

Alibaba Cloud Auto Scaling

Best practices

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Generic conventions

Table -1: Style conventions

Style	Description	Example
	This warning information indicates a situation that will cause major system changes, faults, physical injuries, and other adverse results.	 Danger: Resetting will result in the loss of user configuration data.
	This warning information indicates a situation that may cause major system changes, faults, physical injuries, and other adverse results.	 Warning: Restarting will cause business interruption. About 10 minutes are required to restore business.
	This indicates warning information, supplementary instructions, and other content that the user must understand.	 Note: Take the necessary precautions to save exported data containing sensitive information.
	This indicates supplemental instructions, best practices, tips, and other content that is good to know for the user.	 Note: You can use Ctrl + A to select all files.
>	Multi-level menu cascade.	Settings > Network > Set network type
Bold	It is used for buttons, menus, page names, and other UI elements.	Click OK .
Courier font	It is used for commands.	Run the <code>cd /d C:/windows</code> command to enter the Windows system folder.
<i>Italics</i>	It is used for parameters and variables.	<code>bae log list --instanceid Instance_ID</code>
[] or [a b]	It indicates that it is a optional value, and only one item can be selected.	<code>ipconfig [-all -t]</code>
{ } or {a b}	It indicates that it is a required value, and only one item can be selected.	<code>swich {stand / slave}</code>

Contents

Legal disclaimer.....	I
Generic conventions.....	I
1 API quick start.....	1
1.1 Process introduction.....	1
1.2 Create a scaling group.....	1
1.3 Create a scaling configuration.....	2
1.4 Enable a scaling group.....	2
1.5 Create a scaling rule.....	2
1.6 Create a scheduled task.....	3

1 API quick start

1.1 Process introduction

This topic explains how to use APIs to create and configure overall scaling solutions, including scheduled, dynamic, customized, and fixed quantity scaling.

Follow the steps shown in the following figure. The first three steps are used to create a simple scaling solution:



1. Create a scaling group. Configure the minimum (Min Size) and maximum (Max Size) number of ECS instances for scaling, and select a Server Load Balancer instance and an RDS instance.
2. Create scaling configuration. Specify the specifications of ECS instances used for Auto Scaling , such as Image ID and Instance Type.
3. Enable the scaling group according to the scaling configuration created in Step 2.
4. Create a scaling rule. For example, **adding N (number) ECS instances**.
5. Create a scheduled task. For example, triggering the scaling rule at 13:00.
6. Create an alarm task (CloudMonitor API PutAlarmRule). For example, adding 1 ECS instance when the CPU usage is equal to or greater than 80%.

1.2 Create a scaling group

This topic gives you an example of how to make the CreateScalingGroup API request, and specifying MinSize and MaxSize.

```
http://ess.aliyuncs.com/?Action=CreateScalingGroup
&RegionId=cn-qingdao
&MaxSize=20
&MinSize=2
&LoadBalancerId=147b46d767c-cn-qingdao-cm5-a01
&DBInstanceId.1=rdszzzyybaeu
&DBInstanceId.2=rdsia3u3yia3u3y
&<Public Request Parameters>
```

Response example

```
<CreateScalingGroupResponse>
  <ScalingGroupId>dp8VqSd9ENXPc0ciVmbrBT1</ScalingGroupId>
  <RequestId>536E9CAD-DB30-4647-AC87-AA5CC38C5382</RequestId>
```

```
</CreateScalingGroupResponse>
```

1.3 Create a scaling configuration

You must specify the attributes of the ECS instances to be scaled, such as the ImageID and InstanceType. You must specify the ScalingGroupId returned in step 1.

```
http://ess.aliyuncs.com/?Action=CreateScalingConfiguration
&ScalingGroupId=dP8VqSd9ENXPc0ciVmbrBT1
&SecurityGroupId=sg-280ih3w4b
&ImageId=centos6u5_64_20G_aliaegis_20140703.vhd
&InstanceType=ecs.t1.xsmall
&<common request parameters>
```

Response example

```
<CreateScalingConfigurationResponse>
  <ScalingConfigurationId>eOs27Kb0oXvQcUYjEGelJqUy</ScalingCon
figurationId>
  <RequestId>5CC0AD41-08ED-4559-A683-6F56355FE068</RequestId>
</CreateScalingConfigurationResponse>
```

1.4 Enable a scaling group

This topic gives you an example of how to make the EnableScalingGroup API request according to the scaling configuration you specified, and add an existing ECS instance.

```
http://ess.aliyuncs.com/?Action=EnableScalingGroup
&ScalingGroupId=dP8VqSd9ENXPc0ciVmbrBT1
&ActiveScalingConfigurationId=eOs27Kb0oXvQcUYjEGelJqUy
&InstanceId.1=i-283vvytn
&<Public Request Parameters>
```

Response example

```
< EnableScalingGroupResponse>
  <RequestId>6469DCD0-13AC-487E-85A0-CE4922908FDE</RequestId>
</ EnableScalingGroupResponse>
```

1.5 Create a scaling rule

This topic is an example of API request CreateScalingRule(create a scaling rule). You must specify the ScalingGroupId.

```
http://ess.aliyuncs.com/?Action=CreateScalingRule
&ScalingGroupId=dP8VqSd9ENXPc0ciVmbrBT1
&AdjustmentType=QuantityChangeInCapacity
&AdjustmentValue=1
```



```
&<common request parameters>
```

Response example

```
<CreateScalingRuleResponse>  
<ScalingRuleAri>  
ari:acs:ess:cn-qingdao:1344371:scalingrule/eMKWG8SRNb9dBLAjweNI1Ik  
</ScalingRuleAri>  
  <ScalingRuleId>eMKWG8SRNb9dBLAjweNI1Ik</ScalingRuleId>  
  <RequestId>570C84F4-A434-488A-AFA1-1E3213682B33</RequestId>  
</CreateScalingRuleResponse>
```

1.6 Create a scheduled task

This topic is an example of API request `CreateScheduledTask` (create a scheduled task). You must specify the `ScalingRuleAri`.

```
http://ess.aliyuncs.com/?Action=CreateScheduledTask  
&RegionId=cn-qingdao  
&LaunchTime=2014-08-17T12:00Z  
&RecurrenceType=Daily  
&RecurrenceValue=1  
&RecurrenceEndTime=2014-09-17T16:55Z  
&ScheduledAction=ari:acs:ess:cn-qingdao:1344371:scalingrule/eMKWG8SRNb  
9dBLAjweNI1Ik  
&<common request parameters>
```

Response example

```
<CreateScheduledTaskResponse>  
  <ScheduledTaskId>edRtShc57WGXdt8TlPbrjsnV</ScheduledTaskId>  
  <RequestId>0F02D931-2B12-44D7-A0E9-39925C13D15E</RequestId>  
</CreateScheduledTaskResponse>
```