# Alibaba Cloud

Resource Management Resource Group

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C-J Alibaba Cloud

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# **Document conventions**

Style	Description	Example
A 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.
O 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.
⑦ 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 cd /d C:/window command to enter the Windows system folder.
Italic	Italic formatting is used for parameters and variables.	bae log listinstanceid Instance_ID
[] or [a b]	This format is used for an optional value, where only one item can be selected.	ipconfig [-all -t]
{} or {a b}	This format is used for a required value, where only one item can be selected.	switch {active stand}

# Table of Contents

1.	1.Manage resource groups			
	1.1. Create a resource group	05		
	1.2. View basic information of a resource group	05		
	1.3. Modify the name of a resource group	05		
	1.4. Delete a resource group	06		
	1.5. Add RAM authorization	07		
	1.6. Revoke RAM authorization	07		
	1.7. Add a tag to a resource group	08		
2.	2.Manage resources			
	2.1. Purchase resources for a resource group	09		
	2.2. Transfer resources across resource groups	09		
	2.3. Search for resources in a resource group	10		
	2.4. Query resources that belong to different resource groups	11		
	2.5. Export resources in a resource group	12		
	2.6. Export resources in different resource groups	13		
	2.7. Manage resources in a resource group	13		
	2.8. Add a tag to a resource	14		
	2.9. Service-linked role for RMC	14		

# 1.Manage resource groups 1.1. Create a resource group

You can create resource groups to manage cloud products or resources by department or project.

### Prerequisites

You are an Alibaba Cloud account administrator or a RAM user with administrative permissions on resource groups.

### Procedure

- 1. Log on to the Resource Management console.
- 2. In the left-side navigation pane, click **Resource Group**.
- 3. On the Resource Group page, click Create Resource Group.
- 4. In the Create Resource Group pane that appears, set **Resource Group Name** and **Display Name**.
- 5. Click OK.

#### Result

After the preceding operations are complete, the resource group is in the **Creating** state. Wait for

about three seconds and click the C button. If the state of the resource group changes to Available,

the creation of the resource group succeeded.

# 1.2. View basic information of a resource group

This topic describes how to view basic information of a resource group, including the resource group ID, resource group name, and resource group display name.

## Procedure

- 1. Log on to the Resource Management console.
- 2. In the left-side navigation pane, click **Resource Group**.
- 3. In the **Display Name** column, click the name of the resource group you want to query.
- 4. On the **Settings** tab, view basic information of the resource group in the **Basic Information** section.

# 1.3. Modify the name of a resource group

This topic describes how to modify the name of a resource group.

## Procedure

1. Log on to the Resource Management console.

- 2. In the left-side navigation pane, click **Resource Group**.
- 3. In the Display Name column, click the resource group whose name you want to modify.
- 4. In the **Basic Information** section of the **Settings** tab, click next to the display name of the

resource group.

5. Enter a new name for the resource group and click **OK**.

# 1.4. Delete a resource group

If you no longer require a resource group, you can delete the resource group. The default resource group cannot be deleted.

#### Prerequisites

Before you delete a resource group, make sure that the resource group does not contain resources. If the resource group contains resources, transfer the resources to another resource group or release the resources. For more information about how to transfer the resources, see Transfer resources across resource groups.

#### Procedure

- 1. Log on to the Resource Management console.
- 2. In the left-side navigation pane, click **Resource Group**.
- 3. On the **Resource Group** page, find the resource group that you want to delete and click its name in the Display Name column.
- 4. Click the Settings tab. In the Delete section of the Settings tab, click Delete.
- 5. In the **Delete** message, click **OK**.

**?** Note After a resource group is deleted, it cannot be recovered. Proceed with caution when you delete a resource group.

### Result

After the preceding steps are performed, the system checks whether the resource group contains resources. This process takes three days. The resource group remains in the **Deleting** state during this period.

- The system renames a resource group that is in the Deleting state in the following format: <origin al name of the resource group>-<ID of the resource group>-<Date when the resource group was deleted>. For example, if a delete operation was performed on the resource group TestGroup On August 12, 2021, the resource group is renamed TestGroup-rg-aekzcobgwwj\*\*\*\*-20210812 .
- If the system detects that a resource group in the **Deleting** state still contains resources, the resource group fails to be deleted, and the system attempts to roll back the new name of the resource group to the original name. If the original name is already used by another resource group, the system retains the new name. If you still want to delete the resource group, you must delete resources from the resource group and delete the resource group again.
- A resource group in the **Deleting** state occupies your resource group quota. If your quota is insufficient, go to the Quota Center to apply for a quota.

# 1.5. Add RAM authorization

After you create resource groups, you can designate an administrator for each resource group. Resource group administrators can grant the operation permissions on the resource groups to other users.

## Prerequisites

You are a cloud account administrator or a RAM user with administrative permissions on resource groups.

## Context

Before you perform this task, make sure that you understand the relationship between resource group authorization and RAM.

- RAM offers permission management for resource group authorization.
- Resource group authorization uses all the policies in RAM. The policies include system policies and custom policies.
- Resource group authorization grants permissions to RAM users, RAM user groups, or RAM roles.
- The permissions granted by using RAM take effect on all resources under the relevant Alibaba Cloud account. The permissions granted by using resource group authorization only take effect on resources in a specific resource group.

### Procedure

- 1. Log on to the Resource Management console.
- 2. In the left-side navigation pane, click **Resource Group**.
- 3. On the page that appears, find the resource group for which you want to add RAM authorization and click **Manage Permission** in the **Actions** column.
- 4. Click Grant Permission.
- 5. Set Principal.
- 6. Select the policy you want to attach to the principal.
- 7. Click OK.

**?** Note After the authorization is complete, the principal is granted the relevant permissions on the resources in the resource group.

# 1.6. Revoke RAM authorization

This topic describes how to revoke permissions from RAM users, user groups, or RAM roles.

## Prerequisites

Only Alibaba Cloud accounts or RAM users that are authorized to manage resource groups can perform this operation.

### Procedure

1. Log on to the Resource Management console.

- 2. In the left-side navigation pane, click **Resource Group**.
- 3. In the resource group list, find the target resource group and click Manage Permission in the Actions column.
- 4. On the Permissions tab, select the permission you want to revoke and click **Revoke Authorization** in the **Actions** column.
- 5. Click OK.

Onte You can select more than one permission at a time and click Revoke Authorization in the lower part of the page to batch revoke permissions.

## Result

After the permission is revoked, RAM users, user groups, or RAM roles do not have the operation permission on resources in the resource group.

# 1.7. Add a tag to a resource group

You can add tags to resource groups. This way, you can manage your resource groups based on tags.

### Procedure

- 1. Log on to the Resource Management console.
- 2. In the left-side navigation pane, click **Resource Group**.
- 3. On the Resource Group page, find the resource group to which you want to add a tag and click the name of the resource group.
- 4. On the page that appears, click the **Settings** tab. Then, click the *i*con on the right side of **Tag**.
- 5. In the Edit Tag dialog box, enter a tag key and a tag value. Then, click OK.
- 6. In the **Configure Tags successfully** message, click **Close**.

# 2.Manage resources 2.1. Purchase resources for a resource group

After you create a resource group, you can purchase resources for the resource group.

## Context

- You can purchase resources in the Resource Management console or the consoles of other Alibaba Cloud services. You must select a resource group when you purchase resources. This topic describes how to purchase resources in the Resource Management console.
- Many Alibaba Cloud services support resource groups. For more information, see Services that work with Resource Group.

### Procedure

- 1. Log on to the Resource Management console.
- 2. In the left-side navigation pane, click **Resource Group**.
- 3. Find the resource group for which you want to purchase resources and click **Manage Resource** in the **Actions** column.
- 4. On the Resources tab, click **Purchase**. You must select the resource group when you purchase a resource.

After the resource is purchased, it belongs to the selected resource group.

# 2.2. Transfer resources across resource groups

When the ownership of resources changes, you can transfer resources across resource groups to readjust the ownership of the resources.

## Context

You can transfer resources across resource groups in the Resource Management console or by calling the related API operations of Alibaba Cloud services that support resource groups. This topic describes how to transfer resources across resource groups in the Resource Management console. For more information, see Services that work with Resource Group.

## Transfer resources from a resource group

To transfer resources from a resource group, perform the following steps:

- 1. Log on to the Resource Management console.
- 2. In the left-side navigation pane, click **Resource Group**.
- 3. Find the resource group from which you want to transfer resources and click **Manage Resource** in the **Actions** column.
- 4. Select the resources that you want to transfer out, and click **Transfer Out** in the lower part of the

page.

- 5. In the **Transfer Out** panel, select the resource group to which you want to transfer the selected resources.
- 6. Click **OK**.

#### Transfer resources to a resource group

To transfer resources to a resource group, perform the following steps:

- 1. Log on to the Resource Management console.
- 2. In the left-side navigation pane, click **Resource Group**.
- 3. Find the resource group to which you want to transfer resources and click **Manage Resource** in the **Actions** column.
- 4. In the upper part of the resource list, click **Transfer In**.
- 5. In the **Transfer In** panel, select the resource group from which you want to transfer resources and select the resources that you want to transfer to the current resource group.

You can use the search feature to quickly find the resource group and resources.

6. Click OK.

# 2.3. Search for resources in a resource group

You can use a single field or a combination of several fields to search for resources that you have permissions to access in a resource group.

### Supported fields

- Service: You can use this field to search for the resources of an Alibaba Cloud service.
- Resource type: You can use this field to search for the resources of a specific type.

For more information about the supported resource types, see the **Resource type** column in Services that work with Resource Group.

- Region: You can use this field to search for resources that reside in a specific region.
- Resource ID: You can use this field to search for the resource indicated by an ID.
- Resource metadata: You can use this field to search for a resource based on its name, IP address, or tags.

The Resource Meta Center (RMC) service allows you to use resource metadata to search for resources that belong to different resource groups, are used by different Alibaba Cloud services, or are of different types. The metadata includes resource names, IP addresses, and tags. The types of resource metadata that you can use to search for resources vary based on Alibaba Cloud services. For more information, see the **Resource metadata** column in Services that work with Resource Group.

#### Procedure

- 1. Log on to the Resource Management console.
- 2. In the left-side navigation pane, click **Resource Group**.
- 3. On the Resource Group page, find the resource group whose resources you want to search for and

click the name of the resource group.

- 4. On the page that appears, click the **Resources** tab.
- 5. (Optional)Grant permissions to RMC if this is the first time that you use the resource metadatabased search feature.
  - i. In the upper part of the Resources tab, click Enable to grant the required permissions to RMC.
  - ii. In the Resource Meta Center Authorization message, click OK.

The system creates the service-linked role AliyunServiceRoleForResourceMetaCenter for RMC. This way, RMC is authorized to search for the metadata of Alibaba Cloud services. During the authorization, RMC obtains resource metadata. After the metadata is obtained, you can use the resource metadata-based search feature to search for the desired resources. The time that is required for RMC to obtain resource metadata depends on the number of resources within your account. You may need to wait for a few minutes or hours before the authorization is complete. You need to authorize RMC only once. For more information about the service-linked role AliyunServiceRoleForResourceMetaCenter, see Service-linked role for RMC.

**Note** If the metadata of a resource is modified, the modification is synchronized to RMC about 2 minutes later. Therefore, you must wait for about 2 minutes before you can use the new resource metadata to search for the resource.

- 6. Specify filter conditions and click the  $\bigcirc$  icon.
- 7. Search for the resources that you have permissions to access in the resource group.

### References

You can search for the resources that belong to different resource groups within your Alibaba Cloud account and that you have permissions to access. For more information, see <u>Query resources that belong</u> to different resource groups.

# 2.4. Query resources that belong to different resource groups

You can use a single field or a combination of several fields to query resources that belong to different resource groups within your Alibaba Cloud account. You can query only resources that support resource groups and are added to resource groups.

## Supported fields

- Resource group: You can use this field to query resources in a resource group.
- Service: You can use this field to query the resources of an Alibaba Cloud service.
- Resource type: You can use this field to query the resources of a specific type.

For more information about the supported resource types, see the **Resource type** column in Services that work with Resource Group.

- Region: You can use this field to query resources that reside in a specific region.
- Resource ID: You can use this field to query the resource indicated by an ID.
- Resource metadata: You can use this field to query a resource based on its name, IP address, or tags.

The Resource Meta Center (RMC) service allows you to use resource metadata to query resources that belong to different resource groups, are used by different Alibaba Cloud services, or are of different types. The metadata includes resource names, IP addresses, and tags. The types of resource metadata that you can use to query resources vary based on Alibaba Cloud services. For more information, see the **Resource metadata** column in Services that work with Resource Group.

#### Procedure

- 1. Log on to the Resource Management console.
- 2. In the left-side navigation pane, click My Resource.
- 3. (Optional)Grant permissions to RMC if this is the first time that you use the resource metadatabased search feature.
  - i. In the upper part of the Resources tab, click Enable to grant the required permissions to RMC.
  - ii. In the Resource Meta Center Authorization message, click OK.

The system automatically creates the service-linked role AliyunServiceRoleForResourceMetaCenter for RMC. This way, RMC is authorized to query the metadata of Alibaba Cloud services. During the authorization, RMC obtains resource metadata. After the metadata is obtained, you can use the resource metadata-based search feature to query the desired resources. The time that is required for RMC to obtain resource metadata depends on the number of resources within your account. You may need to wait for a few minutes or hours before the authorization is complete. You need to authorize RMC only once. For more information about the service-linked role AliyunServiceRoleForResourceMetaCenter, see Service-linked role for RMC.

**?** Note If the metadata of a resource is modified, the modification is synchronized to RMC about 2 minutes later. Therefore, you must wait for about 2 minutes before you can use the new resource metadata to query the resource.

- 4. Specify filter conditions and click the  $\bigcirc$  icon.
- 5. Query resources that belong to different resource groups within your Alibaba Cloud account and that you have permissions to access.

### References

You can also query resources in a specific resource group that you have permissions to access. For more information, see Search for resources in a resource group.

# 2.5. Export resources in a resource group

You can export all resources in a resource group as a CSV file. This way, you can view the resources in the CSV file on your on-premises machine.

### Procedure

- 1. Log on to the Resource Management console.
- 2. In the left-side navigation pane, click **Resource Group**.

- 3. On the Resource Group page, find the resource group from which you want to export resources and click the resource group name.
- 4. On the page that appears, click the **Resources** tab.
- 5. On the Resources tab, click the 🐷 icon to export all resources in the resource group as a CSV file.

# 2.6. Export resources in different resource groups

You can export the resources that belong to different resource groups within your Alibaba Cloud account and that you have permissions to access.

#### Procedure

- 1. Log on to the Resource Management console.
- 2. In the left-side navigation pane, click My Resource.
- 3. (Optional)Specify filter conditions to query resources.

For more information, see Query resources that belong to different resource groups.

4. In the upper-right corner, click the 🚽 icon to export all resources as a CSV file.

If you do not specify filter conditions, the system exports all resources that you have permissions to access. If you specify filter conditions, the system exports the resources that you query.

# 2.7. Manage resources in a resource group

After you obtain management permissions on resource groups, you can manage resources in a resource group in the Resource Management console or the consoles of other Alibaba Cloud services that support resource groups.

#### Manage resources in the Resource Management console

- 1. Log on to the Resource Management console.
- 2. In the left-side navigation pane, click **Resource Group**.
- 3. Find the resource group for which you want to manage resources and click **Manage Resource** in the **Actions** column.
- 4. On the page that appears, find the resource that you want to manage and click **Manage** in the **Actions** column to go to the console of the related Alibaba Cloud service and perform the desired operation.

### Manage resources in the console of the related Alibaba Cloud service

1. Log on to the console of the related Alibaba Cloud service.

For more information, see Services that work with Resource Group.

2. In the top navigation bar, select the desired resource group.

**?** Note You can select only a resource group that you are authorized to manage. After you select a resource group, all resources in the resource group are displayed in the resource list.

3. Specify filter conditions to search for the desired resource and manage the resource.

# 2.8. Add a tag to a resource

You can add tags to resources in the Resource Management console. This way, you can manage the resources based on the tags.

#### Add a tag to a resource on the My Resource page

- 1. Log on to the Resource Management console.
- 2. In the left-side navigation pane, click My Resource.
- 3. Find the resource to which you want to add a tag, move the pointer over the icon in the Tags column, and then click **Edit**.

For a resource to which tags are added, you can click **Edit** to modify the tags or add other tags to the resource.

- 4. In the Edit Tag dialog box, enter a tag key and a tag value, and click OK.
- 5. In the Configure Tags successfully message, click Close.

#### Add a tag to a resource on the Resource Group page

- 1. Log on to the Resource Management console.
- 2. In the left-side navigation pane, click **Resource Group**.
- 3. On the Resource Group page, find the desired resource group and click the name of the resource group.
- 4. On the page that appears, click the **Resources** tab.
- 5. Find the resource to which you want to add a tag, move the pointer over the icon in the Tags column, and then click **Edit**.

For a resource to which tags are added, you can click **Edit** to modify the tags or add other tags to the resource.

- 6. In the Edit Tag dialog box, enter a tag key and a tag value, and click OK.
- 7. In the **Configure Tags successfully** message, click **Close**.

# 2.9. Service-linked role for RMC

This topic describes the scenarios, policies, creation, and deletion of the service-linked role for the Resource Meta Center (RMC) service. This role is named AliyunServiceRoleForResourceMetaCenter.

#### Scenarios

RMC uses the service-linked role AliyunServiceRoleForResourceMetaCenter to access the resources of other Alibaba Cloud services and obtain the metadata of the resources. The metadata includes resource names, IP addresses, and tags. You can use resource metadata to query the desired resources.

For more information about the service-linked role, see Service-linked roles.

### **Role description**

Role name: AliyunServiceRoleForResourceMetaCenter

Policy: AliyunServiceRolePolicyForResourceMetaCenter

Permission description: the permissions to access other Alibaba Cloud services and create and delete service-linked role

```
{
   "Version": "1",
  "Statement": [
      {
           "Action": [
               "ecs:Describe*",
               "ess:Describe*",
               "vpc:Describe*",
               "rds:DescribeDBInstance*",
               "rds:DescribeRegions",
               "rds:DescribeBackup*",
               "rds:DescribeParameters",
               "rds:DescribeSQLCollector*",
               "slb:Describe*",
               "*:DescribeTags",
               "oss:GetService",
               "oss:GetBucket*",
               "oss:ListBuckets",
               "oss:ListObjects",
               "ram:List*",
               "ram:Get*",
               "actiontrail:LookupEvents",
               "actiontrail:Describe*",
               "actiontrail:Get*",
               "ots:BatchGet*",
               "ots:Describe*",
               "ots:Get*",
               "ots:List*",
               "ocs:Describe*",
               "cms:Get*",
               "cms:List*",
               "cms:Query*",
               "cms:BatchQuery*",
               "cms:Describe*",
               "kvstore:Describe*",
               "fc:Get*",
               "fc:List*",
               "kms:DescribeKey",
               "kms:DescribeRegions",
               "kms:ListAliases",
               "kms:ListAliasesByKeyId",
               "kms:ListKeys",
               "kms:DescribeKeyVersion",
               "kms:ListKeyVersions",
               "kms:ListSecrets",
               "kms:DescribeSecret",
```

"cdn:Describe\*", "yundun\*:Get\*", "yundun\*:Describe\*", "yundun\*:Query\*", "yundun\*:List\*", "polardb:Describe\*", "dds:Describe\*", "cen:Describe\*", "mns:ListTopic", "mns:GetTopicAttributes", "resourcemanager:GetAccount", "resourcemanager:ListAccountsForParent", "resourcemanager:ListAccounts", "resourcemanager:GetFolder", "resourcemanager:ListFoldersForParent", "resourcemanager:ListAncestors", "resourcemanager:GetResourceDirectory", "resourcemanager:ListHandshakesForResourceDirectory", "resourcemanager:GetHandshake", "resourcemanager:ListResourceGroups", "resourcemanager:GetResourceGroup", "composer:GetFlow", "composer:DescribeFlow", "nas:Describe\*", "hbase:Describe\*", "hbase:Get\*", "hbase:List\*", "hbase:Query\*", "cs:Get\*", "cs:List\*", "dms:List\*", "dms:Get\*", "mq:OnsInstanceInServiceList", "mq:OnsInstanceBaseInfo", "mq:OnsTopicList", "mq:OnsGroupList", "mq:QueryInstanceBaseInfo", "mq:List\*", "alidns:Describe\*", "alidns:List\*", "mse:Query\*", "mse:List\*", "ros:Describe\*", "ros:Get\*", "ros:List\*", "elasticsearch:List\*", "elasticsearch:Describe\*", "dcdn:Describe\*", "hcs-sgw:Describe\*", "eci:Describe\*", "privatelink:List\*", "privatelink:Get\*", "yundun-antiddosbag:Describe\*", "yundun-cert:Describe\*", "has-sour Describe\*"

```
nes sym. Deserroe ,
        "brain-industrial:List*",
        "brain-industrial:Get*",
        "imagesearch:List*",
        "imagesearch:Describe*",
        "hitsdb:Describe*",
        "apigateway:Describe*",
        "cmn:List*",
        "cmn:Get*",
        "ledgerdb:Describe*",
        "cms:Describe*",
        "pvtz:Describe*",
        "oos:Search*",
        "oos:List*",
        "adb:Describe*",
        "edas:Read*",
        "drds:Describe*",
        "gpdb:Describe*",
        "log:ListProject",
        "log:GetProject",
        "log:ListLogStores",
        "log:GetLogStore",
        "eventbridge:Get*",
        "eventbridge:List*",
        "pvtz:Describe*",
        "*:ListTagResources",
        "emr:List*",
        "emr:Describe*",
        "iot:List*",
        "iot:Get*",
        "iot:Query*",
        "smartag:Describe*",
        "smartag:List*",
        "alb:List*",
        "alb:Get*"
   ],
   "Resource": "*",
    "Effect": "Allow"
},
{
    "Action": "ram:DeleteServiceLinkedRole",
    "Resource": "*",
   "Effect": "Allow",
    "Condition": {
        "StringEquals": {
            "ram:ServiceName": "rmc.resourcemanager.aliyuncs.com"
        }
   }
},
{
   "Action": "ram:CreateServiceLinkedRole",
    "Resource": "*",
    "Effect": "Allow",
    "Condition": {
        "StringEquals": {
```

```
"ram:ServiceName": "rmc.resourcemanager.aliyuncs.com"
}
}
]
```

## Create the service-linked role AliyunServiceRoleForResourceMetaCenter

Before you can use resource metadata, such as resource names, IP addresses, or tags, to query the desired resources, you must activate the RMC service. When you activate the RMC service, the system automatically creates the service-linked role AliyunServiceRoleForResourceMetaCenter for RMC. For more information, see Search for resources in a resource group or Query resources that belong to different resource groups.

## Delete the service-linked role AliyunServiceRoleForResourceMetaCenter

If you no longer need to use resource metadata to query resources, you can delete the service-linked role AliyunServiceRoleForResourceMetaCenter in the Resource Access Management (RAM) console. For more information, see Delete a RAM role.