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# **Auto Scaling**

## **API Reference**

### **API Version 2011-01-01**



## **Auto Scaling: API Reference**

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# Welcome

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This is the *Auto Scaling API Reference*. This guide provides detailed information about Auto Scaling actions, data types, parameters, and errors. For detailed information about Auto Scaling features and their associated API calls, go to the [Auto Scaling Developer Guide](#).

Auto Scaling is a web service designed to automatically launch or terminate Amazon Elastic Compute Cloud (Amazon EC2) instances based on user-defined policies, schedules, and health checks. This service is used in conjunction with Amazon CloudWatch and Elastic Load Balancing services.

This reference is based on the current WSDL, which is available at:

<http://autoscaling.amazonaws.com/doc/2011-01-01/AutoScaling.wsdl>

## Endpoints

For information about this product's regions and endpoints, go to [Regions and Endpoints](#) in the Amazon Web Services General Reference.

This document was last updated on February 28, 2012.

# Actions

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The actions described in this guide are called using the AWS Query protocol.

The following actions are supported:

- [CreateAutoScalingGroup](#) (p. 4)
- [CreateLaunchConfiguration](#) (p. 6)
- [CreateOrUpdateTags](#) (p. 9)
- [DeleteAutoScalingGroup](#) (p. 10)
- [DeleteLaunchConfiguration](#) (p. 11)
- [DeleteNotificationConfiguration](#) (p. 12)
- [DeletePolicy](#) (p. 13)
- [DeleteScheduledAction](#) (p. 14)
- [DeleteTags](#) (p. 15)
- [DescribeAdjustmentTypes](#) (p. 16)
- [DescribeAutoScalingGroups](#) (p. 17)
- [DescribeAutoScalingInstances](#) (p. 18)
- [DescribeAutoScalingNotificationTypes](#) (p. 19)
- [DescribeLaunchConfigurations](#) (p. 20)
- [DescribeMetricCollectionTypes](#) (p. 21)
- [DescribeNotificationConfigurations](#) (p. 22)
- [DescribePolicies](#) (p. 23)
- [DescribeScalingActivities](#) (p. 25)
- [DescribeScalingProcessTypes](#) (p. 27)
- [DescribeScheduledActions](#) (p. 28)
- [DescribeTags](#) (p. 30)
- [DisableMetricsCollection](#) (p. 31)
- [EnableMetricsCollection](#) (p. 32)
- [ExecutePolicy](#) (p. 33)

- [PutNotificationConfiguration](#) (p. 34)
- [PutScalingPolicy](#) (p. 35)
- [PutScheduledUpdateGroupAction](#) (p. 37)
- [ResumeProcesses](#) (p. 39)
- [SetDesiredCapacity](#) (p. 40)
- [SetInstanceHealth](#) (p. 41)
- [SuspendProcesses](#) (p. 42)
- [TerminateInstanceInAutoScalingGroup](#) (p. 43)
- [UpdateAutoScalingGroup](#) (p. 44)

# CreateAutoScalingGroup

## Description

Creates a new Auto Scaling group with the specified name and other attributes. When the creation request is completed, the Auto Scaling group is ready to be used in other calls.



### Note

The Auto Scaling group name must be unique within the scope of your AWS account, and under the quota of Auto Scaling groups allowed for your account.

## Request Parameters

For information about the common parameters that all actions use, see [Common Query Parameters \(p. 68\)](#).

| Name                              | Description  | Required |
|-----------------------------------|--|----------|
| <i>AutoScalingGroupName</i>       | The name of the Auto Scaling group.<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 255.   | Yes      |
| <i>AvailabilityZones.member.N</i> | A list of Availability Zones for the Auto Scaling group.<br>Type: String list<br>Length constraints: Minimum of 1 item(s) in the list.   | Yes      |
| <i>DefaultCooldown</i>            | The amount of time, in seconds, after a scaling activity completes before any further trigger-related scaling activities can start.<br>Type: Integer   | No       |
| <i>DesiredCapacity</i>            | The number of Amazon EC2 instances that should be running in the group.<br>Type: Integer   | No       |
| <i>HealthCheckGracePeriod</i>     | Length of time in seconds after a new Amazon EC2 instance comes into service that Auto Scaling starts checking its health.<br>Type: Integer  | No       |
| <i>HealthCheckType</i>            | The service you want the health status from, Amazon EC2 or Elastic Load Balancer. Valid values are EC2 or ELB.<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 32. | No       |
| <i>LaunchConfigurationName</i>    | The name of the launch configuration to use with the Auto Scaling group.<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 1600.                                     | Yes      |



## Auto Scaling API Reference Errors

| Name                              | Description  | Required |
|-----------------------------------|--|----------|
| <i>LoadBalancerNames.member.N</i> | A list of load balancers to use.<br>Type: String list  | No       |
| <i>MaxSize</i>                    | The maximum size of the Auto Scaling group.<br>Type: Integer   | Yes      |
| <i>MinSize</i>                    | The minimum size of the Auto Scaling group.<br>Type: Integer   | Yes      |
| <i>PlacementGroup</i>             | Physical location of your cluster placement group created in Amazon EC2. For more information about cluster placement group, see <a href="#">Using Cluster Instances</a><br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 255.  | No       |
| <i>Tags.member.N</i>              | The tag to be created or updated. Each tag should be defined by its resource type, resource ID, key, value, and a propagate flag. Valid values are: <code>key=value</code> , <code>value=value</code> , <code>propagate=true</code> or <code>false</code> . Value and propagate are optional parameters.<br>Type: <a href="#">Tag (p. 65)</a> list | No       |
| <i>VPCZoneIdentifier</i>          | A comma-separated list of subnet identifiers of Amazon Virtual Private Clouds (Amazon VPCs).<br><br>When you specify subnets and Availability Zones with this call, ensure that the subnets' Availability Zones match the Availability Zones specified.<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 255.         | No       |

## Errors

For information about the common errors that all actions use, see [Common Errors \(p. 70\)](#).

| Error                | Description  | HTTP Status Code |
|----------------------|--|------------------|
| <i>AlreadyExists</i> | The named Auto Scaling group or launch configuration already exists.                               | 400              |
| <i>LimitExceeded</i> | The quota for capacity groups or launch configurations for this customer has already been reached. | 400              |

# CreateLaunchConfiguration

## Description

Creates a new launch configuration. The launch configuration name must be unique within the scope of the client's AWS account. The maximum limit of launch configurations, which by default is 100, must not yet have been met; otherwise, the call will fail. When created, the new launch configuration is available for immediate use.

You can create a launch configuration with Amazon EC2 security groups or with Amazon VPC security groups. However, you can't use Amazon EC2 security groups together with Amazon VPC security groups, or vice versa.



### Note

At this time, Auto Scaling launch configurations don't support compressed (e.g. zipped) user data files.

## Request Parameters

For information about the common parameters that all actions use, see [Common Query Parameters \(p. 68\)](#).

| Name                                | Description  | Required |
|-------------------------------------|--|----------|
| <i>BlockDeviceMappings.member.N</i> | A list of mappings that specify how block devices are exposed to the instance. Each mapping is made up of a <i>VirtualName</i> , a <i>DeviceName</i> , and an <i>ebs</i> data structure that contains information about the associated Elastic Block Storage volume. For more information about Amazon EC2 BlockDeviceMappings, go to <a href="#">Block Device Mapping</a> in the Amazon EC2 product documentation.<br>Type: <a href="#">BlockDeviceMapping (p. 51)</a> list | No       |
| <i>ImageId</i>                      | Unique ID of the <i>Amazon Machine Image</i> (AMI) which was assigned during registration. For more information about Amazon EC2 images, please see <a href="#">Amazon EC2 product documentation</a> .<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 255.  | Yes      |
| <i>InstanceMonitoring</i>           | Enables detailed monitoring, which is enabled by default.<br><br>When detailed monitoring is enabled, CloudWatch will generate metrics every minute and your account will be charged a fee. When you disable detailed monitoring, by specifying <i>False</i> , Cloudwatch will generate metrics every 5 minutes. For information about monitoring, see the <a href="#">Amazon CloudWatch</a> product page.<br>Type: <a href="#">InstanceMonitoring (p. 58)</a>               | No       |

**Auto Scaling API Reference**  
**Request Parameters**

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| Name                           | Description  | Required |
|--------------------------------|--|----------|
| <i>InstanceType</i>            | The instance type of the Amazon EC2 instance. For more information about Amazon EC2 instance types, please see <a href="#">Amazon EC2 product documentation</a> .<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 255.   | Yes      |
| <i>KernelId</i>                | The ID of the kernel associated with the Amazon EC2 AMI.<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 255.  | No       |
| <i>KeyName</i>                 | The name of the Amazon EC2 key pair.<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 255.  | No       |
| <i>LaunchConfigurationName</i> | The name of the launch configuration to create.<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 255.   | Yes      |
| <i>RamdiskId</i>               | The ID of the RAM disk associated with the Amazon EC2 AMI.<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 255.  | No       |
| <i>SecurityGroups.member.N</i> | The names of the security groups with which to associate Amazon EC2 or Amazon VPC instances. Specify Amazon EC2 security groups using security group names, such as <code>websrv</code> . Specify Amazon VPC security groups using security group IDs, such as <code>sg-12345678</code> . For more information about Amazon EC2 security groups, go to <a href="#">Using Security Groups</a> in the Amazon EC2 product documentation. For more information about Amazon VPC security groups, go to <a href="#">Security Groups</a> in the Amazon VPC product documentation.<br>Type: String list | No       |
| <i>UserData</i>                | The user data available to the launched Amazon EC2 instances. For more information about Amazon EC2 user data, please see <a href="#">Amazon EC2 product documentation</a> .<br>Type: String<br>Length constraints: Minimum length of 0. Maximum length of 21847.  | No       |

## Errors

For information about the common errors that all actions use, see [Common Errors \(p. 70\)](#).

| Error                      | Description  | HTTP Status Code |
|----------------------------|--|------------------|
| <code>AlreadyExists</code> | The named Auto Scaling group or launch configuration already exists.                               | 400              |
| <code>LimitExceeded</code> | The quota for capacity groups or launch configurations for this customer has already been reached. | 400              |

# CreateOrUpdateTags

## Description

Creates new tags or updates existing tags for an Auto Scaling group.



### Note

A tag's definition is composed of a resource ID, resource type, key and value, and the propagate flag. Value and the propagate flag are optional parameters. See the Request Parameters for more information.

## Request Parameters

For information about the common parameters that all actions use, see [Common Query Parameters \(p. 68\)](#).

| Name                       | Description   | Required |
|----------------------------|---|----------|
| <code>Tags.member.N</code> | <p>The tag to be created or updated. Each tag should be defined by its resource type, resource ID, key, value, and a propagate flag. The resource type and resource ID identify the type and name of resource for which the tag is created. Currently, <code>auto-scaling-group</code> is the only supported resource type. The valid value for the resource ID is <i>groupname</i>.</p> <p>The <code>PropagateAtLaunch</code> flag defines whether the new tag will be applied to instances launched by the Auto Scaling group. Valid values are <code>true</code> or <code>false</code>. However, instances that are already running will not get the new or updated tag. Likewise, when you modify a tag, the updated version will be applied only to new instances launched by the Auto Scaling group after the change. Running instances that had the previous version of the tag will continue to have the older tag.</p> <p>When you create a tag and a tag of the same name already exists, the operation overwrites the previous tag definition, but you will not get an error message.<br/>Type: <a href="#">Tag (p. 65)</a> list</p> | Yes      |

## Errors

For information about the common errors that all actions use, see [Common Errors \(p. 70\)](#).

| Error                      | Description  | HTTP Status Code |
|----------------------------|--|------------------|
| <code>AlreadyExists</code> | The named Auto Scaling group or launch configuration already exists.                               | 400              |
| <code>LimitExceeded</code> | The quota for capacity groups or launch configurations for this customer has already been reached. | 400              |

# DeleteAutoScalingGroup

## Description

Deletes the specified Auto Scaling group if the group has no instances and no scaling activities in progress.



### Note

To remove all instances before calling [DeleteAutoScalingGroup](#) (p. 10), you can call [UpdateAutoScalingGroup](#) (p. 44) to set the minimum and maximum size of the AutoScalingGroup to zero.

## Request Parameters

For information about the common parameters that all actions use, see [Common Query Parameters](#) (p. 68).

| Name                        | Description  | Required |
|-----------------------------|--|----------|
| <i>AutoScalingGroupName</i> | The name of the Auto Scaling group.<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 1600.  | Yes      |
| <i>ForceDelete</i>          | Starting with API version 2011-01-01, specifies that the Auto Scaling group will be deleted along with all instances associated with the group, without waiting for all instances to be terminated.<br>Type: Boolean | No       |

## Errors

For information about the common errors that all actions use, see [Common Errors](#) (p. 70).

| Error                            | Description  | HTTP Status Code |
|----------------------------------|--|------------------|
| <i>ResourceInUse</i>             | This is returned when you cannot delete a launch configuration or Auto Scaling group because it is being used. | 400              |
| <i>ScalingActivityInProgress</i> | You cannot delete an Auto Scaling group while there are scaling activities in progress for that group.         | 400              |

# DeleteLaunchConfiguration

## Description

Deletes the specified [LaunchConfiguration](#) (p. 59).

The specified launch configuration must not be attached to an Auto Scaling group. When this call completes, the launch configuration is no longer available for use.

## Request Parameters

For information about the common parameters that all actions use, see [Common Query Parameters](#) (p. 68).

| Name                           | Description   | Required |
|--------------------------------|---|----------|
| <i>LaunchConfigurationName</i> | The name of the launch configuration.<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 1600. | Yes      |

## Errors

For information about the common errors that all actions use, see [Common Errors](#) (p. 70).

| Error                | Description  | HTTP Status Code |
|----------------------|--|------------------|
| <i>ResourceInUse</i> | This is returned when you cannot delete a launch configuration or Auto Scaling group because it is being used. | 400              |

# DeleteNotificationConfiguration

## Description

Deletes notifications created by [PutNotificationConfiguration](#) (p. 34).

## Request Parameters

For information about the common parameters that all actions use, see [Common Query Parameters](#) (p. 68).

| Name                        | Description   | Required |
|-----------------------------|---|----------|
| <i>AutoScalingGroupName</i> | The name of the Auto Scaling group.<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 1600.   | Yes      |
| <i>TopicARN</i>             | The Amazon Resource Name (ARN) of the Amazon Simple Notification Service (SNS) topic.<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 1600. | Yes      |



# DeletePolicy

## Description

Deletes a policy created by [PutScalingPolicy](#) (p. 35).

## Request Parameters

For information about the common parameters that all actions use, see [Common Query Parameters](#) (p. 68).

| Name                        | Description   | Required |
|-----------------------------|---|----------|
| <i>AutoScalingGroupName</i> | The name of the Auto Scaling group.<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 1600.                     | No       |
| <i>PolicyName</i>           | The name or PolicyARN of the policy you want to delete.<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 1600. | Yes      |

# DeleteScheduledAction

## Description

Deletes a scheduled action previously created using the [PutScheduledUpdateGroupAction](#) (p. 37).

## Request Parameters

For information about the common parameters that all actions use, see [Common Query Parameters](#) (p. 68).

| Name                        | Description  | Required |
|-----------------------------|--|----------|
| <i>AutoScalingGroupName</i> | The name of the Auto Scaling group.<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 1600.        | No       |
| <i>ScheduledActionName</i>  | The name of the action you want to delete.<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 1600. | Yes      |

# DeleteTags

## Description

Removes the specified tags or a set of tags from a set of resources.

## Request Parameters

For information about the common parameters that all actions use, see [Common Query Parameters \(p. 68\)](#).

| Name                 | Description  | Required |
|----------------------|--|----------|
| <i>Tags.member.N</i> | Each tag should be defined by its resource type, resource ID, key, value, and a propagate flag. Valid values are: Resource type = <i>auto-scaling-group</i> , Resource ID = <i>AutoScalingGroupName</i> , key= <i>value</i> , value= <i>value</i> , propagate= <i>true</i> or <i>false</i> .<br>Type: <a href="#">Tag (p. 65)</a> list | Yes      |

# DescribeAdjustmentTypes

## Description

Returns policy adjustment types for use in the [PutScalingPolicy](#) (p. 35) action.

## Response Elements

The following elements come wrapped in a `DescribeAdjustmentTypesResult` structure.

| Name            | Description  |
|-----------------|--|
| AdjustmentTypes | A list of specific policy adjustment types.<br>Type: <a href="#">AdjustmentType</a> (p. 48) list |

# DescribeAutoScalingGroups

## Description

Returns a full description of each Auto Scaling group in the given list. This includes all Amazon EC2 instances that are members of the group. If a list of names is not provided, the service returns the full details of all Auto Scaling groups.

This action supports pagination by returning a token if there are more pages to retrieve. To get the next page, call this action again with the returned token as the `NextToken` parameter.

## Request Parameters

For information about the common parameters that all actions use, see [Common Query Parameters \(p. 68\)](#).

| Name                                  | Description  | Required |
|---------------------------------------|--|----------|
| <i>AutoScalingGroupNames.member.N</i> | A list of Auto Scaling group names.<br>Type: String list                             | No       |
| <i>MaxRecords</i>                     | The maximum number of records to return.<br>Type: Integer                            | No       |
| <i>NextToken</i>                      | A string that marks the start of the next batch of returned results.<br>Type: String | No       |

## Response Elements

The following elements come wrapped in a `DescribeAutoScalingGroupsResult` structure.

| Name                           | Description   |
|--------------------------------|---|
| <code>AutoScalingGroups</code> | A list of Auto Scaling groups.<br>Type: <a href="#">AutoScalingGroup (p. 49)</a> list |
| <code>NextToken</code>         | A string that marks the start of the next batch of returned results.<br>Type: String  |

## Errors

For information about the common errors that all actions use, see [Common Errors \(p. 70\)](#).

| Error                         | Description                                  | HTTP Status Code |
|-------------------------------|--|------------------|
| <code>InvalidNextToken</code> | The <code>NextToken</code> value is invalid. | 400              |

# DescribeAutoScalingInstances

## Description

Returns a description of each Auto Scaling instance in the `InstanceIds` list. If a list is not provided, the service returns the full details of all instances up to a maximum of 50. By default, the service returns a list of 20 items.

This action supports pagination by returning a token if there are more pages to retrieve. To get the next page, call this action again with the returned token as the `NextToken` parameter.

## Request Parameters

For information about the common parameters that all actions use, see [Common Query Parameters \(p. 68\)](#).

| Name                        | Description  | Required |
|-----------------------------|--|----------|
| <i>InstanceIds.member.N</i> | The list of Auto Scaling instances to describe. If this list is omitted, all auto scaling instances are described. The list of requested instances cannot contain more than 50 items. If unknown instances are requested, they are ignored with no error.<br>Type: String list | No       |
| <i>MaxRecords</i>           | The maximum number of Auto Scaling instances to be described with each call.<br>Type: Integer  | No       |
| <i>NextToken</i>            | The token returned by a previous call to indicate that there is more data available.<br>Type: String   | No       |

## Response Elements

The following elements come wrapped in a `DescribeAutoScalingInstancesResult` structure.

| Name                              | Description  |
|-----------------------------------|--|
| <code>AutoScalingInstances</code> | A list of Auto Scaling instances.<br>Type: <a href="#">AutoScalingInstanceDetails (p. 50)</a> list |
| <code>NextToken</code>            | A string that marks the start of the next batch of returned results.<br>Type: String               |

## Errors

For information about the common errors that all actions use, see [Common Errors \(p. 70\)](#).

| Error                         | Description                                  | HTTP Status Code |
|-------------------------------|--|------------------|
| <code>InvalidNextToken</code> | The <code>NextToken</code> value is invalid. | 400              |

# DescribeAutoScalingNotificationTypes

## Description

Returns a list of all notification types that are supported by Auto Scaling.

## Response Elements

The following elements come wrapped in a `DescribeAutoScalingNotificationTypesResult` structure.

| Name                                      | Description   |
|---|---|
| <code>AutoScalingNotificationTypes</code> | Notification types supported by Auto Scaling. They are:<br>autoscaling:EC2_INSTANCE_LAUNCH,<br>autoscaling:EC2_INSTANCE_LAUNCH_ERROR,<br>autoscaling:EC2_INSTANCE_TERMINATE,<br>autoscaling:EC2_INSTANCE_TERMINATE_ERROR,<br>autoscaling:TEST_NOTIFICATION<br>Type: String list |

# DescribeLaunchConfigurations

## Description

Returns a full description of the launch configurations, or the specified launch configurations, if they exist.

If no name is specified, then the full details of all launch configurations are returned.

## Request Parameters

For information about the common parameters that all actions use, see [Common Query Parameters \(p. 68\)](#).

| Name                                     | Description  | Required |
|--|--|----------|
| <i>LaunchConfigurationNames.member.N</i> | A list of launch configuration names.<br>Type: String list                           | No       |
| <i>MaxRecords</i>                        | The maximum number of launch configurations. The default is 100.<br>Type: Integer    | No       |
| <i>NextToken</i>                         | A string that marks the start of the next batch of returned results.<br>Type: String | No       |

## Response Elements

The following elements come wrapped in a `DescribeLaunchConfigurationsResult` structure.

| Name                 | Description  |
|----------------------|--|
| LaunchConfigurations | A list of launch configurations.<br>Type: <a href="#">LaunchConfiguration (p. 59)</a> list |
| NextToken            | A string that marks the start of the next batch of returned results.<br>Type: String       |

## Errors

For information about the common errors that all actions use, see [Common Errors \(p. 70\)](#).

| Error            | Description                     | HTTP Status Code |
|------------------|---------------------------------|------------------|
| InvalidNextToken | The NextToken value is invalid. | 400              |



# DescribeMetricCollectionTypes

## Description

Returns a list of metrics and a corresponding list of granularities for each metric.

## Response Elements

The following elements come wrapped in a `DescribeMetricCollectionTypesResult` structure.

| Name          | Description  |
|---------------|--|
| Granularities | A list of granularities for the listed Metrics.<br>Type: <a href="#">MetricGranularityType</a> (p. 60) list  |
| Metrics       | The list of Metrics collected. The following metrics are supported: <ul style="list-style-type: none"><li>• GroupMinSize</li><li>• GroupMaxSize</li><li>• GroupDesiredCapacity</li><li>• GroupInServiceInstances</li><li>• GroupPendingInstances</li><li>• GroupTerminatingInstances</li><li>• GroupTotalInstances</li></ul> Type: <a href="#">MetricCollectionType</a> (p. 60) list |

# DescribeNotificationConfigurations

## Description

Returns a list of notification actions associated with Auto Scaling groups for specified events.

## Request Parameters

For information about the common parameters that all actions use, see [Common Query Parameters \(p. 68\)](#).

| Name                                  | Description   | Required |
|---------------------------------------|---|----------|
| <i>AutoScalingGroupNames.member.N</i> | The name of the Auto Scaling group.<br>Type: String list  | No       |
| <i>MaxRecords</i>                     | Maximum number of records to be returned.<br>Type: Integer  | No       |
| <i>NextToken</i>                      | A string that is used to mark the start of the next batch of returned results for pagination.<br>Type: String | No       |

## Response Elements

The following elements come wrapped in a `DescribeNotificationConfigurationsResult` structure.

| Name                              | Description   |
|-----------------------------------|---|
| <i>NextToken</i>                  | A string that is used to mark the start of the next batch of returned results for pagination.<br>Type: String |
| <i>NotificationConfigurations</i> | The list of notification configurations.<br>Type: <a href="#">NotificationConfiguration (p. 60)</a> list      |

## Errors

For information about the common errors that all actions use, see [Common Errors \(p. 70\)](#).

| Error                   | Description                            | HTTP Status Code |
|-------------------------|--|------------------|
| <i>InvalidNextToken</i> | The <i>NextToken</i> value is invalid. | 400              |

# DescribePolicies

## Description

Returns descriptions of what each policy does. This action supports pagination. If the response includes a token, there are more records available. To get the additional records, repeat the request with the response token as the `NextToken` parameter.

## Request Parameters

For information about the common parameters that all actions use, see [Common Query Parameters \(p. 68\)](#).

| Name                        | Description   | Required |
|-----------------------------|---|----------|
| <i>AutoScalingGroupName</i> | The name of the Auto Scaling group.<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 1600.   | No       |
| <i>MaxRecords</i>           | The maximum number of policies that will be described with each call.<br>Type: Integer  | No       |
| <i>NextToken</i>            | A string that is used to mark the start of the next batch of returned results for pagination.<br>Type: String   | No       |
| <i>PolicyNames.member.N</i> | A list of policy names or policy ARNs to be described. If this list is omitted, all policy names are described. If an auto scaling group name is provided, the results are limited to that group. The list of requested policy names cannot contain more than 50 items. If unknown policy names are requested, they are ignored with no error.<br>Type: String list | No       |

## Response Elements

The following elements come wrapped in a `DescribePoliciesResult` structure.

| Name                   | Description  |
|------------------------|--|
| <i>NextToken</i>       | A string that marks the start of the next batch of returned results.<br>Type: String |
| <i>ScalingPolicies</i> | A list of scaling policies.<br>Type: <a href="#">ScalingPolicy (p. 63)</a> list      |

## Errors

For information about the common errors that all actions use, see [Common Errors \(p. 70\)](#).

## Auto Scaling API Reference Errors

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| Error            | Description                     | HTTP<br>Status<br>Code |
|------------------|---------------------------------|------------------------|
| InvalidNextToken | The NextToken value is invalid. | 400                    |

# DescribeScalingActivities

## Description

Returns the scaling activities for the specified Auto Scaling group.

If the specified `ActivityIds` list is empty, all the activities from the past six weeks are returned. Activities are sorted by completion time. Activities still in progress appear first on the list.

This action supports pagination. If the response includes a token, there are more records available. To get the additional records, repeat the request with the response token as the `NextToken` parameter.

## Request Parameters

For information about the common parameters that all actions use, see [Common Query Parameters \(p. 68\)](#).

| Name                        | Description  | Required |
|-----------------------------|--|----------|
| <i>ActivityIds.member.N</i> | A list containing the activity IDs of the desired scaling activities. If this list is omitted, all activities are described. If an <code>AutoScalingGroupName</code> is provided, the results are limited to that group. The list of requested activities cannot contain more than 50 items. If unknown activities are requested, they are ignored with no error.<br>Type: String list | No       |
| <i>AutoScalingGroupName</i> | The name of the <a href="#">AutoScalingGroup (p. 49)</a> .<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 1600.   | No       |
| <i>MaxRecords</i>           | The maximum number of scaling activities to return.<br>Type: Integer   | No       |
| <i>NextToken</i>            | A string that marks the start of the next batch of returned results for pagination.<br>Type: String  | No       |

## Response Elements

The following elements come wrapped in a `DescribeScalingActivitiesResult` structure.

| Name       | Description  |
|------------|--|
| Activities | A list of the requested scaling activities.<br>Type: <a href="#">Activity (p. 47)</a> list   |
| NextToken  | Acts as a paging mechanism for large result sets. Set to a non-empty string if there are additional results waiting to be returned. Pass this in to subsequent calls to return additional results.<br>Type: String |

## Errors

For information about the common errors that all actions use, see [Common Errors \(p. 70\)](#).

| Error            | Description                                  | HTTP Status Code |
|------------------|--|------------------|
| InvalidNextToken | The <code>NextToken</code> value is invalid. | 400              |

# DescribeScalingProcessTypes

## Description

Returns scaling process types for use in the [ResumeProcesses](#) (p. 39) and [SuspendProcesses](#) (p. 42) actions.

## Response Elements

The following elements come wrapped in a `DescribeScalingProcessTypesResult` structure.

| Name      | Description  |
|-----------|--|
| Processes | A list of <a href="#">ProcessType</a> (p. 61) names.<br>Type: <a href="#">ProcessType</a> (p. 61) list |

# DescribeScheduledActions

## Description

Lists all the actions scheduled for your Auto Scaling group that haven't been executed. To see a list of actions already executed, see the activity record returned in [DescribeScalingActivities](#) (p. 25).

## Request Parameters

For information about the common parameters that all actions use, see [Common Query Parameters](#) (p. 68).

| Name                                 | Description  | Required |
|--------------------------------------|--|----------|
| <i>AutoScalingGroupName</i>          | The name of the Auto Scaling group.<br>Type: String<br>Length constraints: Minimum length of 1.<br>Maximum length of 1600.   | No       |
| <i>EndTime</i>                       | The latest scheduled start time to return. If scheduled action names are provided, this field is ignored.<br>Type: DateTime  | No       |
| <i>MaxRecords</i>                    | The maximum number of scheduled actions to return.<br>Type: Integer  | No       |
| <i>NextToken</i>                     | A string that marks the start of the next batch of returned results.<br>Type: String   | No       |
| <i>ScheduledActionNames.member.N</i> | A list of scheduled actions to be described. If this list is omitted, all scheduled actions are described. The list of requested scheduled actions cannot contain more than 50 items. If an auto scaling group name is provided, the results are limited to that group. If unknown scheduled actions are requested, they are ignored with no error.<br>Type: String list | No       |
| <i>StartTime</i>                     | The earliest scheduled start time to return. If scheduled action names are provided, this field will be ignored.<br>Type: DateTime   | No       |

## Response Elements

The following elements come wrapped in a `DescribeScheduledActionsResult` structure.



| Name                        | Description  |
|-----------------------------|--|
| NextToken                   | A string that marks the start of the next batch of returned results.<br>Type: String   |
| ScheduledUpdateGroupActions | A list of scheduled actions designed to update an Auto Scaling group.<br>Type: <a href="#">ScheduledUpdateGroupAction</a> (p. 64) list |

## Errors

For information about the common errors that all actions use, see [Common Errors](#) (p. 70).

| Error            | Description                     | HTTP Status Code |
|------------------|---------------------------------|------------------|
| InvalidNextToken | The NextToken value is invalid. | 400              |

# DescribeTags

## Description

Lists the Auto Scaling group tags.

You can use filters to limit results when describing tags. For example, you can query for tags of a particular Auto Scaling group. You can specify multiple values for a filter. A tag must match at least one of the specified values for it to be included in the results.

You can also specify multiple filters. The result includes information for a particular tag only if it matches all your filters. If there's no match, no special message is returned.

## Request Parameters

For information about the common parameters that all actions use, see [Common Query Parameters \(p. 68\)](#).

| Name                    | Description  | Required |
|-------------------------|--|----------|
| <i>Filters.member.N</i> | The value of the filter type used to identify the tags to be returned. For example, you can filter so that tags are returned according to Auto Scaling group, the key and value, or whether the new tag will be applied to instances launched after the tag is created (PropagateAtLaunch).<br>Type: <a href="#">Filter (p. 57)</a> list | No       |
| <i>MaxRecords</i>       | The maximum number of records to return.<br>Type: Integer  | No       |
| <i>NextToken</i>        | A string that marks the start of the next batch of returned results.<br>Type: String   | No       |

## Response Elements

The following elements come wrapped in a `DescribeTagsResult` structure.

| Name             | Description  |
|------------------|--|
| <i>NextToken</i> | A string used to mark the start of the next batch of returned results.<br>Type: String |
| <i>Tags</i>      | The list of tags.<br>Type: <a href="#">TagDescription (p. 66)</a> list                 |

## Errors

For information about the common errors that all actions use, see [Common Errors \(p. 70\)](#).

| Error                   | Description                            | HTTP Status Code |
|-------------------------|--|------------------|
| <i>InvalidNextToken</i> | The <i>NextToken</i> value is invalid. | 400              |

# DisableMetricsCollection

## Description

Disables monitoring of group metrics for the Auto Scaling group specified in `AutoScalingGroupName`. You can specify the list of affected metrics with the `Metrics` parameter.

## Request Parameters

For information about the common parameters that all actions use, see [Common Query Parameters \(p. 68\)](#).

| Name                        | Description  | Required |
|-----------------------------|--|----------|
| <i>AutoScalingGroupName</i> | The name or ARN of the Auto Scaling Group.<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 1600.   | Yes      |
| <i>Metrics.member.N</i>     | The list of metrics to disable. If no metrics are specified, all metrics are disabled. The following metrics are supported: <ul style="list-style-type: none"><li>GroupMinSize</li><li>GroupMaxSize</li><li>GroupDesiredCapacity</li><li>GroupInServiceInstances</li><li>GroupPendingInstances</li><li>GroupTerminatingInstances</li><li>GroupTotalInstances</li></ul> Type: String list | No       |

# EnableMetricsCollection

## Description

Enables monitoring of group metrics for the Auto Scaling group specified in `AutoScalingGroupName`. You can specify the list of enabled metrics with the `Metrics` parameter.

Auto scaling metrics collection can be turned on only if the `InstanceMonitoring` flag, in the Auto Scaling group's launch configuration, is set to `True`.

## Request Parameters

For information about the common parameters that all actions use, see [Common Query Parameters \(p. 68\)](#).

| Name                        | Description   | Required |
|-----------------------------|---|----------|
| <i>AutoScalingGroupName</i> | The name or ARN of the Auto Scaling group.<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 1600.  | Yes      |
| <i>Granularity</i>          | The granularity to associate with the metrics to collect. Currently, the only legal granularity is "1Minute".<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 255.  | Yes      |
| <i>Metrics.member.N</i>     | The list of metrics to collect. If no metrics are specified, all metrics are enabled. The following metrics are supported: <ul style="list-style-type: none"><li>GroupMinSize</li><li>GroupMaxSize</li><li>GroupDesiredCapacity</li><li>GroupInServiceInstances</li><li>GroupPendingInstances</li><li>GroupTerminatingInstances</li><li>GroupTotalInstances</li></ul> Type: String list | No       |

# ExecutePolicy

## Description

Runs the policy you create for your Auto Scaling group in [PutScalingPolicy \(p. 35\)](#).

## Request Parameters

For information about the common parameters that all actions use, see [Common Query Parameters \(p. 68\)](#).

| Name                        | Description  | Required |
|-----------------------------|--|----------|
| <i>AutoScalingGroupName</i> | The name or ARN of the Auto Scaling group.<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 1600.           | No       |
| <i>HonorCooldown</i>        | Set to <code>True</code> if you want Auto Scaling to reject this request when the Auto Scaling group is in cooldown.<br>Type: Boolean    | No       |
| <i>PolicyName</i>           | The name or PolicyARN of the policy you want to run.<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 1600. | Yes      |

## Errors

For information about the common errors that all actions use, see [Common Errors \(p. 70\)](#).

| Error                            | Description  | HTTP Status Code |
|----------------------------------|--|------------------|
| <i>ScalingActivityInProgress</i> | You cannot delete an Auto Scaling group while there are scaling activities in progress for that group. | 400              |

# PutNotificationConfiguration

## Description

Configures an Auto Scaling group to send notifications when specified events take place. Subscribers to this topic can have messages for events delivered to an endpoint such as a web server or email address.

A new `PutNotificationConfiguration` overwrites an existing configuration.

## Request Parameters

For information about the common parameters that all actions use, see [Common Query Parameters \(p. 68\)](#).

| Name                              | Description   | Required |
|-----------------------------------|---|----------|
| <i>AutoScalingGroupName</i>       | The name of the Auto Scaling group.<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 1600.   | Yes      |
| <i>NotificationTypes.member.N</i> | The type of events that will trigger the notification. For more information, go to <a href="#">DescribeAutoScalingNotificationTypes (p. 19)</a> .<br>Type: String list    | Yes      |
| <i>TopicARN</i>                   | The Amazon Resource Name (ARN) of the Amazon Simple Notification Service (SNS) topic.<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 1600. | Yes      |

## Errors

For information about the common errors that all actions use, see [Common Errors \(p. 70\)](#).

| Error                      | Description  | HTTP Status Code |
|----------------------------|--|------------------|
| <code>LimitExceeded</code> | The quota for capacity groups or launch configurations for this customer has already been reached. | 400              |

# PutScalingPolicy

## Description

Creates or updates a policy for an Auto Scaling group. To update an existing policy, use the existing policy name and set the parameter(s) you want to change. Any existing parameter not changed in an update to an existing policy is not changed in this update request.

## Request Parameters

For information about the common parameters that all actions use, see [Common Query Parameters \(p. 68\)](#).

| Name                        | Description   | Required |
|-----------------------------|---|----------|
| <i>AdjustmentType</i>       | Specifies whether the <code>ScalingAdjustment</code> is an absolute number or a percentage of the current capacity. Valid values are <code>ChangeInCapacity</code> , <code>ExactCapacity</code> , and <code>PercentChangeInCapacity</code> .<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 255.             | Yes      |
| <i>AutoScalingGroupName</i> | The name or ARN of the Auto Scaling group.<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 1600.  | Yes      |
| <i>Cooldown</i>             | The amount of time, in seconds, after a scaling activity completes before any further trigger-related scaling activities can start.<br>Type: Integer  | No       |
| <i>PolicyName</i>           | The name of the policy you want to create or update.<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 255.   | Yes      |
| <i>ScalingAdjustment</i>    | The number of instances by which to scale.<br><code>AdjustmentType</code> determines the interpretation of this number (e.g., as an absolute number or as a percentage of the existing Auto Scaling group size). A positive increment adds to the current capacity and a negative value removes from the current capacity.<br>Type: Integer | Yes      |

## Response Elements

The following elements come wrapped in a `PutScalingPolicyResult` structure.

| Name                   | Description  |
|------------------------|--|
| <code>PolicyARN</code> | A policy's Amazon Resource Name (ARN).<br>Type: String |

## Errors

For information about the common errors that all actions use, see [Common Errors \(p. 70\)](#).

| Error         | Description  | HTTP Status Code |
|---------------|--|------------------|
| LimitExceeded | The quota for capacity groups or launch configurations for this customer has already been reached. | 400              |



# PutScheduledUpdateGroupAction

## Description

Creates a scheduled scaling action for an Auto Scaling group. If you leave a parameter unspecified, the corresponding value remains unchanged in the affected Auto Scaling group.

## Request Parameters

For information about the common parameters that all actions use, see [Common Query Parameters \(p. 68\)](#).

| Name                        | Description  | Required |
|-----------------------------|--|----------|
| <i>AutoScalingGroupName</i> | The name or ARN of the Auto Scaling group.<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 1600.   | Yes      |
| <i>DesiredCapacity</i>      | The number of Amazon EC2 instances that should be running in the group.<br>Type: Integer   | No       |
| <i>EndTime</i>              | The time for this action to end.<br>Type: DateTime   | No       |
| <i>MaxSize</i>              | The maximum size for the Auto Scaling group.<br>Type: Integer  | No       |
| <i>MinSize</i>              | The minimum size for the new Auto Scaling group.<br>Type: Integer  | No       |
| <i>Recurrence</i>           | The time when recurring future actions will start. Start time is specified by the user following the Unix cron syntax format. For information about cron syntax, go to <a href="#">Wikipedia, The Free Encyclopedia</a> .<br><br>When <i>StartTime</i> and <i>EndTime</i> are specified with <i>Recurrence</i> , they form the boundaries of when the recurring action will start and stop.<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 255. | No       |
| <i>ScheduledActionName</i>  | The name of this scaling action.<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 255.  | Yes      |
| <i>StartTime</i>            | The time for this action to start, as in <code>--start-time 2010-06-01T00:00:00Z</code> .<br><br>When <i>StartTime</i> and <i>EndTime</i> are specified with <i>Recurrence</i> , they form the boundaries of when the recurring action will start and stop.<br>Type: DateTime  | No       |

| Name        | Description   | Required |
|-------------|---|----------|
| <i>Time</i> | Time is deprecated.<br><br>The time for this action to start. <i>Time</i> is an alias for <i>StartTime</i> and can be specified instead of <i>StartTime</i> , or vice versa. If both <i>Time</i> and <i>StartTime</i> are specified, their values should be identical. Otherwise, <i>PutScheduledUpdateGroupAction</i> will return an error.<br>Type: <i>DateTime</i> | No       |

## Errors

For information about the common errors that all actions use, see [Common Errors \(p. 70\)](#).

| Error                | Description  | HTTP Status Code |
|----------------------|--|------------------|
| <i>AlreadyExists</i> | The named Auto Scaling group or launch configuration already exists.                               | 400              |
| <i>LimitExceeded</i> | The quota for capacity groups or launch configurations for this customer has already been reached. | 400              |

# ResumeProcesses

## Description

Resumes Auto Scaling processes for an Auto Scaling group. For more information, see [SuspendProcesses](#) (p. 42) and [ProcessType](#) (p. 61).

## Request Parameters

For information about the common parameters that all actions use, see [Common Query Parameters](#) (p. 68).

| Name                             | Description   | Required |
|----------------------------------|---|----------|
| <i>AutoScalingGroupName</i>      | The name or Amazon Resource Name (ARN) of the Auto Scaling group.<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 1600.   | Yes      |
| <i>ScalingProcesses.member.N</i> | The processes that you want to suspend or resume, which can include one or more of the following: <ul style="list-style-type: none"><li>• Launch</li><li>• Terminate</li><li>• HealthCheck</li><li>• ReplaceUnhealthy</li><li>• AZRebalance</li><li>• AlarmNotifications</li><li>• ScheduledActions</li><li>• AddToLoadBalancer</li></ul> To suspend all process types, omit this parameter.<br>Type: String list | No       |

# SetDesiredCapacity

## Description

Adjusts the desired size of the [AutoScalingGroup](#) (p. 49) by initiating scaling activities. When reducing the size of the group, it is not possible to define which Amazon EC2 instances will be terminated. This applies to any Auto Scaling decisions that might result in terminating instances.

There are two common use cases for `SetDesiredCapacity`: one for users of the Auto Scaling triggering system, and another for developers who write their own triggering systems. Both use cases relate to the concept of cooldown.

In the first case, if you use the Auto Scaling triggering system, `SetDesiredCapacity` changes the size of your Auto Scaling group without regard to the cooldown period. This could be useful, for example, if Auto Scaling did something unexpected for some reason. If your cooldown period is 10 minutes, Auto Scaling would normally reject requests to change the size of the group for that entire 10-minute period. The `SetDesiredCapacity` command allows you to circumvent this restriction and change the size of the group before the end of the cooldown period.

In the second case, if you write your own triggering system, you can use `SetDesiredCapacity` to control the size of your Auto Scaling group. If you want the same cooldown functionality that Auto Scaling offers, you can configure `SetDesiredCapacity` to honor cooldown by setting the `HonorCooldown` parameter to `true`.

## Request Parameters

For information about the common parameters that all actions use, see [Common Query Parameters](#) (p. 68).

| Name                        | Description  | Required |
|-----------------------------|--|----------|
| <i>AutoScalingGroupName</i> | The name of the Auto Scaling group.<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 1600.  | Yes      |
| <i>DesiredCapacity</i>      | The new capacity setting for the Auto Scaling group.<br>Type: Integer  | Yes      |
| <i>HonorCooldown</i>        | By default, <code>SetDesiredCapacity</code> overrides any cooldown period. Set to <code>True</code> if you want Auto Scaling to reject this request when the Auto Scaling group is in cooldown.<br>Type: Boolean | No       |

## Errors

For information about the common errors that all actions use, see [Common Errors](#) (p. 70).

| Error                            | Description  | HTTP Status Code |
|----------------------------------|--|------------------|
| <i>ScalingActivityInProgress</i> | You cannot delete an Auto Scaling group while there are scaling activities in progress for that group. | 400              |

# SetInstanceHealth

## Description

Sets the health status of an instance.

## Request Parameters

For information about the common parameters that all actions use, see [Common Query Parameters \(p. 68\)](#).

| Name                            | Description   | Required |
|---------------------------------|---|----------|
| <i>HealthStatus</i>             | The health status of the instance. "Healthy" means that the instance is healthy and should remain in service. "Unhealthy" means that the instance is unhealthy. Auto Scaling should terminate and replace it.<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 32. | Yes      |
| <i>InstanceId</i>               | The identifier of the Amazon EC2 instance.<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 16.  | Yes      |
| <i>ShouldRespectGracePeriod</i> | If True, this call should respect the grace period associated with the group.<br>Type: Boolean  | No       |

# SuspendProcesses

## Description

Suspends Auto Scaling processes for an Auto Scaling group. To suspend specific process types, specify them by name with the `ScalingProcesses.member.N` parameter. To suspend all process types, omit the `ScalingProcesses.member.N` parameter.



### Important

Suspending either of the two primary process types, `Launch` or `Terminate`, can prevent other process types from functioning properly. For more information about processes and their dependencies, see [ProcessType](#) (p. 61).

To resume processes that have been suspended, use [ResumeProcesses](#) (p. 39).

## Request Parameters

For information about the common parameters that all actions use, see [Common Query Parameters](#) (p. 68).

| Name                             | Description   | Required |
|----------------------------------|---|----------|
| <i>AutoScalingGroupName</i>      | The name or Amazon Resource Name (ARN) of the Auto Scaling group.<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 1600.   | Yes      |
| <i>ScalingProcesses.member.N</i> | The processes that you want to suspend or resume, which can include one or more of the following: <ul style="list-style-type: none"><li>• <code>Launch</code></li><li>• <code>Terminate</code></li><li>• <code>HealthCheck</code></li><li>• <code>ReplaceUnhealthy</code></li><li>• <code>AZRebalance</code></li><li>• <code>AlarmNotifications</code></li><li>• <code>ScheduledActions</code></li><li>• <code>AddToLoadBalancer</code></li></ul> To suspend all process types, omit this parameter.<br>Type: String list | No       |

# TerminateInstanceInAutoScalingGroup

## Description

Terminates the specified instance. Optionally, the desired group size can be adjusted.



### Note

This call simply registers a termination request. The termination of the instance cannot happen immediately.

## Request Parameters

For information about the common parameters that all actions use, see [Common Query Parameters \(p. 68\)](#).

| Name                                  | Description   | Required |
|---------------------------------------|---|----------|
| <i>InstanceId</i>                     | The ID of the Amazon EC2 instance to be terminated.<br>Type: String<br>Length constraints: Minimum length of 1.<br>Maximum length of 16.  | Yes      |
| <i>ShouldDecrementDesiredCapacity</i> | Specifies whether ( <i>true</i> ) or not ( <i>false</i> ) terminating this instance should also decrement the size of the <a href="#">AutoScalingGroup (p. 49)</a> .<br>Type: Boolean | Yes      |

## Response Elements

The following elements come wrapped in a `TerminateInstanceInAutoScalingGroupResult` structure.

| Name     | Description   |
|----------|---|
| Activity | A scaling Activity.<br>Type: <a href="#">Activity (p. 47)</a> |

## Errors

For information about the common errors that all actions use, see [Common Errors \(p. 70\)](#).

| Error                     | Description  | HTTP Status Code |
|---------------------------|--|------------------|
| ScalingActivityInProgress | You cannot delete an Auto Scaling group while there are scaling activities in progress for that group. | 400              |

# UpdateAutoScalingGroup

## Description

Updates the configuration for the specified [AutoScalingGroup](#) (p. 49).



### Note

To update an Auto Scaling group with a launch configuration that has the `InstanceMonitoring` flag set to `False`, you must first ensure that collection of group metrics is disabled. Otherwise, calls to [UpdateAutoScalingGroup](#) (p. 44) will fail. If you have previously enabled group metrics collection, you can disable collection of all group metrics by calling [DisableMetricsCollection](#) (p. 31).

The new settings are registered upon the completion of this call. Any launch configuration settings take effect on any triggers after this call returns. Triggers that are currently in progress aren't affected.



### Note

- If a new value is specified for *MinSize* without specifying the value for *DesiredCapacity*, and if the new *MinSize* is larger than the current size of the Auto Scaling Group, there will be an implicit call to [SetDesiredCapacity](#) (p. 40) to set the group to the new *MinSize*.
- If a new value is specified for *MaxSize* without specifying the value for *DesiredCapacity*, and the new *MaxSize* is smaller than the current size of the Auto Scaling Group, there will be an implicit call to [SetDesiredCapacity](#) (p. 40) to set the group to the new *MaxSize*.
- All other optional parameters are left unchanged if not passed in the request.

## Request Parameters

For information about the common parameters that all actions use, see [Common Query Parameters](#) (p. 68).

| Name                              | Description  | Required |
|-----------------------------------|--|----------|
| <i>AutoScalingGroupName</i>       | The name of the Auto Scaling group.<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 1600.                              | Yes      |
| <i>AvailabilityZones.member.N</i> | Availability Zones for the group.<br>Type: String list<br>Length constraints: Minimum of 1 item(s) in the list.                                      | No       |
| <i>DefaultCooldown</i>            | The amount of time, in seconds, after a scaling activity completes before any further trigger-related scaling activities can start.<br>Type: Integer | No       |
| <i>DesiredCapacity</i>            | The desired capacity for the Auto Scaling group.<br>Type: Integer  | No       |



| Name                           | Description  | Required |
|--------------------------------|--|----------|
| <i>HealthCheckGracePeriod</i>  | The length of time that Auto Scaling waits before checking an instance's health status. The grace period begins when an instance comes into service.<br>Type: Integer  | No       |
| <i>HealthCheckType</i>         | The service of interest for the health status check, either "EC2" for Amazon EC2 or "ELB" for Elastic Load Balancing.<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 32.  | No       |
| <i>LaunchConfigurationName</i> | The name of the launch configuration.<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 1600.  | No       |
| <i>MaxSize</i>                 | The maximum size of the Auto Scaling group.<br>Type: Integer   | No       |
| <i>MinSize</i>                 | The minimum size of the Auto Scaling group.<br>Type: Integer   | No       |
| <i>PlacementGroup</i>          | The name of the cluster placement group, if applicable. For more information, go to <a href="#">Using Cluster Instances</a> in the Amazon EC2 User Guide.<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 255.   | No       |
| <i>VPCZoneIdentifier</i>       | The subnet identifier for the Amazon VPC connection, if applicable. You can specify several subnets in a comma-separated list.<br><br>When you specify <i>VPCZoneIdentifier</i> with <i>AvailabilityZones</i> , ensure that the subnets' Availability Zones match the values you specify for <i>AvailabilityZones</i> .<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 255. | No       |

## Errors

For information about the common errors that all actions use, see [Common Errors](#) (p. 70).

| Error                            | Description  | HTTP Status Code |
|----------------------------------|--|------------------|
| <i>ScalingActivityInProgress</i> | You cannot delete an Auto Scaling group while there are scaling activities in progress for that group. | 400              |

# Data Types

---

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

**Note**

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

The following data types are supported:

- [Activity](#) (p. 47)
- [AdjustmentType](#) (p. 48)
- [Alarm](#) (p. 48)
- [AutoScalingGroup](#) (p. 49)
- [AutoScalingInstanceDetails](#) (p. 50)
- [BlockDeviceMapping](#) (p. 51)
- [DescribeAdjustmentTypesResult](#) (p. 52)
- [DescribeAutoScalingGroupsResult](#) (p. 52)
- [DescribeAutoScalingInstancesResult](#) (p. 52)
- [DescribeAutoScalingNotificationTypesResult](#) (p. 53)
- [DescribeLaunchConfigurationsResult](#) (p. 53)
- [DescribeMetricCollectionTypesResult](#) (p. 54)
- [DescribeNotificationConfigurationsResult](#) (p. 54)
- [DescribePoliciesResult](#) (p. 55)
- [DescribeScalingActivitiesResult](#) (p. 55)
- [DescribeScalingProcessTypesResult](#) (p. 55)
- [DescribeScheduledActionsResult](#) (p. 56)
- [DescribeTagsResult](#) (p. 56)
- [Ebs](#) (p. 56)
- [EnabledMetric](#) (p. 57)

- [Filter](#) (p. 57)
- [Instance](#) (p. 58)
- [InstanceMonitoring](#) (p. 58)
- [LaunchConfiguration](#) (p. 59)
- [MetricCollectionType](#) (p. 60)
- [MetricGranularityType](#) (p. 60)
- [NotificationConfiguration](#) (p. 60)
- [ProcessType](#) (p. 61)
- [PutScalingPolicyResult](#) (p. 63)
- [ScalingPolicy](#) (p. 63)
- [ScheduledUpdateGroupAction](#) (p. 64)
- [SuspendedProcess](#) (p. 65)
- [Tag](#) (p. 65)
- [TagDescription](#) (p. 66)
- [TerminateInstanceInAutoScalingGroupResult](#) (p. 67)

## Activity

### Description

A scaling Activity is a long-running process that represents a change to your AutoScalingGroup, such as changing the size of the group. It can also be a process to replace an instance, or a process to perform any other long-running operations supported by the API.

### Contents

| Name                 | Description   |
|----------------------|---|
| ActivityId           | Specifies the ID of the activity.<br>Type: String   |
| AutoScalingGroupName | The name of the Auto Scaling group.<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 255.          |
| Cause                | Contains the reason the activity was begun.<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 1023. |
| Description          | Contains a friendly, more verbose description of the scaling activity.<br>Type: String  |
| Details              | Contains details of the scaling activity.<br>Type: String   |
| EndTime              | Provides the end time of this activity.<br>Type: DateTime   |

| Name          | Description  |
|---------------|--|
| Progress      | Specifies a value between 0 and 100 that indicates the progress of the activity.<br>Type: Integer  |
| StartTime     | Provides the start time of this activity.<br>Type: DateTime  |
| StatusCode    | Contains the current status of the activity.<br>Type: String   |
| StatusMessage | Contains a friendly, more verbose description of the activity status.<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 255. |

## AdjustmentType

### Description

Specifies whether the [PutScalingPolicy \(p. 35\)](#) `ScalingAdjustment` parameter is an absolute number or a percentage of the current capacity.

### Contents

| Name           | Description   |
|----------------|---|
| AdjustmentType | A policy adjustment type. Valid values are <code>ChangeInCapacity</code> , <code>ExactCapacity</code> , and <code>PercentChangeInCapacity</code> .<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 255. |

## Alarm

### Description

The Alarm data type.

### Contents

| Name     | Description  |
|----------|--|
| AlarmARN | The Amazon Resource Name (ARN) of the alarm.<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 1600. |

| Name      | Description   |
|-----------|---|
| AlarmName | The name of the alarm.<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 255. |

# AutoScalingGroup

## Description

The AutoScalingGroup data type.

## Contents

| Name                   | Description   |
|------------------------|---|
| AutoScalingGroupARN    | The Amazon Resource Name (ARN) of the Auto Scaling group.<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 1600.   |
| AutoScalingGroupName   | Specifies the name of the group.<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 255.   |
| AvailabilityZones      | Contains a list of Availability Zones for the group.<br>Type: String list<br>Length constraints: Minimum of 1 item(s) in the list.  |
| CreatedTime            | Specifies the date and time the Auto Scaling group was created.<br>Type: DateTime   |
| DefaultCooldown        | The number of seconds after a scaling activity completes before any further scaling activities can start.<br>Type: Integer  |
| DesiredCapacity        | Specifies the desired capacity for the Auto Scaling group.<br>Type: Integer   |
| EnabledMetrics         | A list of metrics enabled for this Auto Scaling group.<br>Type: <a href="#">EnabledMetric (p. 57)</a> list  |
| HealthCheckGracePeriod | The length of time that Auto Scaling waits before checking an instance's health status. The grace period begins when an instance comes into service.<br>Type: Integer                                   |
| HealthCheckType        | The service of interest for the health status check, either "EC2" for Amazon EC2 or "ELB" for Elastic Load Balancing.<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 32. |

| Name                    | Description  |
|-------------------------|--|
| Instances               | Provides a summary list of Amazon EC2 instances.<br>Type: <a href="#">Instance (p. 58)</a> list  |
| LaunchConfigurationName | Specifies the name of the associated <a href="#">LaunchConfiguration (p. 59)</a> .<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 255.  |
| LoadBalancerNames       | A list of load balancers associated with this Auto Scaling group.<br>Type: String list   |
| MaxSize                 | Contains the maximum size of the Auto Scaling group.<br>Type: Integer  |
| MinSize                 | Contains the minimum size of the Auto Scaling group.<br>Type: Integer  |
| PlacementGroup          | The name of the cluster placement group, if applicable. For more information, go to <a href="#">Using Cluster Instances</a> in the Amazon EC2 User Guide.<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 255.   |
| Status                  | A list of status conditions for the Auto Scaling group.<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 255.   |
| SuspendedProcesses      | Suspended processes associated with this Auto Scaling group.<br>Type: <a href="#">SuspendedProcess (p. 65)</a> list  |
| Tags                    | A list of tags for the Auto Scaling group.<br>Type: <a href="#">TagDescription (p. 66)</a> list  |
| VPCZoneIdentifier       | The subnet identifier for the Amazon VPC connection, if applicable. You can specify several subnets in a comma-separated list.<br><br>When you specify <code>VPCZoneIdentifier</code> with <code>AvailabilityZones</code> , ensure that the subnets' Availability Zones match the values you specify for <code>AvailabilityZones</code> .<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 255. |

## AutoScalingInstanceDetails

### Description

The `AutoScalingInstanceDetails` data type.

## Contents

| Name                    | Description  |
|-------------------------|--|
| AutoScalingGroupName    | The name of the Auto Scaling group associated with this instance.<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 255.   |
| AvailabilityZone        | The Availability Zone in which this instance resides.<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 255.   |
| HealthStatus            | The health status of this instance. "Healthy" means that the instance is healthy and should remain in service. "Unhealthy" means that the instance is unhealthy. Auto Scaling should terminate and replace it.<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 32. |
| InstanceId              | The instance ID of the Amazon EC2 instance.<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 16.  |
| LaunchConfigurationName | The launch configuration associated with this instance.<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 255.   |
| LifecycleState          | The life cycle state of this instance.<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 32.   |

## BlockDeviceMapping

### Description

The BlockDeviceMapping data type.

### Contents

| Name       | Description  |
|------------|--|
| DeviceName | The name of the device within Amazon EC2.<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 255. |
| Ebs        | The Elastic Block Storage volume information.<br>Type: <a href="#">Ebs</a> (p. 56)   |

| Name        | Description   |
|-------------|---|
| VirtualName | The virtual name associated with the device.<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 255. |

## DescribeAdjustmentTypesResult

### Description

The output of the [DescribeAdjustmentTypes](#) (p. 16) action.

### Contents

| Name            | Description  |
|-----------------|--|
| AdjustmentTypes | A list of specific policy adjustment types.<br>Type: <a href="#">AdjustmentType</a> (p. 48) list |

## DescribeAutoScalingGroupsResult

### Description

The `AutoScalingGroupsType` data type.

### Contents

| Name              | Description   |
|-------------------|---|
| AutoScalingGroups | A list of Auto Scaling groups.<br>Type: <a href="#">AutoScalingGroup</a> (p. 49) list |
| NextToken         | A string that marks the start of the next batch of returned results.<br>Type: String  |

## DescribeAutoScalingInstancesResult

### Description

The `AutoScalingInstancesType` data type.



## Contents

| Name                 | Description  |
|----------------------|--|
| AutoScalingInstances | A list of Auto Scaling instances.<br>Type: <a href="#">AutoScalingInstanceDetails</a> (p. 50) list |
| NextToken            | A string that marks the start of the next batch of returned results.<br>Type: String               |

## DescribeAutoScalingNotificationTypesResult

### Description

### Contents

| Name                         | Description   |
|------------------------------|---|
| AutoScalingNotificationTypes | Notification types supported by Auto Scaling. They are:<br>autoscaling:EC2_INSTANCE_LAUNCH,<br>autoscaling:EC2_INSTANCE_LAUNCH_ERROR,<br>autoscaling:EC2_INSTANCE_TERMINATE,<br>autoscaling:EC2_INSTANCE_TERMINATE_ERROR,<br>autoscaling:TEST_NOTIFICATION<br>Type: String list |

## DescribeLaunchConfigurationsResult

### Description

The LaunchConfigurationsType data type.

### Contents

| Name                 | Description  |
|----------------------|--|
| LaunchConfigurations | A list of launch configurations.<br>Type: <a href="#">LaunchConfiguration</a> (p. 59) list |
| NextToken            | A string that marks the start of the next batch of returned results.<br>Type: String       |

# DescribeMetricCollectionTypesResult

## Description

The output of the [DescribeMetricCollectionTypes](#) (p. 21) action.

## Contents

| Name          | Description  |
|---------------|--|
| Granularities | A list of granularities for the listed Metrics.<br>Type: <a href="#">MetricGranularityType</a> (p. 60) list  |
| Metrics       | The list of Metrics collected. The following metrics are supported: <ul style="list-style-type: none"><li>• GroupMinSize</li><li>• GroupMaxSize</li><li>• GroupDesiredCapacity</li><li>• GroupInServiceInstances</li><li>• GroupPendingInstances</li><li>• GroupTerminatingInstances</li><li>• GroupTotalInstances</li></ul> Type: <a href="#">MetricCollectionType</a> (p. 60) list |

# DescribeNotificationConfigurationsResult

## Description

The output of the [DescribeNotificationConfigurations](#) (p. 22) action.

## Contents

| Name                       | Description   |
|----------------------------|---|
| NextToken                  | A string that is used to mark the start of the next batch of returned results for pagination.<br>Type: String |
| NotificationConfigurations | The list of notification configurations.<br>Type: <a href="#">NotificationConfiguration</a> (p. 60) list      |

# DescribePoliciesResult

## Description

The PoliciesType data type.

## Contents

| Name            | Description  |
|-----------------|--|
| NextToken       | A string that marks the start of the next batch of returned results.<br>Type: String |
| ScalingPolicies | A list of scaling policies.<br>Type: <a href="#">ScalingPolicy</a> (p. 63) list      |

# DescribeScalingActivitiesResult

## Description

The output for the [DescribeScalingActivities](#) (p. 25) action.

## Contents

| Name       | Description  |
|------------|--|
| Activities | A list of the requested scaling activities.<br>Type: <a href="#">Activity</a> (p. 47) list   |
| NextToken  | Acts as a paging mechanism for large result sets. Set to a non-empty string if there are additional results waiting to be returned. Pass this in to subsequent calls to return additional results.<br>Type: String |

# DescribeScalingProcessTypesResult

## Description

The output of the [DescribeScalingProcessTypes](#) (p. 27) action.

## Contents

| Name      | Description  |
|-----------|--|
| Processes | A list of <a href="#">ProcessType</a> (p. 61) names.<br>Type: <a href="#">ProcessType</a> (p. 61) list |

# DescribeScheduledActionsResult

## Description

A scaling action that is scheduled for a future time and date. An action can be scheduled up to thirty days in advance.

Starting with API version 2011-01-01, you can use `recurrence` to specify that a scaling action occurs regularly on a schedule.

## Contents

| Name                        | Description  |
|-----------------------------|--|
| NextToken                   | A string that marks the start of the next batch of returned results.<br>Type: String   |
| ScheduledUpdateGroupActions | A list of scheduled actions designed to update an Auto Scaling group.<br>Type: <a href="#">ScheduledUpdateGroupAction</a> (p. 64) list |

# DescribeTagsResult

## Description

## Contents

| Name      | Description  |
|-----------|--|
| NextToken | A string used to mark the start of the next batch of returned results.<br>Type: String |
| Tags      | The list of tags.<br>Type: <a href="#">TagDescription</a> (p. 66) list                 |

# Ebs

## Description

The Ebs data type.

## Contents

| Name       | Description   |
|------------|---|
| SnapshotId | The snapshot ID.<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 255. |
| VolumeSize | The volume size, in gigabytes.<br>Type: Integer   |

## EnabledMetric

### Description

The `EnabledMetric` data type.

### Contents

| Name        | Description   |
|-------------|---|
| Granularity | The granularity of the enabled metric.<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 255. |
| Metric      | The name of the enabled metric.<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 255.        |

## Filter

### Description

The `Filter` data type.

### Contents

| Name   | Description   |
|--------|---|
| Name   | The name of the filter. Valid Name values are: "auto-scaling-group", "key", "value", and "propagate-at-launch".<br>Type: String |
| Values | The value of the filter.<br>Type: String list   |

# Instance

## Description

The `Instance` data type.

## Contents

| Name                                 | Description   |
|--------------------------------------|---|
| <code>AvailabilityZone</code>        | Availability Zones associated with this instance.<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 255.            |
| <code>HealthStatus</code>            | The instance's health status.<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 32.                                 |
| <code>InstanceId</code>              | Specifies the ID of the Amazon EC2 instance.<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 16.                  |
| <code>LaunchConfigurationName</code> | The launch configuration associated with this instance.<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 255.      |
| <code>LifecycleState</code>          | Contains a description of the current <i>lifecycle</i> state.<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 32. |

# InstanceMonitoring

## Description

The `InstanceMonitoring` data type.

## Contents

| Name                 | Description   |
|----------------------|---|
| <code>Enabled</code> | If <code>True</code> , instance monitoring is enabled.<br>Type: Boolean |

# LaunchConfiguration

## Description

The LaunchConfiguration data type.

## Contents

| Name                    | Description   |
|-------------------------|---|
| BlockDeviceMappings     | Specifies how block devices are exposed to the instance. Each mapping is made up of a <i>virtualName</i> and a <i>deviceName</i> .<br>Type: <a href="#">BlockDeviceMapping</a> (p. 51) list |
| CreatedTime             | Provides the creation date and time for this launch configuration.<br>Type: DateTime  |
| ImageId                 | Provides the unique ID of the <i>Amazon Machine Image</i> (AMI) that was assigned during registration.<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 255.   |
| InstanceMonitoring      | Controls whether instances in this group are launched with detailed monitoring or not.<br>Type: <a href="#">InstanceMonitoring</a> (p. 58)  |
| InstanceType            | Specifies the instance type of the Amazon EC2 instance.<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 255.  |
| KernelId                | Provides the ID of the kernel associated with the Amazon EC2 AMI.<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 255.  |
| KeyName                 | Provides the name of the Amazon EC2 key pair.<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 255.  |
| LaunchConfigurationARN  | The launch configuration's Amazon Resource Name (ARN).<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 1600.  |
| LaunchConfigurationName | Specifies the name of the launch configuration.<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 255.  |
| RamdiskId               | Provides ID of the RAM disk associated with the Amazon EC2 AMI.<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 255.  |
| SecurityGroups          | A description of the security groups to associate with the Amazon EC2 instances.<br>Type: String list   |

| Name     | Description  |
|----------|--|
| UserData | The user data available to the launched Amazon EC2 instances.<br>Type: String<br>Length constraints: Minimum length of 0. Maximum length of 21847. |

## MetricCollectionType

### Description

The MetricCollectionType data type.

### Contents

| Name   | Description   |
|--------|---|
| Metric | Type: String<br>Length constraints: Minimum length of 1. Maximum length of 255. |

## MetricGranularityType

### Description

The MetricGranularityType data type.

### Contents

| Name        | Description   |
|-------------|---|
| Granularity | The granularity of a Metric.<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 255. |

## NotificationConfiguration

### Description

The NotificationConfiguration data type.



## Contents

| Name                 | Description   |
|----------------------|---|
| AutoScalingGroupName | Specifies the Auto Scaling group name.<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 1600.  |
| NotificationType     | The types of events for an action to start.<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 255.  |
| TopicARN             | The Amazon Resource Name (ARN) of the Amazon Simple Notification Service (SNS) topic.<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 1600. |

## ProcessType

### Description

There are two primary Auto Scaling process types--`Launch` and `Terminate`. The `Launch` process creates a new Amazon EC2 instance for an Auto Scaling group, and the `Terminate` process removes an existing Amazon EC2 instance.

The remaining Auto Scaling process types relate to specific Auto Scaling features:

- `AddToLoadBalancer`
- `AlarmNotifications`
- `AZRebalance`
- `HealthCheck`
- `ReplaceUnhealthy`
- `ScheduledActions`



#### Important

If you suspend `Launch` or `Terminate`, all other process types are affected to varying degrees. The following descriptions discuss how each process type is affected by a suspension of `Launch` or `Terminate`.

The `AddToLoadBalancer` process type adds instances to the the load balancer when the instances are launched. If you suspend this process, Auto Scaling will launch the instances but will not add them to the load balancer. If you resume the `AddToLoadBalancer` process, Auto Scaling will also resume adding new instances to the load balancer when they are launched. However, Auto Scaling will not add running instances that were launched while the process was suspended; those instances must be added manually using the the [RegisterInstancesWithLoadBalancer](#) call in the *Elastic Load Balancing API Reference*.

The `AlarmNotifications` process type accepts notifications from Amazon CloudWatch alarms that are associated with the Auto Scaling group. If you suspend the `AlarmNotifications` process type, Auto Scaling will not automatically execute scaling policies that would be triggered by alarms.

Although the `AlarmNotifications` process type is not directly affected by a suspension of `Launch` or `Terminate`, alarm notifications are often used to signal that a change in the size of the Auto Scaling group is warranted. If you suspend `Launch` or `Terminate`, Auto Scaling might not be able to implement the alarm's associated policy.

The `AZRebalance` process type seeks to maintain a balanced number of instances across Availability Zones within a Region. If you remove an Availability Zone from your Auto Scaling group or an Availability Zone otherwise becomes unhealthy or unavailable, Auto Scaling launches new instances in an unaffected Availability Zone before terminating the unhealthy or unavailable instances. When the unhealthy Availability Zone returns to a healthy state, Auto Scaling automatically redistributes the application instances evenly across all of the designated Availability Zones.



### Important

If you call [SuspendProcesses \(p. 42\)](#) on the `launch` process type, the `AZRebalance` process will neither launch new instances nor terminate existing instances. This is because the `AZRebalance` process terminates existing instances only after launching the replacement instances.

If you call [SuspendProcesses \(p. 42\)](#) on the `terminate` process type, the `AZRebalance` process can cause your Auto Scaling group to grow up to ten percent larger than the maximum size. This is because Auto Scaling allows groups to temporarily grow larger than the maximum size during rebalancing activities. If Auto Scaling cannot terminate instances, your Auto Scaling group could remain up to ten percent larger than the maximum size until you resume the `terminate` process type.

The `HealthCheck` process type checks the health of the instances. Auto Scaling marks an instance as unhealthy if Amazon EC2 or Elastic Load Balancing informs Auto Scaling that the instance is unhealthy. The `HealthCheck` process can override the health status of an instance that you set with [SetInstanceHealth \(p. 41\)](#).

The `ReplaceUnhealthy` process type terminates instances that are marked as unhealthy and subsequently creates new instances to replace them. This process calls both of the primary process types--first `Terminate` and then `Launch`.



### Important

The `HealthCheck` process type works in conjunction with the `ReplaceUnhealthy` process type to provide health check functionality. If you suspend either `Launch` or `Terminate`, the `ReplaceUnhealthy` process type will not function properly.

The `ScheduledActions` process type performs scheduled actions that you create with [PutScheduledUpdateGroupAction \(p. 37\)](#). Scheduled actions often involve launching new instances or terminating existing instances. If you suspend either `Launch` or `Terminate`, your scheduled actions might not function as expected.

## Contents

| Name                     | Description   |
|--------------------------|---|
| <code>ProcessName</code> | The name of a process.<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 255. |

# PutScalingPolicyResult

## Description

The PolicyARNType data type.

## Contents

| Name      | Description  |
|-----------|--|
| PolicyARN | A policy's Amazon Resource Name (ARN).<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 1600. |

# ScalingPolicy

## Description

The ScalingPolicy data type.

## Contents

| Name                 | Description  |
|----------------------|--|
| AdjustmentType       | Specifies whether the ScalingAdjustment is an absolute number or a percentage of the current capacity. Valid values are ChangeInCapacity, ExactCapacity, and PercentOfCapacity.<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 255. |
| Alarms               | A list of CloudWatch Alarms related to the policy.<br>Type: <a href="#">Alarm (p. 48)</a> list   |
| AutoScalingGroupName | The name of the Auto Scaling group associated with this scaling policy.<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 255.   |
| Cooldown             | The amount of time, in seconds, after a scaling activity completes before any further trigger-related scaling activities can start.<br>Type: Integer   |
| PolicyARN            | The Amazon Resource Name (ARN) of the policy.<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 1600.  |
| PolicyName           | The name of the scaling policy.<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 255.   |

| Name              | Description  |
|-------------------|--|
| ScalingAdjustment | The number associated with the specified adjustment type. A positive value adds to the current capacity and a negative value removes from the current capacity.<br>Type: Integer |

# ScheduledUpdateGroupAction

## Description

This data type stores information about a scheduled update to an Auto Scaling group.

## Contents

| Name                 | Description  |
|----------------------|--|
| AutoScalingGroupName | The name of the Auto Scaling group to be updated.<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 255.         |
| DesiredCapacity      | The number of instances you prefer to maintain in your Auto Scaling group.<br>Type: Integer  |
| EndTime              | The time that the action is scheduled to end. This value can be up to one month in the future.<br>Type: DateTime                             |
| MaxSize              | The maximum size of the Auto Scaling group.<br>Type: Integer   |
| MinSize              | The minimum size of the Auto Scaling group.<br>Type: Integer   |
| Recurrence           | The regular schedule that an action occurs.<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 255.               |
| ScheduledActionARN   | The Amazon Resource Name (ARN) of this scheduled action.<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 1600. |
| ScheduledActionName  | The name of this scheduled action.<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 255.                        |

| Name      | Description  |
|-----------|--|
| StartTime | The time that the action is scheduled to begin. This value can be up to one month in the future.<br><br>When <code>StartTime</code> and <code>EndTime</code> are specified with <code>Recurrence</code> , they form the boundaries of when the recurring action will start and stop.<br>Type: DateTime |
| Time      | Time is deprecated.<br><br>The time that the action is scheduled to begin. Time is an alias for <code>StartTime</code> .<br>Type: DateTime   |

## SuspendedProcess

### Description

An Auto Scaling process that has been suspended. For more information, see [ProcessType \(p. 61\)](#).

### Contents

| Name             | Description   |
|------------------|---|
| ProcessName      | The name of the suspended process.<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 255.         |
| SuspensionReason | The reason that the process was suspended.<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 255. |

## Tag

### Description

The tag applied to an Auto Scaling group.

### Contents

| Name | Description  |
|------|--|
| Key  | The key of the tag.<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 128. |

| Name              | Description  |
|-------------------|--|
| PropagateAtLaunch | Specifies whether the new tag will be applied to instances launched after the tag is created. The same behavior applies to updates: If you change a tag, the changed tag will be applied to all instances launched after you made the change.<br>Type: Boolean |
| ResourceId        | The name of the Auto Scaling group.<br>Type: String  |
| ResourceType      | The kind of resource to which the tag is applied. Currently, Auto Scaling supports the <code>auto-scaling-group</code> resource type.<br>Type: String  |
| Value             | The value of the tag.<br>Type: String<br>Length constraints: Minimum length of 0. Maximum length of 256.   |

## TagDescription

### Description

The tag applied to an Auto Scaling group.

### Contents

| Name              | Description  |
|-------------------|--|
| Key               | The key of the tag.<br>Type: String<br>Length constraints: Minimum length of 1. Maximum length of 128.   |
| PropagateAtLaunch | Specifies whether the new tag will be applied to instances launched after the tag is created. The same behavior applies to updates: If you change a tag, the changed tag will be applied to all instances launched after you made the change.<br>Type: Boolean |
| ResourceId        | The name of the Auto Scaling group.<br>Type: String  |
| ResourceType      | The kind of resource to which the tag is applied. Currently, Auto Scaling supports the <code>auto-scaling-group</code> resource type.<br>Type: String  |
| Value             | The value of the tag.<br>Type: String<br>Length constraints: Minimum length of 0. Maximum length of 256.   |

# TerminateInstanceInAutoScalingGroupResult

## Description

The output for the [TerminateInstanceInAutoScalingGroup](#) (p. 43) action.

## Contents

| Name     | Description   |
|----------|---|
| Activity | A scaling Activity.<br>Type: <a href="#">Activity</a> (p. 47) |

# Common Query Parameters

---

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

| Parameter Name        | Description   | Required    |
|-----------------------|---|-------------|
| <i>Action</i>         | The action to perform.<br>Default: None<br>Type: String   | Yes         |
| <i>AuthParams</i>     | The parameters required to authenticate a query request.<br>Contains:<br>AWSAccessKeyId<br>SignatureVersion<br>Timestamp<br>Signature<br>Default: None  | Conditional |
| <i>AWSAccessKeyId</i> | The Access Key ID corresponding to the AWS Secret Access Key you used to sign the request.<br>Default: None<br>Type: String   | Yes         |
| <i>Expires</i>        | The date and time at which the request signature expires, in the format YYYY-MM-DDThh:mm:ssZ, as specified in the ISO 8601 standard.<br>Condition: Requests must include either <i>Timestamp</i> or <i>Expires</i> , but not both.<br>Default: None<br>Type: String | Conditional |



| Parameter Name          | Description  | Required    |
|-------------------------|--|-------------|
| <i>SecurityToken</i>    | The temporary security token obtained through a call to AWS Security Token Service. For a list of services that support AWS Security Token Service, go to <a href="#">Using Temporary Security Credentials to Access AWS</a> in <i>Using Temporary Security Credentials</i> .<br>Default: None<br>Type: String |             |
| <i>Signature</i>        | The digital signature you created for the request. Refer to the service's developer documentation for information about how to generate the signature.<br>Default: None<br>Type: String  | Yes         |
| <i>SignatureMethod</i>  | The hash algorithm you used to create the request signature.<br>Default: None<br>Valid Values: HmacSHA256   HmacSHA1.<br>Type: String  | Yes         |
| <i>SignatureVersion</i> | The signature version you use to sign the request. Set this to the value recommended in your product-specific documentation on security.<br>Default: None<br>Type: String  | Yes         |
| <i>Timestamp</i>        | The date and time the request was signed, in the format YYYY-MM-DDThh:mm:ssZ, as specified in the ISO 8601 standard.<br>Condition: Requests must include either <i>Timestamp</i> or <i>Expires</i> , but not both.<br>Default: None<br>Type: String  | Conditional |
| <i>Version</i>          | The API version to use, in the format YYYY-MM-DD.<br>Default: None<br>Type: String   | Yes         |

# Common Errors

---

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

| Error                       | Description  | HTTP Status Code |
|-----------------------------|--|------------------|
| IncompleteSignature         | The request signature does not conform to AWS standards.                                 | 400              |
| InternalFailure             | The request processing has failed due to some unknown error, exception or failure.       | 500              |
| InvalidAction               | The action or operation requested is invalid.  | 400              |
| InvalidClientTokenId        | The X.509 certificate or AWS Access Key ID provided does not exist in our records.       | 403              |
| InvalidParameterCombination | Parameters that must not be used together were used together.                            | 400              |
| InvalidParameterValue       | A bad or out-of-range value was supplied for the input parameter.                        | 400              |
| InvalidQueryParameter       | AWS query string is malformed, does not adhere to AWS standards.                         | 400              |
| MalformedQueryString        | The query string is malformed.   | 404              |
| MissingAction               | The request is missing an action or operation parameter.                                 | 400              |
| MissingAuthenticationToken  | Request must contain either a valid (registered) AWS Access Key ID or X.509 certificate. | 403              |
| MissingParameter            | An input parameter that is mandatory for processing the request is not supplied.         | 400              |

| <b>Error</b>       | <b>Description</b>   | <b>HTTP Status Code</b> |
|--------------------|--|-------------------------|
| OptInRequired      | The AWS Access Key ID needs a subscription for the service.  | 403                     |
| RequestExpired     | Request is past expires date or the request date (either with 15 minute padding), or the request date occurs more than 15 minutes in the future. | 400                     |
| ServiceUnavailable | The request has failed due to a temporary failure of the server.   | 503                     |
| Throttling         | Request was denied due to request throttling.  | 400                     |