp_2` | `iso2022_jp_2004` | `iso2022_jp_3` | `iso2022_jp_ext` | `iso2022_kr` | `latin_1` | `iso8859_2` | `iso8859_3` | `iso8859_4` | `iso8859_5` | `iso8859_6` | `iso8859_7` | `iso8859_8` | `iso8859_9` | `iso8859_10` | `iso8859_13` | `iso8859_14` | `iso8859_15` | `iso8859_16` | `johab` | `koi8_r` | `koi8_u` | `mac_cyrillic` | `mac_greek` | `mac_iceland` | `mac_latin2` | `mac_roman` | `mac_turkish` | `ptcp154` | `shift_jis` | `shift_jis_2004` | `shift_jisx0213` | `utf_32`

| utf_32_be | utf_32_le | utf_16 | utf_16_be | utf_16_le | utf_7 | utf_8 |
utf_8_sig

Required: No

File

Specifies log files that you want to push to CloudWatch Logs.

File can point to a specific file or multiple files (by using wild card characters such as `/var/log/system.log*`). Only the latest file is pushed to CloudWatch Logs, based on file modification time. We recommend that you use wild card characters to specify a series of files of the same type, such as `access_log.2014-06-01-01`, `access_log.2014-06-01-02`, and so on by using a pattern like `access_log.*`. Don't use a wildcard to match multiple file types, such as `access_log_80` and `access_log_443`. To specify multiple, different file types, add another log stream entry to the configuration file, so that each log file type is stored in a different log group.

Zippped files are not supported.

Type: String

Required: No

FileFingerprintLines

Specifies the range of lines for identifying a file. The valid values are one number, or two dash-delimited numbers, such as '1', '2-5'. The default value is '1', meaning the first line is used to calculate the fingerprint. Fingerprint lines are not sent to CloudWatch Logs unless all specified lines are available.

Type: String

Required: No

InitialPosition

Specifies where to start to read data (`start_of_file` or `end_of_file`). The default is `start_of_file`. This setting is only used if there is no state persisted for that log stream.

Type: String

Valid Values: `start_of_file` | `end_of_file`

Required: No

LogGroupName

Specifies the destination log group. A log group is created automatically if it doesn't already exist. Log group names can be between 1 and 512 characters long. Allowed characters include a-z, A-Z, 0-9, '_' (underscore), '-' (hyphen), '/' (forward slash), and '.' (period).

Type: String

Required: No

MultiLineStartPattern

Specifies the pattern for identifying the start of a log message.

Type: String

Required: No

TimeZone

Specifies the time zone of log event time stamps.

Type: String

Valid Values: `LOCAL` | `UTC`

Required: No

See Also

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

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

Command

Describes a command.

Contents

AcknowledgedAt

Date and time when the command was acknowledged.

Type: String

Required: No

CommandId

The command ID.

Type: String

Required: No

CompletedAt

Date when the command completed.

Type: String

Required: No

CreatedAt

Date and time when the command was run.

Type: String

Required: No

DeploymentId

The command deployment ID.

Type: String

Required: No

ExitCode

The command exit code.

Type: Integer

Required: No

InstanceId

The ID of the instance where the command was executed.

Type: String

Required: No

LogUrl

The URL of the command log.

Type: String

Required: No

Status

The command status:

- failed
- successful
- skipped
- pending

Type: String

Required: No

Type

The command type:

- configure
- deploy
- execute_recipes
- install_dependencies
- restart
- rollback
- setup
- start
- stop
- undeploy
- update_custom_cookbooks
- update_dependencies

Type: String

Required: No

See Also

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

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

DataSource

Describes an app's data source.

Contents

Arn

The data source's ARN.

Type: String

Required: No

DatabaseName

The database name.

Type: String

Required: No

Type

The data source's type, `AutoSelectOpsworksMysqlInstance`, `OpsworksMysqlInstance`, `RdsDbInstance`, or `None`.

Type: String

Required: No

See Also

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

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

Deployment

Describes a deployment of a stack or app.

Contents

AppId

The app ID.

Type: String

Required: No

Command

Used to specify a stack or deployment command.

Type: [DeploymentCommand](#) (p. 211) object

Required: No

Comment

A user-defined comment.

Type: String

Required: No

CompletedAt

Date when the deployment completed.

Type: String

Required: No

CreatedAt

Date when the deployment was created.

Type: String

Required: No

CustomJson

A string that contains user-defined custom JSON. It can be used to override the corresponding default stack configuration attribute values for stack or to pass data to recipes. The string should be in the following format:

```
"{\"key1\": \"value1\", \"key2\": \"value2\", ...}"
```

For more information on custom JSON, see [Use Custom JSON to Modify the Stack Configuration Attributes](#).

Type: String

Required: No

DeploymentId

The deployment ID.

Type: String

Required: No

Duration

The deployment duration.

Type: Integer

Required: No

IamUserArn

The user's IAM ARN.

Type: String

Required: No

InstanceIds

The IDs of the target instances.

Type: Array of strings

Required: No

StackId

The stack ID.

Type: String

Required: No

Status

The deployment status:

- running
- successful
- failed

Type: String

Required: No

See Also

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

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

DeploymentCommand

Used to specify a stack or deployment command.

Contents

Args

The arguments of those commands that take arguments. It should be set to a JSON object with the following format:

```
{"arg_name1" : ["value1", "value2", ...], "arg_name2" : ["value1", "value2", ...], ...}
```

The `update_dependencies` command takes two arguments:

- `upgrade_os_to` - Specifies the desired Amazon Linux version for instances whose OS you want to upgrade, such as Amazon Linux 2016.09. You must also set the `allow_reboot` argument to `true`.
- `allow_reboot` - Specifies whether to allow AWS OpsWorks Stacks to reboot the instances if necessary, after installing the updates. This argument can be set to either `true` or `false`. The default value is `false`.

For example, to upgrade an instance to Amazon Linux 2016.09, set `Args` to the following.

```
{ "upgrade_os_to":["Amazon Linux 2016.09"], "allow_reboot":["true"] }
```

Type: String to array of strings map

Required: No

Name

Specifies the operation. You can specify only one command.

For stacks, the following commands are available:

- `execute_recipes`: Execute one or more recipes. To specify the recipes, set an `Args` parameter named `recipes` to the list of recipes to be executed. For example, to execute `phpapp::appsetup`, set `Args` to `{"recipes":["phpapp::appsetup"]}`.
- `install_dependencies`: Install the stack's dependencies.
- `update_custom_cookbooks`: Update the stack's custom cookbooks.
- `update_dependencies`: Update the stack's dependencies.

Note

The `update_dependencies` and `install_dependencies` commands are supported only for Linux instances. You can run the commands successfully on Windows instances, but they do nothing.

For apps, the following commands are available:

- `deploy`: Deploy an app. Ruby on Rails apps have an optional `Args` parameter named `migrate`. Set `Args` to `{"migrate":["true"]}` to migrate the database. The default setting is `{"migrate":["false"]}`.
- `rollback`: Roll the app back to the previous version. When you update an app, AWS OpsWorks Stacks stores the previous version, up to a maximum of five versions. You can use this command to roll an app back as many as four versions.
- `start`: Start the app's web or application server.
- `stop`: Stop the app's web or application server.

- `restart`: Restart the app's web or application server.
- `undeploy`: Undeploy the app.

Type: String

Valid Values: `install_dependencies` | `update_dependencies` | `update_custom_cookbooks` | `execute_recipes` | `configure` | `setup` | `deploy` | `rollback` | `start` | `stop` | `restart` | `undeploy`

Required: Yes

See Also

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

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

EbsBlockDevice

Describes an Amazon EBS volume. This data type maps directly to the Amazon EC2 [EbsBlockDevice](#) data type.

Contents

DeleteOnTermination

Whether the volume is deleted on instance termination.

Type: Boolean

Required: No

Iops

The number of I/O operations per second (IOPS) that the volume supports. For more information, see [EbsBlockDevice](#).

Type: Integer

Required: No

SnapshotId

The snapshot ID.

Type: String

Required: No

VolumeSize

The volume size, in GiB. For more information, see [EbsBlockDevice](#).

Type: Integer

Required: No

VolumeType

The volume type. `gp2` for General Purpose (SSD) volumes, `io1` for Provisioned IOPS (SSD) volumes, `st1` for Throughput Optimized hard disk drives (HDD), `sc1` for Cold HDD, and `standard` for Magnetic volumes.

If you specify the `io1` volume type, you must also specify a value for the `Iops` attribute. The maximum ratio of provisioned IOPS to requested volume size (in GiB) is 50:1. AWS uses the default volume size (in GiB) specified in the AMI attributes to set IOPS to 50 x (volume size).

Type: String

Valid Values: `gp2` | `io1` | `standard`

Required: No

See Also

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

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

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

EcsCluster

Describes a registered Amazon ECS cluster.

Contents

EcsClusterArn

The cluster's ARN.

Type: String

Required: No

EcsClusterName

The cluster name.

Type: String

Required: No

RegisteredAt

The time and date that the cluster was registered with the stack.

Type: String

Required: No

StackId

The stack ID.

Type: String

Required: No

See Also

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

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

ElasticIp

Describes an Elastic IP address.

Contents

Domain

The domain.

Type: String

Required: No

InstanceId

The ID of the instance that the address is attached to.

Type: String

Required: No

Ip

The IP address.

Type: String

Required: No

Name

The name.

Type: String

Required: No

Region

The AWS region. For more information, see [Regions and Endpoints](#).

Type: String

Required: No

See Also

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

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

ElasticLoadBalancer

Describes an Elastic Load Balancing instance.

Contents

AvailabilityZones

A list of Availability Zones.

Type: Array of strings

Required: No

DnsName

The instance's public DNS name.

Type: String

Required: No

Ec2InstanceIds

A list of the EC2 instances that the Elastic Load Balancing instance is managing traffic for.

Type: Array of strings

Required: No

ElasticLoadBalancerName

The Elastic Load Balancing instance's name.

Type: String

Required: No

LayerId

The ID of the layer that the instance is attached to.

Type: String

Required: No

Region

The instance's AWS region.

Type: String

Required: No

StackId

The ID of the stack that the instance is associated with.

Type: String

Required: No

SubnetIds

A list of subnet IDs, if the stack is running in a VPC.

Type: Array of strings

Required: No

VpcId

The VPC ID.

Type: String

Required: No

See Also

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

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

EnvironmentVariable

Represents an app's environment variable.

Contents

Key

(Required) The environment variable's name, which can consist of up to 64 characters and must be specified. The name can contain upper- and lowercase letters, numbers, and underscores (`_`), but it must start with a letter or underscore.

Type: String

Required: Yes

Secure

(Optional) Whether the variable's value will be returned by the [DescribeApps \(p. 68\)](#) action. To conceal an environment variable's value, set `Secure` to `true`. `DescribeApps` then returns `*****FILTERED*****` instead of the actual value. The default value for `Secure` is `false`.

Type: Boolean

Required: No

Value

(Optional) The environment variable's value, which can be left empty. If you specify a value, it can contain up to 256 characters, which must all be printable.

Type: String

Required: Yes

See Also

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

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

Instance

Describes an instance.

Contents

AgentVersion

The agent version. This parameter is set to `INHERIT` if the instance inherits the default stack setting or to a version number for a fixed agent version.

Type: String

Required: No

Amild

A custom AMI ID to be used to create the instance. For more information, see [Instances](#)

Type: String

Required: No

Architecture

The instance architecture: "i386" or "x86_64".

Type: String

Valid Values: `x86_64` | `i386`

Required: No

Arn

The instance's Amazon Resource Number (ARN).

Type: String

Required: No

AutoScalingType

For load-based or time-based instances, the type.

Type: String

Valid Values: `load` | `timer`

Required: No

AvailabilityZone

The instance Availability Zone. For more information, see [Regions and Endpoints](#).

Type: String

Required: No

BlockDeviceMappings

An array of `BlockDeviceMapping` objects that specify the instance's block device mappings.

Type: Array of [BlockDeviceMapping](#) (p. 200) objects

Required: No

CreatedAt

The time that the instance was created.

Type: String

Required: No

EbsOptimized

Whether this is an Amazon EBS-optimized instance.

Type: Boolean

Required: No

Ec2InstanceId

The ID of the associated Amazon EC2 instance.

Type: String

Required: No

EcsClusterArn

For container instances, the Amazon ECS cluster's ARN.

Type: String

Required: No

EcsContainerInstanceArn

For container instances, the instance's ARN.

Type: String

Required: No

ElasticIp

The instance [Elastic IP address](#) .

Type: String

Required: No

Hostname

The instance host name.

Type: String

Required: No

InfrastructureClass

For registered instances, the infrastructure class: ec2 or on-premises.

Type: String

Required: No

InstallUpdatesOnBoot

Whether to install operating system and package updates when the instance boots. The default value is `true`. If this value is set to `false`, you must then update your instances manually by using [CreateDeployment](#) (p. 24) to run the `update_dependencies` stack command or by manually running `yum` (Amazon Linux) or `apt-get` (Ubuntu) on the instances.

Note

We strongly recommend using the default value of `true`, to ensure that your instances have the latest security updates.

Type: Boolean

Required: No

InstanceId

The instance ID.

Type: String

Required: No

InstanceProfileArn

The ARN of the instance's IAM profile. For more information about IAM ARNs, see [Using Identifiers](#).

Type: String

Required: No

InstanceType

The instance type, such as `t2.micro`.

Type: String

Required: No

LastServiceErrorId

The ID of the last service error. For more information, call [DescribeServiceErrors](#) (p. 102).

Type: String

Required: No

LayerIds

An array containing the instance layer IDs.

Type: Array of strings

Required: No

Os

The instance's operating system.

Type: String

Required: No

Platform

The instance's platform.

Type: String

Required: No

PrivateDns

The instance's private DNS name.

Type: String

Required: No

PrivateIp

The instance's private IP address.

Type: String

Required: No

PublicDns

The instance public DNS name.

Type: String

Required: No

PublicIp

The instance public IP address.

Type: String

Required: No

RegisteredBy

For registered instances, who performed the registration.

Type: String

Required: No

ReportedAgentVersion

The instance's reported AWS OpsWorks Stacks agent version.

Type: String

Required: No

ReportedOs

For registered instances, the reported operating system.

Type: [ReportedOs](#) (p. 247) object

Required: No

RootDeviceType

The instance's root device type. For more information, see [Storage for the Root Device](#).

Type: String

Valid Values: `ebs` | `instance-store`

Required: No

RootDeviceVolumeld

The root device volume ID.

Type: String

Required: No

SecurityGroupIds

An array containing the instance security group IDs.

Type: Array of strings

Required: No

SshHostDsaKeyFingerprint

The SSH key's Deep Security Agent (DSA) fingerprint.

Type: String

Required: No

SshHostRsaKeyFingerprint

The SSH key's RSA fingerprint.

Type: String

Required: No

SshKeyName

The instance's Amazon EC2 key-pair name.

Type: String

Required: No

StackId

The stack ID.

Type: String

Required: No

Status

The instance status:

- booting
- connection_lost
- online
- pending
- rebooting
- requested
- running_setup
- setup_failed
- shutting_down
- start_failed

- `stop_failed`
- `stopped`
- `stopping`
- `terminated`
- `terminating`

Type: String

Required: No

SubnetId

The instance's subnet ID; applicable only if the stack is running in a VPC.

Type: String

Required: No

Tenancy

The instance's tenancy option, such as `dedicated` or `host`.

Type: String

Required: No

VirtualizationType

The instance's virtualization type: `paravirtual` or `hvm`.

Type: String

Valid Values: `paravirtual` | `hvm`

Required: No

See Also

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

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

Instancedentity

Contains a description of an Amazon EC2 instance from the Amazon EC2 metadata service. For more information, see [Instance Metadata and User Data](#).

Contents

Document

A JSON document that contains the metadata.

Type: String

Required: No

Signature

A signature that can be used to verify the document's accuracy and authenticity.

Type: String

Required: No

See Also

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

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

InstancesCount

Describes how many instances a stack has for each status.

Contents

Assigning

The number of instances in the Assigning state.

Type: Integer

Required: No

Booting

The number of instances with `booting` status.

Type: Integer

Required: No

ConnectionLost

The number of instances with `connection_lost` status.

Type: Integer

Required: No

Deregistering

The number of instances in the Deregistering state.

Type: Integer

Required: No

Online

The number of instances with `online` status.

Type: Integer

Required: No

Pending

The number of instances with `pending` status.

Type: Integer

Required: No

Rebooting

The number of instances with `rebooting` status.

Type: Integer

Required: No

Registered

The number of instances in the Registered state.

Type: Integer

Required: No

Registering

The number of instances in the Registering state.

Type: Integer

Required: No

Requested

The number of instances with `requested` status.

Type: Integer

Required: No

RunningSetup

The number of instances with `running_setup` status.

Type: Integer

Required: No

SetupFailed

The number of instances with `setup_failed` status.

Type: Integer

Required: No

ShuttingDown

The number of instances with `shutting_down` status.

Type: Integer

Required: No

StartFailed

The number of instances with `start_failed` status.

Type: Integer

Required: No

StopFailed

The number of instances with `stop_failed` status.

Type: Integer

Required: No

Stopped

The number of instances with `stopped` status.

Type: Integer

Required: No

Stopping

The number of instances with `stopping` status.

Type: Integer

Required: No

Terminated

The number of instances with `terminated` status.

Type: Integer

Required: No

Terminating

The number of instances with `terminating` status.

Type: Integer

Required: No

Unassigning

The number of instances in the Unassigning state.

Type: Integer

Required: No

See Also

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

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

Layer

Describes a layer.

Contents

Arn

The Amazon Resource Number (ARN) of a layer.

Type: String

Required: No

Attributes

The layer attributes.

For the `HaproxyStatsPassword`, `MysqlRootPassword`, and `GangliaPassword` attributes, AWS OpsWorks Stacks returns `*****FILTERED*****` instead of the actual value

For an ECS Cluster layer, AWS OpsWorks Stacks the `EcsClusterArn` attribute is set to the cluster's ARN.

Type: String to string map

Valid Keys: `EcsClusterArn` | `EnableHaproxyStats` | `HaproxyStatsUrl` | `HaproxyStatsUser` | `HaproxyStatsPassword` | `HaproxyHealthCheckUrl` | `HaproxyHealthCheckMethod` | `MysqlRootPassword` | `MysqlRootPasswordUbiquitous` | `GangliaUrl` | `GangliaUser` | `GangliaPassword` | `MemcachedMemory` | `NodejsVersion` | `RubyVersion` | `RubygemsVersion` | `ManageBundler` | `BundlerVersion` | `RailsStack` | `PassengerVersion` | `Jvm` | `JvmVersion` | `JvmOptions` | `JavaAppServer` | `JavaAppServerVersion`

Required: No

AutoAssignElasticIps

Whether to automatically assign an [Elastic IP address](#) to the layer's instances. For more information, see [How to Edit a Layer](#).

Type: Boolean

Required: No

AutoAssignPublicIps

For stacks that are running in a VPC, whether to automatically assign a public IP address to the layer's instances. For more information, see [How to Edit a Layer](#).

Type: Boolean

Required: No

CloudWatchLogsConfiguration

The Amazon CloudWatch Logs configuration settings for the layer.

Type: [CloudWatchLogsConfiguration](#) (p. 202) object

Required: No

CreatedAt

Date when the layer was created.

Type: String

Required: No

CustomInstanceProfileArn

The ARN of the default IAM profile to be used for the layer's EC2 instances. For more information about IAM ARNs, see [Using Identifiers](#).

Type: String

Required: No

CustomJson

A JSON formatted string containing the layer's custom stack configuration and deployment attributes.

Type: String

Required: No

CustomRecipes

A `LayerCustomRecipes` object that specifies the layer's custom recipes.

Type: [Recipes \(p. 245\)](#) object

Required: No

CustomSecurityGroupIds

An array containing the layer's custom security group IDs.

Type: Array of strings

Required: No

DefaultRecipes

AWS OpsWorks Stacks supports five lifecycle events: **setup**, **configuration**, **deploy**, **undeploy**, and **shutdown**. For each layer, AWS OpsWorks Stacks runs a set of standard recipes for each event. In addition, you can provide custom recipes for any or all layers and events. AWS OpsWorks Stacks runs custom event recipes after the standard recipes. `LayerCustomRecipes` specifies the custom recipes for a particular layer to be run in response to each of the five events.

To specify a recipe, use the cookbook's directory name in the repository followed by two colons and the recipe name, which is the recipe's file name without the `.rb` extension. For example: `phpapp2::dbsetup` specifies the `dbsetup.rb` recipe in the repository's `phpapp2` folder.

Type: [Recipes \(p. 245\)](#) object

Required: No

DefaultSecurityGroupNames

An array containing the layer's security group names.

Type: Array of strings

Required: No

EnableAutoHealing

Whether auto healing is disabled for the layer.

Type: Boolean

Required: No

InstallUpdatesOnBoot

Whether to install operating system and package updates when the instance boots. The default value is `true`. If this value is set to `false`, you must then update your instances manually by using [CreateDeployment](#) (p. 24) to run the `update_dependencies` stack command or manually running `yum` (Amazon Linux) or `apt-get` (Ubuntu) on the instances.

Note

We strongly recommend using the default value of `true`, to ensure that your instances have the latest security updates.

Type: Boolean

Required: No

LayerId

The layer ID.

Type: String

Required: No

LifecycleEventConfiguration

A `LifeCycleEventConfiguration` object that specifies the Shutdown event configuration.

Type: [LifecycleEventConfiguration](#) (p. 234) object

Required: No

Name

The layer name.

Type: String

Required: No

Packages

An array of `Package` objects that describe the layer's packages.

Type: Array of strings

Required: No

Shortname

The layer short name.

Type: String

Required: No

StackId

The layer stack ID.

Type: String

Required: No

Type

The layer type.

Type: String

Valid Values: `aws-flow-ruby` | `ecs-cluster` | `java-app` | `lb` | `web` | `php-app` | `rails-app` | `nodejs-app` | `memcached` | `db-master` | `monitoring-master` | `custom`

Required: No

UseEbsOptimizedInstances

Whether the layer uses Amazon EBS-optimized instances.

Type: Boolean

Required: No

VolumeConfigurations

A `VolumeConfigurations` object that describes the layer's Amazon EBS volumes.

Type: Array of [VolumeConfiguration](#) (p. 268) objects

Required: No

See Also

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

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

LifecycleEventConfiguration

Specifies the lifecycle event configuration

Contents

Shutdown

A `ShutdownEventConfiguration` object that specifies the Shutdown event configuration.

Type: [ShutdownEventConfiguration \(p. 251\)](#) object

Required: No

See Also

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

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

LoadBasedAutoScalingConfiguration

Describes a layer's load-based auto scaling configuration.

Contents

DownScaling

An `AutoScalingThresholds` object that describes the downscaling configuration, which defines how and when AWS OpsWorks Stacks reduces the number of instances.

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

Required: No

Enable

Whether load-based auto scaling is enabled for the layer.

Type: Boolean

Required: No

LayerId

The layer ID.

Type: String

Required: No

UpScaling

An `AutoScalingThresholds` object that describes the upscaling configuration, which defines how and when AWS OpsWorks Stacks increases the number of instances.

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

Required: No

See Also

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

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

OperatingSystem

Describes supported operating systems in AWS OpsWorks Stacks.

Contents

ConfigurationManagers

Supported configuration manager name and versions for an AWS OpsWorks Stacks operating system.

Type: Array of [OperatingSystemConfigurationManager \(p. 238\)](#) objects

Required: No

Id

The ID of a supported operating system, such as `Amazon Linux 2018.03`.

Type: String

Required: No

Name

The name of the operating system, such as `Amazon Linux 2018.03`.

Type: String

Required: No

ReportedName

A short name for the operating system manufacturer.

Type: String

Required: No

ReportedVersion

The version of the operating system, including the release and edition, if applicable.

Type: String

Required: No

Supported

Indicates that an operating system is not supported for new instances.

Type: Boolean

Required: No

Type

The type of a supported operating system, either `Linux` or `Windows`.

Type: String

Required: No

See Also

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

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

OperatingSystemConfigurationManager

A block that contains information about the configuration manager (Chef) and the versions of the configuration manager that are supported for an operating system.

Contents

Name

The name of the configuration manager, which is Chef.

Type: String

Required: No

Version

The versions of the configuration manager that are supported by an operating system.

Type: String

Required: No

See Also

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

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

Permission

Describes stack or user permissions.

Contents

AllowSsh

Whether the user can use SSH.

Type: Boolean

Required: No

AllowSudo

Whether the user can use **sudo**.

Type: Boolean

Required: No

IamUserArn

The Amazon Resource Name (ARN) for an AWS Identity and Access Management (IAM) role. For more information about IAM ARNs, see [Using Identifiers](#).

Type: String

Required: No

Level

The user's permission level, which must be the following:

- deny
- show
- deploy
- manage
- iam_only

For more information on the permissions associated with these levels, see [Managing User Permissions](#)

Type: String

Required: No

StackId

A stack ID.

Type: String

Required: No

See Also

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

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

RaidArray

Describes an instance's RAID array.

Contents

AvailabilityZone

The array's Availability Zone. For more information, see [Regions and Endpoints](#).

Type: String

Required: No

CreatedAt

When the RAID array was created.

Type: String

Required: No

Device

The array's Linux device. For example `/dev/mdadm0`.

Type: String

Required: No

InstanceId

The instance ID.

Type: String

Required: No

Iops

For PIOPS volumes, the IOPS per disk.

Type: Integer

Required: No

MountPoint

The array's mount point.

Type: String

Required: No

Name

The array name.

Type: String

Required: No

NumberOfDisks

The number of disks in the array.

Type: Integer

Required: No

RaidArrayId

The array ID.

Type: String

Required: No

RaidLevel

The [RAID level](#).

Type: Integer

Required: No

Size

The array's size.

Type: Integer

Required: No

StackId

The stack ID.

Type: String

Required: No

VolumeType

The volume type, standard or PIOPS.

Type: String

Required: No

See Also

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

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

RdsDbInstance

Describes an Amazon RDS instance.

Contents

Address

The instance's address.

Type: String

Required: No

DbInstanceIdentifier

The DB instance identifier.

Type: String

Required: No

DbPassword

AWS OpsWorks Stacks returns *****FILTERED***** instead of the actual value.

Type: String

Required: No

DbUser

The master user name.

Type: String

Required: No

Engine

The instance's database engine.

Type: String

Required: No

MissingOnRds

Set to `true` if AWS OpsWorks Stacks is unable to discover the Amazon RDS instance. AWS OpsWorks Stacks attempts to discover the instance only once. If this value is set to `true`, you must deregister the instance, and then register it again.

Type: Boolean

Required: No

RdsDbInstanceArn

The instance's ARN.

Type: String

Required: No

Region

The instance's AWS region.

Type: String

Required: No

StackId

The ID of the stack with which the instance is registered.

Type: String

Required: No

See Also

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

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

Recipes

AWS OpsWorks Stacks supports five lifecycle events: **setup**, **configuration**, **deploy**, **undeploy**, and **shutdown**. For each layer, AWS OpsWorks Stacks runs a set of standard recipes for each event. In addition, you can provide custom recipes for any or all layers and events. AWS OpsWorks Stacks runs custom event recipes after the standard recipes. `LayerCustomRecipes` specifies the custom recipes for a particular layer to be run in response to each of the five events.

To specify a recipe, use the cookbook's directory name in the repository followed by two colons and the recipe name, which is the recipe's file name without the `.rb` extension. For example: `phpapp2::dbsetup` specifies the `dbsetup.rb` recipe in the repository's `phpapp2` folder.

Contents

Configure

An array of custom recipe names to be run following a `configure` event.

Type: Array of strings

Required: No

Deploy

An array of custom recipe names to be run following a `deploy` event.

Type: Array of strings

Required: No

Setup

An array of custom recipe names to be run following a `setup` event.

Type: Array of strings

Required: No

Shutdown

An array of custom recipe names to be run following a `shutdown` event.

Type: Array of strings

Required: No

Undeploy

An array of custom recipe names to be run following a `undeploy` event.

Type: Array of strings

Required: No

See Also

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

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

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

ReportedOs

A registered instance's reported operating system.

Contents

Family

The operating system family.

Type: String

Required: No

Name

The operating system name.

Type: String

Required: No

Version

The operating system version.

Type: String

Required: No

See Also

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

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

SelfUserProfile

Describes a user's SSH information.

Contents

IamUserArn

The user's IAM ARN.

Type: String

Required: No

Name

The user's name.

Type: String

Required: No

SshPublicKey

The user's SSH public key.

Type: String

Required: No

SshUsername

The user's SSH user name.

Type: String

Required: No

See Also

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

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

ServiceError

Describes an AWS OpsWorks Stacks service error.

Contents

CreatedAt

When the error occurred.

Type: String

Required: No

InstanceId

The instance ID.

Type: String

Required: No

Message

A message that describes the error.

Type: String

Required: No

ServiceErrorId

The error ID.

Type: String

Required: No

StackId

The stack ID.

Type: String

Required: No

Type

The error type.

Type: String

Required: No

See Also

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

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

- [AWS SDK for Ruby V2](#)

ShutdownEventConfiguration

The Shutdown event configuration.

Contents

DelayUntilElbConnectionsDrained

Whether to enable Elastic Load Balancing connection draining. For more information, see [Connection Draining](#)

Type: Boolean

Required: No

ExecutionTimeout

The time, in seconds, that AWS OpsWorks Stacks will wait after triggering a Shutdown event before shutting down an instance.

Type: Integer

Required: No

See Also

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

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

Source

Contains the information required to retrieve an app or cookbook from a repository. For more information, see [Creating Apps](#) or [Custom Recipes and Cookbooks](#).

Contents

Password

When included in a request, the parameter depends on the repository type.

- For Amazon S3 bundles, set `Password` to the appropriate IAM secret access key.
- For HTTP bundles and Subversion repositories, set `Password` to the password.

For more information on how to safely handle IAM credentials, see <https://docs.aws.amazon.com/general/latest/gr/aws-access-keys-best-practices.html>.

In responses, AWS OpsWorks Stacks returns `*****FILTERED*****` instead of the actual value.

Type: String

Required: No

Revision

The application's version. AWS OpsWorks Stacks enables you to easily deploy new versions of an application. One of the simplest approaches is to have branches or revisions in your repository that represent different versions that can potentially be deployed.

Type: String

Required: No

SshKey

In requests, the repository's SSH key.

In responses, AWS OpsWorks Stacks returns `*****FILTERED*****` instead of the actual value.

Type: String

Required: No

Type

The repository type.

Type: String

Valid Values: `git` | `svn` | `archive` | `s3`

Required: No

Url

The source URL. The following is an example of an Amazon S3 source URL: `https://s3.amazonaws.com/opsworks-demo-bucket/opsworks_cookbook_demo.tar.gz`.

Type: String

Required: No

Username

This parameter depends on the repository type.

- For Amazon S3 bundles, set `Username` to the appropriate IAM access key ID.
- For HTTP bundles, Git repositories, and Subversion repositories, set `Username` to the user name.

Type: String

Required: No

See Also

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

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

SslConfiguration

Describes an app's SSL configuration.

Contents

Certificate

The contents of the certificate's domain.crt file.

Type: String

Required: Yes

Chain

Optional. Can be used to specify an intermediate certificate authority key or client authentication.

Type: String

Required: No

PrivateKey

The private key; the contents of the certificate's domain.kex file.

Type: String

Required: Yes

See Also

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

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

Stack

Describes a stack.

Contents

AgentVersion

The agent version. This parameter is set to `LATEST` for auto-update, or a version number for a fixed agent version.

Type: String

Required: No

Arn

The stack's ARN.

Type: String

Required: No

Attributes

The stack's attributes.

Type: String to string map

Valid Keys: `Color`

Required: No

ChefConfiguration

A `ChefConfiguration` object that specifies whether to enable Berkshelf and the Berkshelf version. For more information, see [Create a New Stack](#).

Type: [ChefConfiguration \(p. 201\)](#) object

Required: No

ConfigurationManager

The configuration manager.

Type: [StackConfigurationManager \(p. 259\)](#) object

Required: No

CreatedAt

The date when the stack was created.

Type: String

Required: No

CustomCookbooksSource

Contains the information required to retrieve an app or cookbook from a repository. For more information, see [Creating Apps](#) or [Custom Recipes and Cookbooks](#).

Type: [Source \(p. 252\)](#) object

Required: No

CustomJson

A JSON object that contains user-defined attributes to be added to the stack configuration and deployment attributes. You can use custom JSON to override the corresponding default stack configuration attribute values or to pass data to recipes. The string should be in the following format:

```
"{\"key1\": \"value1\", \"key2\": \"value2\", ...}\"
```

For more information on custom JSON, see [Use Custom JSON to Modify the Stack Configuration Attributes](#).

Type: String

Required: No

DefaultAvailabilityZone

The stack's default Availability Zone. For more information, see [Regions and Endpoints](#).

Type: String

Required: No

DefaultInstanceProfileArn

The ARN of an IAM profile that is the default profile for all of the stack's EC2 instances. For more information about IAM ARNs, see [Using Identifiers](#).

Type: String

Required: No

DefaultOs

The stack's default operating system.

Type: String

Required: No

DefaultRootDeviceType

The default root device type. This value is used by default for all instances in the stack, but you can override it when you create an instance. For more information, see [Storage for the Root Device](#).

Type: String

Valid Values: `ebs` | `instance-store`

Required: No

DefaultSshKeyName

A default Amazon EC2 key pair for the stack's instances. You can override this value when you create or update an instance.

Type: String

Required: No

DefaultSubnetId

The default subnet ID; applicable only if the stack is running in a VPC.

Type: String

Required: No

HostnameTheme

The stack host name theme, with spaces replaced by underscores.

Type: String

Required: No

Name

The stack name.

Type: String

Required: No

Region

The stack AWS region, such as "ap-northeast-2". For more information about AWS regions, see [Regions and Endpoints](#).

Type: String

Required: No

ServiceRoleArn

The stack AWS Identity and Access Management (IAM) role.

Type: String

Required: No

StackId

The stack ID.

Type: String

Required: No

UseCustomCookbooks

Whether the stack uses custom cookbooks.

Type: Boolean

Required: No

UseOpsworksSecurityGroups

Whether the stack automatically associates the AWS OpsWorks Stacks built-in security groups with the stack's layers.

Type: Boolean

Required: No

VpcId

The VPC ID; applicable only if the stack is running in a VPC.

Type: String

Required: No

See Also

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

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

StackConfigurationManager

Describes the configuration manager.

Contents

Name

The name. This parameter must be set to "Chef".

Type: String

Required: No

Version

The Chef version. This parameter must be set to 12, 11.10, or 11.4 for Linux stacks, and to 12.2 for Windows stacks. The default value for Linux stacks is 11.4.

Type: String

Required: No

See Also

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

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

StackSummary

Summarizes the number of layers, instances, and apps in a stack.

Contents

AppsCount

The number of apps.

Type: Integer

Required: No

Arn

The stack's ARN.

Type: String

Required: No

InstancesCount

An `InstancesCount` object with the number of instances in each status.

Type: [InstancesCount](#) (p. 227) object

Required: No

LayersCount

The number of layers.

Type: Integer

Required: No

Name

The stack name.

Type: String

Required: No

StackId

The stack ID.

Type: String

Required: No

See Also

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

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

- [AWS SDK for Ruby V2](#)

TemporaryCredential

Contains the data needed by RDP clients such as the Microsoft Remote Desktop Connection to log in to the instance.

Contents

InstanceId

The instance's AWS OpsWorks Stacks ID.

Type: String

Required: No

Password

The password.

Type: String

Required: No

Username

The user name.

Type: String

Required: No

ValidForInMinutes

The length of time (in minutes) that the grant is valid. When the grant expires, at the end of this period, the user will no longer be able to use the credentials to log in. If they are logged in at the time, they will be automatically logged out.

Type: Integer

Required: No

See Also

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

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

TimeBasedAutoScalingConfiguration

Describes an instance's time-based auto scaling configuration.

Contents

AutoScalingSchedule

A `WeeklyAutoScalingSchedule` object with the instance schedule.

Type: [WeeklyAutoScalingSchedule](#) (p. 270) object

Required: No

InstanceId

The instance ID.

Type: String

Required: No

See Also

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

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

UserProfile

Describes a user's SSH information.

Contents

AllowSelfManagement

Whether users can specify their own SSH public key through the My Settings page. For more information, see [Managing User Permissions](#).

Type: Boolean

Required: No

IamUserArn

The user's IAM ARN.

Type: String

Required: No

Name

The user's name.

Type: String

Required: No

SshPublicKey

The user's SSH public key.

Type: String

Required: No

SshUsername

The user's SSH user name.

Type: String

Required: No

See Also

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

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

Volume

Describes an instance's Amazon EBS volume.

Contents

AvailabilityZone

The volume Availability Zone. For more information, see [Regions and Endpoints](#).

Type: String

Required: No

Device

The device name.

Type: String

Required: No

Ec2VolumeId

The Amazon EC2 volume ID.

Type: String

Required: No

Encrypted

Specifies whether an Amazon EBS volume is encrypted. For more information, see [Amazon EBS Encryption](#).

Type: Boolean

Required: No

InstanceId

The instance ID.

Type: String

Required: No

Iops

For PIOPS volumes, the IOPS per disk.

Type: Integer

Required: No

MountPoint

The volume mount point. For example, `"/mnt/disk1"`.

Type: String

Required: No

Name

The volume name.

Type: String

Required: No

RaidArrayId

The RAID array ID.

Type: String

Required: No

Region

The AWS region. For more information about AWS regions, see [Regions and Endpoints](#).

Type: String

Required: No

Size

The volume size.

Type: Integer

Required: No

Status

The value returned by [DescribeVolumes](#).

Type: String

Required: No

Volumeld

The volume ID.

Type: String

Required: No

VolumeType

The volume type. For more information, see [Amazon EBS Volume Types](#).

- `standard` - Magnetic. Magnetic volumes must have a minimum size of 1 GiB and a maximum size of 1024 GiB.
- `io1` - Provisioned IOPS (SSD). PIOPS volumes must have a minimum size of 4 GiB and a maximum size of 16384 GiB.
- `gp2` - General Purpose (SSD). General purpose volumes must have a minimum size of 1 GiB and a maximum size of 16384 GiB.
- `st1` - Throughput Optimized hard disk drive (HDD). Throughput optimized HDD volumes must have a minimum size of 500 GiB and a maximum size of 16384 GiB.
- `sc1` - Cold HDD. Cold HDD volumes must have a minimum size of 500 GiB and a maximum size of 16384 GiB.

Type: String

Required: No

See Also

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

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

VolumeConfiguration

Describes an Amazon EBS volume configuration.

Contents

Encrypted

Specifies whether an Amazon EBS volume is encrypted. For more information, see [Amazon EBS Encryption](#).

Type: Boolean

Required: No

Iops

For PIOPS volumes, the IOPS per disk.

Type: Integer

Required: No

MountPoint

The volume mount point. For example `"/dev/sdh"`.

Type: String

Required: Yes

NumberOfDisks

The number of disks in the volume.

Type: Integer

Required: Yes

RaidLevel

The volume [RAID level](#).

Type: Integer

Required: No

Size

The volume size.

Type: Integer

Required: Yes

VolumeType

The volume type. For more information, see [Amazon EBS Volume Types](#).

- `standard` - Magnetic. Magnetic volumes must have a minimum size of 1 GiB and a maximum size of 1024 GiB.
- `io1` - Provisioned IOPS (SSD). PIOPS volumes must have a minimum size of 4 GiB and a maximum size of 16384 GiB.

- `gp2` - General Purpose (SSD). General purpose volumes must have a minimum size of 1 GiB and a maximum size of 16384 GiB.
- `st1` - Throughput Optimized hard disk drive (HDD). Throughput optimized HDD volumes must have a minimum size of 500 GiB and a maximum size of 16384 GiB.
- `sc1` - Cold HDD. Cold HDD volumes must have a minimum size of 500 GiB and a maximum size of 16384 GiB.

Type: String

Required: No

See Also

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

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

WeeklyAutoScalingSchedule

Describes a time-based instance's auto scaling schedule. The schedule consists of a set of key-value pairs.

- The key is the time period (a UTC hour) and must be an integer from 0 - 23.
- The value indicates whether the instance should be online or offline for the specified period, and must be set to "on" or "off"

The default setting for all time periods is off, so you use the following parameters primarily to specify the online periods. You don't have to explicitly specify offline periods unless you want to change an online period to an offline period.

The following example specifies that the instance should be online for four hours, from UTC 1200 - 1600. It will be off for the remainder of the day.

```
{ "12": "on", "13": "on", "14": "on", "15": "on" }
```

Contents

Friday

The schedule for Friday.

Type: String to string map

Required: No

Monday

The schedule for Monday.

Type: String to string map

Required: No

Saturday

The schedule for Saturday.

Type: String to string map

Required: No

Sunday

The schedule for Sunday.

Type: String to string map

Required: No

Thursday

The schedule for Thursday.

Type: String to string map

Required: No

Tuesday

The schedule for Tuesday.

Type: String to string map

Required: No

Wednesday

The schedule for Wednesday.

Type: String to string map

Required: No

See Also

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

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

Common Parameters

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

Action

The action to be performed.

Type: string

Required: Yes

Version

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

Type: string

Required: Yes

X-Amz-Algorithm

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

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

Type: string

Valid Values: `AWS4-HMAC-SHA256`

Required: Conditional

X-Amz-Credential

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

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

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

Type: string

Required: Conditional

X-Amz-Date

The date that is used to create the signature. The format must be ISO 8601 basic format (YYYYMMDD'THHMMSS'Z'). For example, the following date time is a valid X-Amz-Date value: `20120325T120000Z`.

Condition: X-Amz-Date is optional for all requests; it can be used to override the date used for signing requests. If the Date header is specified in the ISO 8601 basic format, X-Amz-Date is

not required. When X-Amz-Date is used, it always overrides the value of the Date header. For more information, see [Handling Dates in Signature Version 4](#) in the *Amazon Web Services General Reference*.

Type: string

Required: Conditional

X-Amz-Security-Token

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

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

Type: string

Required: Conditional

X-Amz-Signature

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

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

Type: string

Required: Conditional

X-Amz-SignedHeaders

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

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

Type: string

Required: Conditional

Common Errors

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

AccessDeniedException

You do not have sufficient access to perform this action.

HTTP Status Code: 400

IncompleteSignature

The request signature does not conform to AWS standards.

HTTP Status Code: 400

InternalFailure

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

HTTP Status Code: 500

InvalidAction

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

HTTP Status Code: 400

InvalidClientTokenId

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

HTTP Status Code: 403

InvalidParameterCombination

Parameters that must not be used together were used together.

HTTP Status Code: 400

InvalidParameterValue

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

HTTP Status Code: 400

InvalidQueryParameter

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

HTTP Status Code: 400

MalformedQueryString

The query string contains a syntax error.

HTTP Status Code: 404

MissingAction

The request is missing an action or a required parameter.

HTTP Status Code: 400

MissingAuthenticationToken

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

HTTP Status Code: 403

MissingParameter

A required parameter for the specified action is not supplied.

HTTP Status Code: 400

OptInRequired

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

HTTP Status Code: 403

RequestExpired

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

HTTP Status Code: 400

ServiceUnavailable

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

HTTP Status Code: 503

ThrottlingException

The request was denied due to request throttling.

HTTP Status Code: 400

ValidationError

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

HTTP Status Code: 400