

Alibaba Cloud

Resource Orchestration Service

FAQ

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Document conventions









Style	Description	Example
 Danger	A danger notice 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.
 Warning	A warning notice 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 restart an instance.
 Notice	A caution notice indicates warning information, supplementary instructions, and other content that the user must understand.	 Notice: If the weight is set to 0, the server no longer receives new requests.
 Note	A note indicates supplemental instructions, best practices, tips, and other content.	 Note: You can use Ctrl + A to select all files.
>	Closing angle brackets are used to indicate a multi-level menu cascade.	Click Settings> Network> Set network type .
Bold	Bold formatting is used for buttons, menus, page names, and other UI elements.	Click OK .
Courier font	Courier font is used for commands	Run the <code>cd /d C:/window</code> command to enter the Windows system folder.
<i>Italic</i>	Italic formatting is used for parameters and variables.	<code>bae log list --instanceid</code> <i>Instance_ID</i>
[] or [a b]	This format is used for an optional value, where only one item can be selected.	<code>ipconfig [-all -t]</code>
{ } or {a b}	This format is used for a required value, where only one item can be selected.	<code>switch {active stand}</code>

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1. Why did template validation fail?

This topic describes why template validation fails.

Format

Make sure that the template is a valid JSON or YAML file with UTF-8 encoding. The files are valid if their content can be correctly interpreted as JSON or YAML.

Version (ROSTemplateFormatVersion)

Make sure that ROSTemplateFormatVersion is correctly spelled and the value is 2015-09-01.


Mappings

Make sure that mapping definitions meet the Resource Orchestration Service (ROS) requirements.

 **Notice** Functions cannot be used in mappings.

Parameters

Make sure that parameter definitions meet the ROS requirements.

 **Notice** Functions cannot be used in parameters. If the parameter definition contains a constraint and a default value, the default value must also conform to the parameter constraint.

Resources

Resource IDs cannot contain forward slashes (/).

A resource definition must contain a Type property whose value is of the String type.

A resource definition can only contain values of the Type, Properties, Metadata, DependsOn, DeletionPolicy, and Description properties.

Outputs

A value must be defined in an output.

Unsupported resource types

If the template contains unsupported resources, validation fails.

Others

Make sure that the size of the template file is no larger than 512 KB.

Make sure that the template contains only the following top-level objects:

ROSTemplateFormatVersion, Description, Mappings, Parameters, Resources, and Outputs.

2. Why did resource stack creation fail?

This topic describes the reasons why a stack fails to create.

Name duplication

Stacks that belong to the same user must have unique names.

Invalid stack name

A stack name cannot start with a number or contain non-alphanumeric characters.

Resource creation failure

If any resource in the stack fails to create, the whole stack fails. For example, if an ECS instance fails to create due to insufficient memory, the resource stack creation also fails.

Limit reached

Each user can create up to 50 resource stacks. For more information, see [Constraints](#).

3. Why does a stack fail to be deleted?

This topic describes the reasons why a stack fails to be deleted.

You cannot delete a stack that is in the process of an operation.

If the stack is in the process of an operation, you must wait until the operation has been completed before you can delete the stack.

4. How do I configure password confirmation?

This topic describes how to configure password confirmation when you create resource instances.

Context

When you create a stack, you enter the logon password only once. However, when you enter the password, it is possible to enter a wrong password and get locked out of your service instances, such as ECS and ApsaraDB for RDS instances.

Procedure

1. When you define `InstancePassword`, set `Confirm` to `true` to enable password confirmation.

```
"InstancePassword": {
  "Confirm": true,
  "NoEcho": true,
  "MaxLength": "41",
  "Description": "The login password of ECS instances",
  "Type": "String",
  "ConstraintDescription": "Consist of 8 to 41 characters of alphanumeric characters",
  "MinLength": "8",
  "AllowedPattern": "[a-zA-Z0-9]*"
},
```

 **Notice** Confirm can only be used when NoEcho is set to `true`.

2. Configure Instance Password in the **Configure Template Parameters** step of the Create Stack wizard.

5. How do I specify images for ECS resources?

This topic describes how to use Resource Orchestration Service (ROS) to specify images for ECS resources.

Prerequisites

An Alibaba Cloud account is created. To create an Alibaba Cloud account, go to the [Alibaba Cloud official website](#).

Context

If you use one of the following resource types to create ECS instances, you must specify images for the instances.

- `ALIYUN::ECS::Instance`
- `ALIYUN::ECS::InstanceClone`
- `ALIYUN::ECS::InstanceGroup`
- `ALIYUN::ECS::InstanceGroupClone`

You can use one of the following methods to set the `ImageId` parameter in a stack template:

- Specify an image ID.
- Specify an image by fuzzy match.
- Select an image by using the `AssociationProperty` parameter.

Specify an image ID

If you have the ID of the image that you want to use, specify the `ImageId` parameter in the template.

1. Log on to the [ECS console](#).
2. In the left-side navigation pane, choose **Instances & Images** > **Images**.
3. Click the **Public Image** tab.
Find the target image ID on the **Public Image** tab and record it for later use.
4. In the ROS template, set the `ImageId` parameter to the image ID. For more information about template creation, see [Create a template](#).

```
"ImageId": { "Type": "String", "Description": "Image Id, represents the image resource to startup o  
ne ECS instance", "Default": "centos_7_04_64_20G_alibase_201701015.vhd" },
```

Specify an image by fuzzy match

If you do not need specific versions of CentOS or Ubuntu images, you can use fuzzy match to specify an image ID. ROS uses the value you enter to find the best match.

ROS uses the following rules to find a match:

- If you specify only the operating system of images, such as CentOS, Windows, or Ubuntu, ROS matches the latest 64-bit image version.

- If you specify a major version of an operating system, ROS matches the latest 64-bit version of the system based on the major version. For example, if you enter CentOS_6, ROS matches the latest 64-bit version of CentOS 6. If you enter Ubutun_14, ROS matches the latest 64-bit version of Ubutun_14. If you enter Win2008r2, ROS matches the latest 64-bit version of Windows Server 2008 R2.
- If you use an asterisk (*) to replace a part of the image ID, such as centos_6_09_64_20G_alibase*.vhd , ROS matches the latest centos_6_09_64_20G_alibase public image version. Fuzzy match is used in the sample templates. In many cases, the image ID is set to CentOS_7 or Ubuntu_14.

Examples

```
"ImageId": {  
  "Type": "String",  
  "Description": "ECS Image",  
  "Label": "ECS Image",  
  "Default": "cent*****"  
},
```

Select an image by using the AssociationProperty parameter

Include AssociationProperty as part of your image ID definition when you declare it as a parameter in the Parameters section. Then, ROS lists the images within a region that you can select when you create the ECS instance.

AssociationProperty is used in the following example:

```
"ImageId": {  
  "AssociationProperty": "ALIYUN::ECS::Instance:ImageId",  
  "Type": "String",  
  "Default": "centos_7_04_64_20G_alibase_20170****.vhd",  
  "Description": "IDs of available images"  
}
```

In addition to the available image IDs, ROS displays the default image ID, or indicates whether the values specified by AllowedValues are available. Select the appropriate image ID to create ECS instances.

6. How do I specify different instance names and hostnames when I create multiple ECS instances at a time?

You can use `ALIYUN::ECS::InstanceGroup` to create multiple ECS instances at a time.

Specifically, use the `InstanceName` and `HostName` properties to define instance names and hostnames. You can use the following syntax to specify each instance name or hostname in Resource Orchestration Service (ROS):

`name_prefix[begin_number,bits]name_suffix`. The following fields are included in the syntax:

- `name_prefix`: Required. The prefix of the instance name or hostname.
- `[begin_number,bits]`: Required. The part that changes for each name. `begin_number` specifies the starting number of the instance name or hostname. `bits` specifies the number of digits of each number.

This part must meet the following requirements to be correctly parsed:

- `begin_number` and `bits` are separated by a comma without spaces.
- The value of `bits` ranges from 1 to 4.
- The value of `begin_number` ranges from 0 to 9999.

The value of `bits` follows the following rules:

- If you only specify a value for `begin_number`, the default value of `bits` is 4.
- If you do not specify a value for `begin_number` or `bits`, `begin_number` is set to 0 and `bits` is set to 4.
- If the specified value of `begin_number` has more digits than that specified in `bits`, the larger digit number takes effect. For example, in `[1234,1]`, the value of `begin_number` is 1234, and the value of `digits` is 1. 1234 is a four-digit number within the valid value range of 0 to 9999. Therefore, the actual value of `bits` is 4.

- `name_suffix`: Optional. The suffix of the instance name or hostname.

Example:

```
{
  "ROSTemplateFormatVersion" : "2015-09-01",
  "Resources" : {
    "WebServer": {
      "Type": "ALIYUN::ECS::InstanceGroup",
      "Properties": {
        "ImageId" : "Cen****",
        "InstanceType": "ecs.n4.large",
        "Password": "Test1234",
        "MinAmount": 2,
        "MaxAmount": 2,
        "SecurityGroupId": "sg-2zedcm7ep5quses0****",
        "SystemDiskCategory": "cloud_efficiency",
        "IoOptimized": "optimized",
        "InstanceName": "my.test-[1114]",
        "HostName": "host[]"
      }
    }
  }
}
```

ROS will create two ECS instances at a time based on the preceding template.

- The instance names of the two instances are my.test-1114 and my.test-1115.
- The hostnames of the two instances are host0000 and host0001.



Notice The InstanceName and HostName properties must be specified based on the preceding naming conventions to be correctly parsed. Otherwise, the template cannot be validated.

7.FAQ about SDKs

This topic lists common errors that may occur when you use SDKs.

ErrCode:SDK.ServerUnreachable

When you use SDKs, the following errors may occur:

```
ErrCode:SDK.ServerUnreachable
ErrMsg:SocketTimeoutException has occurred on a socket read or accept.
```

You can extend the timeout period (unit: ms) to solve these problems.

- The Python sample code is as follows:

```
request.set_connect_timeout(10000)
request.set_read_timeout(10000)
```

- The Java sample code is as follows:

```
request.setConnectTimeout(10000);
request.setReadTimeout(10000);
```