NTT Communications

Cloud^{n}

AutoScaling (VPC Type OpenNW) API Manual

Ver.1.0

Version no.	Revision date	Revision details
Ver.1.0	3/2/2014	Created the first version

Table of contents

1-1) Service overview

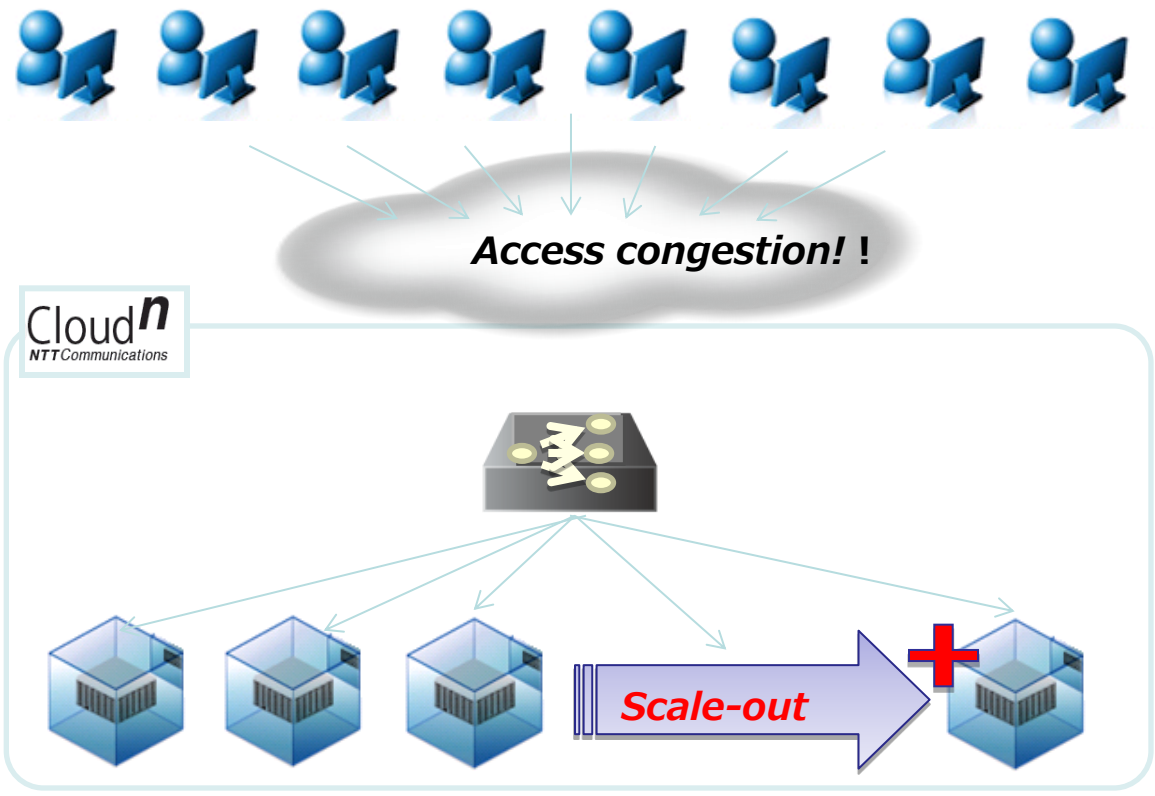
This manual explains how to use Cloud^{n} AutoScaling (AS).

Cloud^{n} AutoScaling (AS) is a service equivalent of AWS Auto Scaling. This service is used to adjust the number of virtual servers on Cloud^{n} Compute or always secure a certain number of virtual servers according to the user application load for executing applications.

By combining Cloud^{n} Load Balancer Advance, increased or reduced instances can be synchronized with a load balancing target of Cloud^{n} Load Balancer Advance.

This service mainly provides the following functions:

- Virtual servers can be increased or reduced automatically according to the AutoScaling group（setting autoscaling behaviors, such as the maximum and minimum number of virtual servers）and the virtual server launch configuration (startup settings).
- Operation is triggered by the Cloud^{n} Monitoring metrics or as scheduled.
- By combining the Cloud^{n} Load Balancer Advance, VMs are not only increased or reduced according to the system load but can be automatically included or excluded as objects of load balancing.



1-2) Making preparation

Start of AS service

Start using AS service from Cloundⁿ Portal. Refer to “3-1) Start using AS service” in “Cloundⁿ Portal Operation Manual.”

API access key common to the Cloundⁿ services and private key

In Cloundⁿ Portal, check that you have the common API access key and secret key necessary for using AS API. Refer to “3-3) Managing API access key/secret key” in Cloundⁿ Portal Instruction Manual.”

Start of LBA service

When linking LBA Service, start using LBA service from Cloundⁿ Portal. Refer to “3-1) Start using LBA service” in “Cloundⁿ Portal Operation Manual.”

You cannot use AS Service from virtual servers created in VLAN type Compute.

2-1) API request format

In this service, customers are provided with APIs for creating/deleting the AutoScaling groups and policies of AS service.

Using the APIs, the customers can operate resources directly from their own programs. These APIs are also AmazonWebService AutoScaling compatible (2011-01-01 version). You will need to connect to the following API server (endpoint) URL to use the service.

API server(endpoint) URL :

https://as-vpcopennw.api.jp-e1.cloudn-service.com/

[API request format]

An API request is sent in the Query API format below.

```
https://as-vpcopennw-api.jp-e1.cloudn-
        service.com/?Action=DescribeScalingProcessTypes&Version=2011-01-
        01&SignatureVersion=2&SignatureMethod=HmacSHA256&Timestamp=2013-02-
        01T05%3A54%3A53.578Z&AWSAccessKeyId=<APIKey>&Signature=<Signature>
```

As an example, the above shows a request to acquire an AS process type.

An API mainly contains a command type its option values, and consists of the following elements.

1. https://as-vpcopennw-api.jp-e1.cloudn-service.com/
2. Action=DescribeScalingProcessTypes
3. Version=2011-01-01
4. SignatureVersion=2
5. SignatureMethod=HmacSHA256
6. Timestamp=2013-02-01T05%3A54%3A53.578Z
7. AWSAccessKeyId=<APIKey>
8. Signature=<Signature>

Line 1: API server/endpoint URL
Line 2: Command to Cloud^{n} AS
Line 3: Options its values given to the command
Lines 4-8: Signature information

The procedure for signing the request message is explained from the next page.

2-2) Creating a request

An API request needs to have a signature to guarantee the request content. A signature is created from the request message (created from element 1), adding the user's secret key and HMAC-SHA-256 hash algorithm.

The public key and the secret key necessary for the service are distributed beforehand, and are respectively called "APIKEY" and "SECRETKEY" in the service. Use the distributed APIKEY and SECRETKEY when using the service.

As an example, the following explains how to create a signature and an HTTP request.

1

Create command parameters for the request.

For a request to acquire load balancer information, the following command parameters are created.

Command (parameter) = key	Value (sample) = value
Action	DescribeScalingProcessTypes
Version	2011-01-01
SignatureVersion	2
SignatureMethod	HmacSHA256
Timestamp	2013-01-30T18%3A09%3A45Z
AWSAccessKeyId	<APIKEY>

When entering the keys, make sure that the case is correct (case sensitive).

The Timestamp key is created in ISO8601 format, using the time of request issuance.

2-2) Creating a request

Create a signature next.

2

Sort the command parameters created in Step 1 in the ascending order of ASCII, and url-encode the value. This is only for signature creation, and the order within the request message is not rearranged. (The request message itself does not have to be rearranged.)

Command (parameter) = key	Value (sample) = value
AWSAccessKeyId	<APIKEY>
Action	DescribeScalingProcessTypes
SignatureMethod	HmacSHA256
SignatureVersion	2
Timestamp	2013-01-30T18%3A09%3A45Z
Version	2011-01-01

Note that the keys need to be sorted in the ascending order of ASCII, not an alphabetical order.

3

Connect each key and value in Step 2 with “=” and connect the sets with “&” to create a single text string for the signature. Make sure that all the elements of HTTP request are in place. Hereinafter, the following text string is called "data."

GET◁

https://as-vpcopennw-api.jp-e1.cloudn-service.com◁

/◁

AWSAccessKeyId=<APIKey>&Action=DescribeScalingProcessTypes&SignatureMethod=HmacSHA256&SignatureVersion=2&Timestamp=2013-01-30T18%3A09%3A45Z&Version=2011-01-01

Start a new line after each element (at the point where ◁ is shown) until “AWSAccessKeyId=…” query starts. The query part should be created in one line without a line break.“

2-2) Creating a request

4

For the text string created in Step 3 (“data”), generate a signature using HMAC-SHA256 and SECRETKEY, and then encode it by Base64 to include in the HTTP request.

HMAC-SHA256:
Use the library function of OpenSSL and others.
(e.g., For Ruby, use “ruby-hmac (0.4.0)” of gem library, etc.)

SECRETKEY:
Use the secret key distributed from NTT Com.

Sample signature generated by HMAC:
5df60c66d6715d33c5b49af3428c0cbb84918a0baa96c29f3b32670a742bdc29

Sample signature: (after Base64 encoding)
NWRmNjBjNjZkNjcxNWQzM2M1YjQ5YWYzNDI4YzBjYmI4NDkxOGEwYmFhOTZjMjlmM2IzMjY3MGE3NDJiZGMyOQ==

Make sure that no line break is included in the signature.

5

Create a request text string by adding the signature to the request message. Firstly, url-encode the parameter values. And then, connect each key and value (already url-encoded) with “=” and connect the parameter sets with “&”. Sorting is unnecessary for HTTP requests.

```
Action=DescribeScalingProcessTypes&SignatureMethod=HmacSHA256&SignatureVersion=2&AWSAccessKeyId=<APIKEY>&Version=2011-01-01&Timestamp=2013-01-30T18%3A09%3A45Z&Signature=XfYMZtZxXTPFtJrzQowMu4SRiguqlsKfOzJnCnQr3Ck%3D
```

NOTE: Do not use line breaks.

6

By using the created request message, execute a GET request in HTTPS. The endpoint of Cloud^{n} AS is https://as-vpcopennw-api.jp-e1.cloudn-service.com/ .

```
GET /?Action=DescribeScalingProcessTypes&SignatureMethod=HmacSHA256&SignatureVersion=2&AWSAccessKeyId=<APIKEY>&Version=2011-01-01&Timestamp=2013-01-30T18%3A09%3A45Z&Signature=XfYMZtZxXTPFtJrzQowMu4SRiguqlsKfOzJnCnQr3Ck%3D
```

NOTE: Do not use line breaks.

2-3) Checking the response

1

When the request is successful, a response is returned in xml format as below.

```
<DescribeScalingProcessTypesResponse xmlns="http://autoscaling.amazonaws.com/doc/2011-01-01/">
  <DescribeScalingProcessTypesResult>
    <Processes>
      <member>
        <ProcessName>AddToLoadBalancer</ProcessName>
      </member>
      <member>
        <ProcessName>AlarmNotification</ProcessName>
      </member>
      <member>
        <ProcessName>AZRebalance</ProcessName>
      </member>
      <member>
        <ProcessName>HealthCheck</ProcessName>
      </member>
      <member>
        <ProcessName>ReplaceUnhealthy</ProcessName>
      </member>
      <member>
        <ProcessName>ScheduledActions</ProcessName>
      </member>
      <member>
        <ProcessName>Launch</ProcessName>
      </member>
      <member>
        <ProcessName>Terminate</ProcessName>
      </member>
    </Processes>
  </DescribeScalingProcessTypesResult>
  <ResponseMetadata>
    <RequestId>cf05a0d7-24e1-6d00-190d-3715493e094f</RequestId>
  </ResponseMetadata>
</DescribeScalingProcessTypesResponse>
```

3-1) Creating a launch configuration

The following explains how to create a launch configuration using a specific example.

1

Create a launch configuration request by specifying the following:

Action key: "CreateLaunchConfiguration"

LaunchConfigurationNamekey: Launch configuration name

ImageIdkey: Virtual server template ID

InstanceType: Instance type

Command (parameter) = key	Value (sample) = value
Action	CreateLaunchConfiguration
LaunchConfigurationName	<LaunchConfigurationName>
ImageId	e388f472-86de-4538-aa79-428c4751240e
InstanceType	t1.micro
SignatureMethod	HmacSHA256
SignatureVersion	2
Version	2011-01-01
Timestamp	2013-01-30T18%3A09%3A45Z
AWSAccessKeyId	<APIKEY>

2

When the request is successful, a response is returned in xml format as below.

```
<CreateLaunchConfigurationResponse xmlns="http://autoscaling.amazonaws.com/doc/2011-01-01/">
  <ResponseMetadata>
    <RequestId>4b4fdfd8-32de-2b88-ba99-84d7290aaac6</RequestId>
  </ResponseMetadata>
</CreateLaunchConfigurationResponse>
```

3-1) Creating a launch configuration

3

Create a request for displaying the launch configuration by specifying the following:

Action key: "DescribeLaunchConfigurations"

Command (parameter) = key	Value (sample) = value
Action	DescribeLaunchConfigurations
SignatureMethod	HmacSHA256
SignatureVersion	2
Version	2011-01-01
Timestamp	2013-01-30T18%3A09%3A45Z
AWSAccessKeyId	<APIKEY>

4

When the request is successful, a response is returned in xml format as below.

```
<DescribeLaunchConfigurationsResponse xmlns="http://autoscaling.amazonaws.com/doc/2011-01-01/">
  <DescribeLaunchConfigurationsResult>
    <LaunchConfigurations>
      <member>
        ... ...
        <LaunchConfigurationName>launchconfigurationname1</LaunchConfigurationName>
        <KernelId/>
        <UserData></UserData>
        <InstanceType>t1.micro</InstanceType>

<LaunchConfigurationARN>... ...launchConfiguration:launchConfigurationName/launchconfigurationname1</
LaunchConfigurationARN>
        ... ...
        <ImageId>e388f472-86de-4538-aa79-428c4751240e</ImageId>
        <KeyName></KeyName>
        <RamdiskId/>
        <InstanceMonitoring>
          <Enabled>true</Enabled>
        </InstanceMonitoring>
      </member>
    </LaunchConfigurations>
  </DescribeLaunchConfigurationsResult>
  ... ...
</DescribeLaunchConfigurationsResponse>
```

3-2) Creating an AutoScaling group

The following explains how to create an AutoScaling group using a specific example.

1

Specify a request to create as follows:

Action key: "CreateAutoScalingGroup"

AutoScalingGroupName key: AutoScaling group name

LaunchConfigurationName key: Launch configuration name

VPCZoneIdentifier.member.N key: subnet ID

MinSize key: Minimum size of AutoScaling group

MaxSize key: Maximum size of AutoScaling group

Command (parameter) = key	Value (sample) = value
Action	CreateAutoScalingGroup
AutoScalingGroupName	<AutoScalingGroupName>
LaunchConfigurationName	<LaunchConfigurationName>
VPCZoneIdentifier.member.1	1ba87658-53ff-4853-9a34-59b62ff38b2a
MinSize	0
MaxSize	3
SignatureMethod	HmacSHA256
SignatureVersion	2
Version	2011-01-01
Timestamp	2013-01-30T18%3A09%3A45Z
AWSAccessKeyId	<APIKEY>

2

When the request is successful, a response is returned in xml format as below.

```
<CreateAutoScalingGroupResponse xmlns="http://autoscaling.amazonaws.com/doc/2011-01-01/">
  <ResponseMetadata>
    <RequestId>dd525470-84b7-917c-bdf6-689d1b421283</RequestId>
  </ResponseMetadata>
</CreateAutoScalingGroupResponse>
```

3-2) Creating an AutoScaling group

3

Create a request for displaying the contents of the AutoScaling group by specifying the following:

Action key: "DescribeAutoScalingGroups"

Command (parameter) = key	Value (sample) = value
Action	DescribeAutoScalingGroups
AutoScalingGroupNames.member.1	<AutoScalingGroupName>
SignatureMethod	HmacSHA256
SignatureVersion	2
Version	2011-01-01
Timestamp	2013-01-30T18%3A09%3A45Z
AWSAccessKeyId	<APIKEY>

3-2) Creating an AutoScaling group

4

When the request is successful, a response is returned in xml format as below.

```
<DescribeAutoScalingGroupsResponse xmlns="http://autoscaling.amazonaws.com/doc/2011-01-01/">
  <DescribeAutoScalingGroupsResult>
    <AutoScalingGroups>
      <member>
        <Tags/>
        ... ...
        <AutoScalingGroupName>autoscalinggroupname1</AutoScalingGroupName>
        ... ...
        <LaunchConfigurationName>launchconfigurationname1</LaunchConfigurationName>
        <Instances>
        </Instances>
        <DesiredCapacity>0</DesiredCapacity>
        <AvailabilityZones>
          <member>jp-e1a</member>
        </AvailabilityZones>
        <LoadBalancerNames>
        </LoadBalancerNames>
        <MinSize>0</MinSize>
        <VPCZoneIdentifier/>
        <HealthCheckGracePeriod>0</HealthCheckGracePeriod>
        <DefaultCooldown>300</DefaultCooldown>
        <AutoScalingGroupARN>arn:... ...
autoScalingGroupName/autoscalinggroupname1</AutoScalingGroupARN>
        <TerminationPolicies>
          <member>Default</member>
        </TerminationPolicies>
        <MaxSize>3</MaxSize>
      </member>
    </AutoScalingGroups>
  </DescribeAutoScalingGroupsResult>
  <ResponseMetadata>
    <RequestId>35ded9b7-cbc6-f0ca-2b8c-877b94a5fc36</RequestId>
  </ResponseMetadata>
</DescribeAutoScalingGroupsResponse>
```

3-3) Monitoring an AutoScaling group

The following explains how to monitor an AutoScaling group using a specific example.

1

Set the monitoring of an AutoScaling group as follows:

Action key: "EnableMetricsCollection"

AutoScalingGroupName key: AutoScaling group name

Granularity key: Monitoring accuracy（1Minute）

Command (parameter) = key	Value (sample) = value
Action	EnableMetricsCollection
AutoScalingGroupName	<AutoScalingGroupName>
Granularity	1Minute
SignatureMethod	HmacSHA256
SignatureVersion	2
Version	2011-01-01
Timestamp	2013-01-30T18%3A09%3A45Z
AWSAccessKeyId	<APIKEY>

3-4) Issuing email notification

The following explains how to issue email notification using a specific example when the VM instances of a specified AutoScaling group increases or decreases.

1

Set the request to create as follows:

Action key: “PutNotificationConfiguration"

AutoScalingGroupName key: AutoScaling group name

NotificationTypes.member.N key: Email notification type

TopicARN key: Email address (delimit each with a comma if more than one)

Command (parameter) = key	Value (sample) = value
Action	PutNotificationConfiguration
AutoScalingGroupName	<AutoScalingGroupName>
NotificationTypes.member.1	Autoscaling:Compute_INSTANCE_LAUNCH
NotificationTypes.member.2	Autoscaling:Compute_INSTANCE_TERMINATE
TopicARN	user1@example.com,user2@example.com
SignatureMethod	HmacSHA256
SignatureVersion	2
Version	2011-01-01
Timestamp	2013-01-30T18%3A09%3A45Z
AWSAccessKeyId	<APIKEY>

For NotificationTypes.member, the following can be specified:
autoscaling:Compute_INSTANCE_LAUNCH
autoscaling:Compute_INSTANCE_LAUNCH_ERROR
autoscaling:Compute_INSTANCE_TERMINATE
autoscaling:Compute_INSTANCE_TERMINATE_ERROR
autoscaling:TEST_NOTIFICATION

Use the action key “DescribeAutoScalingNotificationTypes” to see NotificationTypes that can be specified.

3-4) Issuing email notification

2

When the request is successful, a response is returned in xml format as below.

```
<PutNotificationConfigurationResponse xmlns="http://autoscaling.amazonaws.com/doc/2011-01-01/">
  <ResponseMetadata>
    <RequestId>c1cd8171-e3e8-c1cd-dafd-84d8796ea719</RequestId>
  </ResponseMetadata>
</PutNotificationConfigurationResponse>
```

3

Create a request for displaying the regietered setting of email notification by specifying the following:

Action key: ”DescribeNotificationConfigurations”

Command (parameter) = key	Value (sample) = value
Action	DescribeNotificationConfigurations
SignatureMethod	HmacSHA256
SignatureVersion	2
Version	2011-01-01
Timestamp	2013-01-30T18%3A09%3A45Z
AWSAccessKeyId	<APIKEY>

4

When the request is successful, a response is returned in xml format as below.

```
<DescribeNotificationConfigurationsResponse xmlns="http://autoscaling.amazonaws.com/doc/2011-01-01/">
  <DescribeNotificationConfigurationsResult>
    <NotificationConfigurations>
      <member>
        <AutoScalingGroupName>test-auto-scaling-group</AutoScalingGroupName>
        <NotificationType>autoscaling:TEST_NOTIFICATION</NotificationType>
        <TopicARN>user1@example.com</TopicARN>
      </member>
    </NotificationConfigurations>
  </DescribeNotificationConfigurationsResult>
  <ResponseMetadata>
    <RequestId>7d82ad8b-1746-c08e-2bf4-9ce47892a9f9</RequestId>
  </ResponseMetadata>
</DescribeNotificationConfigurationsResponse>
```

3-4) Issuing email notification

5

Create a request for deleting the registered setting of email notification by specifying the following:

Action key: ”DeleteNotificationConfiguration”

Command (parameter) = key	Value (sample) = value
Action	DeleteNotificationConfiguration
AutoScalingGroupName	<AutoScalingGroupName>
SignatureMethod	HmacSHA256
SignatureVersion	2
Version	2011-01-01
Timestamp	2013-01-30T18%3A09%3A45Z
AWSAccessKeyId	<APIKEY>

6

When the request is successful, a response is returned in xml format as below.

```
<DeleteNotificationConfigurationResponse xmlns="http://autoscaling.amazonaws.com/doc/2011-01-01/">
  <ResponseMetadata>
    <RequestId>7f3cf40d-6e90-7f3f-bfe0-5220c176ca22</RequestId>
  </ResponseMetadata>
</DeleteNotificationConfigurationResponse>
```

3-5) Tagging

The following explains how to assign a tag to an AutoScaling group or VM instance using a specific example.

1

Set the monitoring of an AutoScaling group as follows:

Action key: “CreateOrUpdateTags"

Tags.member.N.ResourceId key: AutoScaling group name

Tags.member.N.ResourceType key: Specify "auto-scaling-group"

Tags.member.N.Key key: Key name of tag

Tags.member.N.Value key: Value of tag

Tags.member.N.PropagateAtLaunch key: true/false

NOTE: When "true" is set, a tag is automatically assigned to a VM instance created.

Command (parameter) = key	Value (sample) = value
Action	CreateOrUpdateTags
Tags.member.1.ResourceId	<AutoScalingGroupName>
Tags.member.1.RecourceType	Auto-scaling-group
Tags.member.1.Key	Key
Tags.member.1.Value	Value
Tags.member.1.PropagateAtLaunch	true
SignatureMethod	HmacSHA256
SignatureVersion	2
Version	2011-01-01
Timestamp	2013-01-30T18%3A09%3A45Z
AWSAccessKeyId	<APIKEY>

3-5) Tagging

2

When the request is successful, a response is returned in xml format as below.

```
<CreateOrUpdateTagsResponse xmlns="http://autoscaling.amazonaws.com/doc/2011-01-01/">
  <ResponseMetadata>
    <RequestId>7cd1c551-94de-4aad-591a-364938cc9832</RequestId>
  </ResponseMetadata>
</CreateOrUpdateTagsResponse>
```

3

Create a request for displaying a registerd tag by specifying the following:

Action key: ”DescribeTags”

Command (parameter) = key	Value (sample) = value
Action	DescribeTags
SignatureMethod	HmacSHA256
SignatureVersion	2
Version	2011-01-01
Timestamp	2013-01-30T18%3A09%3A45Z
AWSAccessKeyId	<APIKEY>

4

When the request is successful, a response is returned in xml format as below.

```
<DescribeTagsResponse xmlns="http://autoscaling.amazonaws.com/doc/2011-01-01/">
  <DescribeTagsResult>
    <Tags>
      <member>
        <ResourceId>test-auto-scaling-group</ResourceId>
        <PropagateAtLaunch>true</PropagateAtLaunch>
        <Value>Value</Value>
        <Key>Key</Key>
        <ResourceType>auto-scaling-group</ResourceType>
      </member>
    </Tags>
  </DescribeTagsResult>
  <ResponseMetadata>
    <RequestId>8ac0b051-5fad-cc58-ec9b-2a5872cbcb82</RequestId>
  </ResponseMetadata>
</DescribeTagsResponse>
```

3-5) Tagging

5

Create a request for deleting a registered tag by specifying the following:

Action key: ”DeleteTags”

Command (parameter) = key	Value (sample) = value
Action	DeleteTags
Tags.member.1.ResourceId	<AutoScalingGroupName>
Tags.member.1.RecourceType	Auto-scaling-group
Tags.member.1.Key	Key
Tags.member.1.Value	Value
Tags.member.1.PropagateAtLaunch	true
SignatureMethod	HmacSHA256
SignatureVersion	2
Version	2011-01-01
Timestamp	2013-01-30T18%3A09%3A45Z
AWSAccessKeyId	<APIKEY>

6

When the request is successful, a response is returned in xml format as below.

```
<DeleteTagsResponse xmlns="http://autoscaling.amazonaws.com/doc/2011-01-01/">
  <ResponseMetadata>
    <RequestId>4daa9188-893f-a88b-200e-0d886d9297f4</RequestId>
  </ResponseMetadata>
</DeleteTagsResponse>
```

3-6) Creating a policy

The following explains how to create a policy for an AutoScaling group using a specific example.

1

Create a request for creating a policy by specifying the fllowing:

Action key: "PutScalingPolicy"

PolicyName key: Policy name

AutoScalingGroupName key: AutoScaling group name

AdjustmentType key: Adjustment type

ScalingAdjustment key: Adjustment value

Command (parameter) = key	Value (sample) = value
Action	PutScalingPolicy
PolicyName	<PolicyName>
AutoScalingGroupName	<AutoScalingGroupName>
AdjustmentType	ChangeInCapacity
ScalingAdjustment	1
SignatureMethod	HmacSHA256
SignatureVersion	2
Version	2011-01-01
Timestamp	2013-01-30T18%3A09%3A45Z
AWSAccessKeyId	<APIKEY>

3-7) Creating a policy

2

When the request is successful, a response is returned in xml format as below.

```
<PutScalingPolicyResponse xmlns="http://autoscaling.amazonaws.com/doc/2011-01-01/">
  <PutScalingPolicyResult>
    <PolicyARN>arn:cloudn:autoscale:...:scalingPolicy:autoScalingGroupName/AutoScaling group name:policyName/Policy name</PolicyARN>
  </PutScalingPolicyResult>
  <ResponseMetadata>
    <RequestId>9f519f0f-4058-a195-2781-7fa9c81f21a5</RequestId>
  </ResponseMetadata>
</PutScalingPolicyResponse>
```

Check that AutoScaling group name and Policy name are written in the <PolicyARN> tag.

3-7) Executing a policy

The following explains how to execute a policy for an AutoScaling group using a specific example.

1

Create a request for executing a policy by specifying the following:

Action key: "ExecutePolicy"

PolicyName key: Policy name

AutoScalingGroupName key: AutoScaling group name

HonorCooldown key: "false"

Command (parameter) = key	Value (sample) = value
Action	ExecutePolicy
PolicyName	<PolicyName>
AutoScalingGroupName	<AutoScalingGroupName>
HornorCooldown	false
SignatureMethod	HmacSHA256
SignatureVersion	2
Version	2011-01-01
Timestamp	2013-01-30T18%3A09%3A45Z
AWSAccessKeyId	<APIKEY>

2

When the request is successful, a response is returned in xml format as below.

```
<ExecutePolicyResponse xmlns="http://autoscaling.amazonaws.com/doc/2011-01-01/">
  <ResponseMetadata>
    <RequestId>2ea3426b-b865-c1c0-db5e-b693ba9a78d1</RequestId>
  </ResponseMetadata>
</ExecutePolicyResponse>
```

3-8) Deleting an AutoScaling group and launch configuration

The following explains how to delete a policy from an AutoScaling group using a specific example.

1

Create a request for deleting a policy by specifying the following:

Action key: "DeletePolicy"

PolicyName key: Policy name

AutoScalingGroupName key: AutoScaling group name

Command (parameter) = key	Value (sample) = value
Action	DeletePolicy
PolicyName	<PolicyName>
AutoScalingGroupName	<AutoScalingGroupName>
SignatureMethod	HmacSHA256
SignatureVersion	2
Version	2011-01-01
Timestamp	2013-01-30T18%3A09%3A45Z
AWSAccessKeyId	<APIKEY>

2

When the request is successful, a response is returned in xml format as below.

```
<DeletePolicyResponse xmlns="http://autoscaling.amazonaws.com/doc/2011-01-01/">
  <ResponseMetadata>
    <RequestId>f23a0577-e656-0eb3-faec-248c6d811916</RequestId>
  </ResponseMetadata>
</DeletePolicyResponse>
```

3-8) Deleting an AutoScaling group and launch configuration

The following explains how to delete an AutoScaling group using a specific example.
Before deletion, change the AutoScaling group to the unused status.

1

Create a request for updating a group by specifying the following:

Action key: "UpdateAutoScalingGroup"

AutoScalingGroupName key: AutoScaling group name

DesiredCapacity key: "0"

MaxSize key: "0"

MixSize key: "0"

Command (parameter) = key	Value (sample) = value
Action	UpdateAutoScalingGroup
AutoScalingGroupName	<AutoScalingGroupName>
DesiredCapacity	0
MaxSize	0
MinSize	0
SignatureMethod	HmacSHA256
SignatureVersion	2
Version	2011-01-01
Timestamp	2013-01-30T18%3A09%3A45Z
AWSAccessKeyId	<APIKEY>

2

When the request is successful, a response is returned in xml format as below.

```
<UpdateAutoScalingGroupResponse xmlns="http://autoscaling.amazonaws.com/doc/2011-01-01/">
  <ResponseMetadata>
    <RequestId>f30efdd4-64a3-ad04-191a-1cafb7f5c924</RequestId>
  </ResponseMetadata>
</UpdateAutoScalingGroupResponse>
```

3-8) Deleting an AutoScaling group and launch configuration

3

Creating a request for deleting an AutoScaling group or its policy by specifying the following:

Action key: "DeleteAutoScalingGroup"

AutoScalingGroupName key: AutoScaling group name

Command (parameter) = key	Value (sample) = value
Action	DeleteAutoScalingGroup
AutoScalingGroupName	<AutoScalingGroupName>
SignatureMethod	HmacSHA256
SignatureVersion	2
Version	2011-01-01
Timestamp	2013-01-30T18%3A09%3A45Z
AWSAccessKeyId	<APIKEY>

4

When the request is successful, a response is returned in xml format as below.

```
<DeleteAutoScalingGroupResponse xmlns="http://autoscaling.amazonaws.com/doc/2011-01-01/">
  <ResponseMetadata>
    <RequestId>7758715a-6e80-e873-1721-e70a0b954937</RequestId>
  </ResponseMetadata>
</DeleteAutoScalingGroupResponse>
```

3-8) Deleting an AutoScaling group and launch configuration

The following explains how to delete a launch configuration using a specific example.

1

Create a request for deleting a launch configuration by specifying the following:

Action key: "DeleteLaunchConfiguration"

LaunchConfigurationName key: Launch configuration name

Command (parameter) = key	Value (sample) = value
Action	DeleteLaunchConfiguration
LaunchConfigurationName	<LaunchConfigurationName>
SignatureMethod	HmacSHA256
SignatureVersion	2
Version	2011-01-01
Timestamp	2013-01-30T18%3A09%3A45Z
AWSAccessKeyId	<APIKEY>

2

When the request is successful, a response is returned in xml format as below.

```
<DeleteLaunchConfigurationResponse xmlns="http://autoscaling.amazonaws.com/doc/2011-01-01/">
  <ResponseMetadata>
    <RequestId>97f39410-1a62-18ea-a367-e2058595b43b</RequestId>
  </ResponseMetadata>
</DeleteLaunchConfigurationResponse>
```

4-1) AS API list (Action)

This service supports the following actions:

Action	Command
	CreateAutoScalingGroup
	CreateLaunchConfiguration
	CreateOrUpdateTags
	DeleteAutoScalingGroup
	DeleteLaunchConfiguration
	DeleteNotificationConfiguration
	DeletePolicy
	DeleteScheduledAction
	DeleteTags
	DescribeAdjustmentTypes
	DescribeAutoScalingGroups
	DescribeAutoScalingInstances
	DescribeAutoScalingNotificationTypes
	DescribeLaunchConfigurations
	DescribeMetricCollectionTypes
	DescribeNotificationConfigurations
	DescribePolicies
	DescribeScalingActivities
	DescribeScalingProcessTypes
	DescribeScheduledActions
	DescribeTags
	DescribeTerminationPolicyTypes
	DisableMetricsCollection
	EnableMetricsCollection
	ExecutePolicy
	PutNotificationConfiguration
	PutScalingPolicy
	PutScheduledUpdateGroupAction
	ResumeProcesses
	SetDesiredCapacity
	SetInstanceHealth
	SuspendProcesses
	TerminateInstanceInAutoScalingGroup
	UpdateAutoScalingGroup

The following APIs are NOT supported:
AttachInstances
DescribeAccountLimits