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Resource Management
API Reference

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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. List of operations by function

The following tables list the API operations available for use in Resource Management.

Resource Directory

Operation	Description
EnableResourceDirectory	Enables a resource directory.
SendVerificationCodeForEnableRD	Sends a verification code to the mobile phone number bound to a newly created account when you use the account to enable a resource directory.
GetResourceDirectory	Queries the information of a resource directory.
DestroyResourceDirectory	Disables a resource directory.
CreateFolder	Creates a folder.
ListFoldersForParent	Queries the information of all subfolders of a folder.
ListAncestors	Queries the information of all parent folders of a folder.
UpdateFolder	Changes the name of a folder.
GetFolder	Queries the information of a folder.
DeleteFolder	Deletes a folder.
InviteAccountToResourceDirectory	Invites an account to join a resource directory.
GetHandshake	Queries the information of an invitation.
AcceptHandshake	Accepts an invitation.
CancelHandshake	Cancels an invitation.
DeclineHandshake	Rejects an invitation.
ListHandshakesForAccount	Queries the invitations that are associated with an account.
ListHandshakesForResourceDirectory	Queries invitations in a resource directory.
CreateResourceAccount	Creates a member of the resource account type.
CreateCloudAccount	Creates a member of the cloud account type. <div style="background-color: #e0f2ff; padding: 10px; margin-top: 10px;">? Note This API operation is no longer maintained and updated.</div>

Operation	Description
PromoteResourceAccount	<p>Upgrades a member from a resource account to a cloud account.</p> <p>Note This API operation is no longer maintained and updated. You can call the UpdateAccount operation to switch the type of a member. For more information, see UpdateAccount.</p>
ResendCreateCloudAccountEmail	<p>Resends an email that is used to confirm the creation of a member of the cloud account type.</p> <p>Note This API operation is no longer maintained and updated.</p>
ResendPromoteResourceAccountEmail	<p>Resends an email that is used to confirm the upgrade of a member from a resource account to a cloud account.</p> <p>Note This API operation is no longer maintained and updated.</p>
CancelCreateCloudAccount	<p>Cancels the creation of a member of the cloud account type.</p> <p>Note This API operation is no longer maintained and updated.</p>
CancelPromoteResourceAccount	<p>Cancels the upgrade of a member from a resource account to a cloud account.</p> <p>Note This API operation is no longer maintained and updated.</p>
RemoveCloudAccount	Removes a member of the cloud account type.
GetAccount	Queries the information of a member.
MoveAccount	Moves a member from a folder to another.
ListAccountsForParent	Queries the information of members in a folder.
ListAccounts	Queries the information of all members in a resource directory.
GetPayerForAccount	Queries the information of a billing account.
UpdateAccount	Changes the display name or type of a member.

Operation	Description
ListTrustedServiceStatus	Queries the Alibaba Cloud services that are integrated with Resource Directory.
EnableControlPolicy	Enables the Control Policy feature.
DisableControlPolicy	Disables the Control Policy feature.
GetControlPolicyEnablementStatus	Queries the status of the Control Policy feature.
CreateControlPolicy	Creates a custom access control policy.
GetControlPolicy	Queries the details of an access control policy.
UpdateControlPolicy	Updates a custom access control policy.
DeleteControlPolicy	Deletes a custom access control policy.
AttachControlPolicy	Attaches a custom access control policy.
DetachControlPolicy	Detaches a custom access control policy.
ListControlPolicies	Queries access control policies.
ListControlPolicyAttachmentsForTarget	Queries the access control policies that are attached to a folder or member.
ListTargetAttachmentsForControlPolicy	Queries the objects to which an access control policy is attached.
RegisterDelegatedAdministrator	Specifies a member in a resource directory as a delegated administrator account of a trusted service.
DeregisterDelegatedAdministrator	Removes a delegated administrator account.
ListDelegatedAdministrators	Queries delegated administrator accounts.
ListDelegatedServicesForAccount	Queries the trusted services for which a member is specified as a delegated administrator account.
InitResourceDirectory	Enables a resource directory. ? Note This API operation is no longer maintained and updated. You can call the EnableResourceDirectory operation to enable a resource directory. For more information, see EnableResourceDirectory .

Resource Sharing

Operation	Description
EnableSharingWithResourceDirectory	Enables resource sharing within a resource directory.
CreateResourceShare	Creates a resource share.
ListResourceShares	Queries resource shares.
UpdateResourceShare	Changes the name of a resource share.
DeleteResourceShare	Deletes a resource share.
AssociateResourceShare	Associates resources or accounts with a resource share.
DisassociateResourceShare	Disassociates resources or accounts from a resource share.
ListResourceShareAssociations	Queries the association records of resource shares.
ListSharedResources	Queries the resources you share with other accounts or the resources other accounts share with you.
ListSharedTargets	Queries principals.
DescribeRegions	Queries the regions where the Resource Sharing service is available.

Resource Group

Operation	Description
CreateResourceGroup	Creates a resource group.
ListResourceGroups	Queries resource groups.
GetResourceGroup	Queries the information of a resource group.
CreatePolicy	Creates a policy.
DeleteResourceGroup	Deletes a resource group.
UpdateResourceGroup	Updates the basic information of a resource group.
ListPolicies	Queries policies.
GetPolicy	Queries the information of a policy.
CreatePolicyVersion	Creates a version for a policy.
DeletePolicyVersion	Deletes a version of a policy.
ListPolicyVersions	Queries the versions of a policy.
GetPolicyVersion	Queries the information of a policy version.

Operation	Description
SetDefaultPolicyVersion	Sets a default version for a policy.
AttachPolicy	Attaches a policy to an object.
DetachPolicy	Detaches a policy from an object.
ListPolicyAttachments	Queries the attachment records of policies.
DeletePolicy	Deletes a policy.
CreateRole	Creates a RAM role.
DeleteRole	Deletes a RAM role.
GetRole	Queries the information of a RAM role.
ListRoles	Queries RAM roles.
UpdateRole	Updates the information of a RAM role.
ListResources	Queries resources that can be accessed by the current account in resource groups.
MoveResources	Moves resources from one resource group to another.
CreateServiceLinkedRole	Creates a service-linked role.
DeleteServiceLinkedRole	Deletes a service-linked role.
GetServiceLinkedRoleDeletionStatus	Queries the status of the task that is used to delete a service-linked role.
TagResources	Adds tags to resource groups.
UntagResources	Removes tags from resource groups.
ListTagResources	Queries the tags that are added to resource groups.

② Note Both the Resource Management and Resource Access Management (RAM) services provide the API operations used to manage policies and the API operations used to manage RAM roles. Two API operations with the same name in Resource Management and RAM provide the same features. You can use either of the two API operations to perform the desired operations. However, two API operations with the same name in the two services have differences. For more information, see [API overview](#).

Tag

Operation	Description
-----------	-------------

Operation	Description
ListTagResources	Queries the tags that are added to the resources of various Alibaba Cloud services.
TagResources	Adds tags to the resources of various Alibaba Cloud services.
UntagResources	Removes tags from the resources of various Alibaba Cloud services.
ListTagKeys	Queries tag keys.
ListTagValues	Queries the values of a tag key.
DescribeRegions	Queries the regions where the Tag service is available.
CreateTags	Creates preset tags.
DeleteTag	Deletes a preset tag.

Resource Meta Center

Operation	Description
SearchResources	Queries the resources that can be accessed within the current account.

2. Make API requests

To send a Resource Management API request, you must send an HTTPS GET request to the Resource Management endpoint. You must add the request parameters that correspond to the API operation being called. After you call the API operation, the system returns a response. The request and response are encoded in UTF-8.

Request structure

Resource Management API operations use the RPC protocol. You can call Resource Management API operations by sending HTTPS GET requests.

The request syntax is as follows:

```
https://Endpoint/?Action=xx&Parameters
```

where:

- **Endpoint**
 - The endpoint of the API for Resource Directory and Resource Group is *resourcemanager.aliyuncs.com*.
 - For more information about the endpoint of the Tag API, see [Endpoints](#).
 - You can call the [DescribeRegions](#) operation to obtain the endpoint of the Resource Sharing API.
 - The endpoint of the API for Resource Meta Center (RMC) is rmc-intl.aliyuncs.com.
- **Action**

The name of the operation being performed. For example, to create a resource account, you must set the Action parameter to CreateResourceAccount.

- **Parameters**

The request parameters for the operation. Separate multiple parameters with ampersands (&).

Request parameters include both common parameters and operation-specific parameters. Common parameters include information such as the API version number and authentication information. For more information, see [Common parameters](#).

The following example demonstrates how to call the CreateResourceAccount operation to create a resource account:

 **Note** The sample request is formatted to improve readability.

```
https://resourcemanager.aliyuncs.com/?Action/CreateResourceAccount
&DisplayName=test
&SignatureVersion=1.0
&Format=JSON
&Timestamp=2020-03-31T12:00:00Z
&AccessKeyId=testid
&SignatureMethod=HMAC-SHA1
&Version=2020-03-31
&SignatureNonce=6a6e0ca6-4557-11e5-86a2-b8e8563d****
&Signature=xxxx%xxxx%3D
```

3.Signature method

You must sign all API requests to ensure security. Alibaba Cloud uses the request signature to verify the identity of the API caller. Each API request must contain the signature, regardless of whether it is sent over HTTP or HTTPS.

Overview

For an RPC API, you must add the signature to the API request in the following format:

```
https://Endpoint/?SignatureVersion=1.0&SignatureMethod=HMAC-SHA1&Signature=CT9X0VtwR86fnWSn  
sc6v8YGOjuE%3D&SignatureNonce=3ee8c1b8-83d3-44af-a94f-4e0ad82fd6cf
```

In the preceding format:

- SignatureMethod: the encryption algorithm used to calculate the signature. Set the value to HMAC-SHA1.
- SignatureVersion: the version of the signature encryption algorithm. Set the value to 1.0.
- SignatureNonce: a unique, random number used to prevent replay attacks. You must use different random numbers for different requests. We recommend that you use universally unique identifiers (UUIDs).
- Signature: the signature generated after the request has been symmetrically encrypted by using the AccessKey secret.

The signature encryption algorithm complies with RFC 2104 HMAC-SHA1 specifications. The AccessKey secret is used to calculate the hash-based message authentication code (HMAC) value of the encoded and sorted query string, and the HMAC value is used as the signature string. Request signatures include operation-specific parameters. Therefore, the signature of a request varies based on the request parameters. To calculate a signature, follow the steps in this topic.

```
Signature = Base64( HMAC-SHA1( AccessKey Secret, UTF-8-Encoding-Of(StringToSign) ) )
```

Step 1: Compose and encode a string-to-sign

1. Use request parameters to construct a canonicalized query string.
 - i. by arranging the request parameters (including all common and operation-specific parameters except Signature) in alphabetical order.

Note If you use the GET method to submit the request, these parameters are the part located after the question mark (?) and connected by the ampersands (&) in the request uniform resource identifier (URI).

- ii. Encode the names and values of the arranged request parameters in the request URL by using the unicode transformation format (UTF)-8 character set. The following table describes the encoding rules.

Character	Encoding rule
Uppercase letters, lowercase letters, digits, hyphens (-), underscores (_), periods (.), and tildes (~)	These characters do not need to be encoded.
Other characters	These characters must be percent encoded in <code>%XY</code> format. <code>XY</code> represents the ASCII code of the characters in hexadecimal notation. For example, double quotation marks ("") are encoded as <code>%22</code> .
Extended UTF-8 characters	These characters are encoded in <code>%XY%ZA...</code> format.
Space characters	<p>Spaces must be encoded as <code>%20</code>. Do not encode spaces as plus signs (+).</p> <p>This encoding method is different from the <code>application/x-www-form-urlencoded</code> MIME encoding algorithm (such as the <code>java.net.URLEncoder</code> class provided by the Java standard library). However, you can apply the encoding algorithm and replace the plus sign (+) in the encoded string with <code>%20</code>, the asterisk (*) with <code>%2A</code>, and <code>%7E</code> with the tilde (~). To do this, you can use the following <code>percentEncode</code> method:</p> <pre>private static final String ENCODING = "UTF-8"; private static String percentEncode(String value) throws UnsupportedEncodingException { return value != null ? URLEncoder.encode(value, ENCODING).replace("+", "%20").replace("*", "%2A").replace("%7E", "~") : null; }</pre>

- iii. Connect the encoded parameter names and their values by using equal signs (=).
- iv. Sort the connected parameter name and value pairs in the order specified in step i and connect the pairs by using ampersands (&) to obtain the canonicalized query string.

2. Use the canonicalized query string to construct a string-to-sign in the following way:

```
StringToSign=
    HTTPMethod + "&" +
    percentEncode("/") + "&" +
    percentEncode(CanonicalizedQueryString)
```

In the preceding rules:

- o `HTTPMethod`: the HTTP method used to submit a request, such as GET.
- o `percentEncode("/")`: specifies the encoded value (%2F) of a forward slash (/). The encoding

follows the URL encoding rules.

- percentEncode(CanonicalizedQueryString): specifies the encoded canonicalized query string based on the URL encoding rules.

Step 2: Calculate the signature string

1. Calculate the HMAC value of the string-to-sign based on RFC 2104.

Note Use the SHA1 algorithm to calculate the HMAC value of the string-to-sign. The combination of your AccessKey secret and an ampersand (&) (ASCII code 38) that follows the secret is used as the key for the HMAC calculation.

2. Encode the HMAC value in Base64 to obtain the signature string
3. Add the signature string to the request as the Signature parameter.

Note When the obtained signature value is submitted as the final request parameter value, the value must be URL-encoded like other parameters based on rules defined in [RFC 3986](#).

Signature examples

The following content uses the CreateResourceAccount API operation as an example.

The following code shows the request URL before a signature:

```
https://resourcemanager.aliyuncs.com/?Action=CreateResourceAccount&DisplayName=test&SignatureVersion=1.0&Format=JSON&Timestamp=2020-03-31T03%3A15%3A45Z&AccessKeyId=testid&SignatureMethod=HMAC-SHA1&Version=2020-03-31&SignatureNonce=6a6e0ca6-4557-11e5-86a2-b8e8563dc8d2
```

The `StringToSign` :

```
GET&%2F&AccessKeyId%3Dtestid%26Action%3DCreateResourceAccount%26DisplayName%3Dtest%26Format%3DJSON%26SignatureMethod%3DHMAC-SHA1%26SignatureNonce%3D6a6e0ca6-4557-11e5-86a2-b8e8563dc8d2%26SignatureVersion%3D1.0%26Timestamp%3D2020-03-31T03%253A15%253A45Z%26Version%3D2020-03-31
```

If the AccessKey ID is testid and the AccessKey secret is testsecret, testsecret& is the key used to calculate the HMAC value of the string-to-sign.

The calculated signature string is `3wKLrs27IDvRi8cnkADL0HuhyhU=`.

The following code shows the URL of the signed request:

```
https://resourcemanager.aliyuncs.com/?Action=CreateResourceAccount&DisplayName=test&SignatureVersion=1.0&Format=JSON&Timestamp=2020-03-31T03%3A15%3A45Z&AccessKeyId=testid&SignatureMethod=HMAC-SHA1&Version=2020-03-31&SignatureNonce=6a6e0ca6-4557-11e5-86a2-b8e8563dc8d2&Signature=3wKLrs27IDvRi8cnkADL0HuhyhU%3D
```

4.Common parameters

Common parameters include common request parameters and common response parameters.

Common request parameters

Parameter	Type	Required	Description
Format	String	No	The format in which to return the response. Valid values: <ul style="list-style-type: none">• JSON• XML (default value)
Version	String	Yes	The version number of the API. Specify the version number in the YYYY-MM-DD format. Valid values: <ul style="list-style-type: none">• 2020-03-31: Resource Directory• 2020-03-31: Resource Group• 2018-08-28: Tag• 2020-01-10: Resource Sharing• 2021-11-04: Resource Meta Center (RMC)
Signature	String	Yes	The signature string of the current request. For more information, see Signature method .
SignatureMethod	String	Yes	The encryption method of the signature string. Set the value to HMAC-SHA1.
SignatureNonce	String	Yes	A unique, random number used to prevent replay attacks. You must use different numbers for different requests.
SignatureVersion	String	Yes	The version of the signature encryption algorithm. Set the value to 1.0.

Parameter	Type	Required	Description
AccessKeyId	String	Yes	The AccessKey ID provided to you by Alibaba Cloud.
Timestamp	String	Yes	<p>The timestamp of the request. Specify the time in the ISO 8601 standard in the YYYY-MM-DDThh:mm:ssZ format. The time must be in UTC.</p> <p>For example, use 2013-01-10T12:00:00Z to indicate January 10, 2013, 20:00:00 (UTC+8).</p>

Sample requests

```
https://resourcemanager.aliyuncs.com/?Action=CreateResourceGroup
&Format=xml
&Version=2020-03-31
&Signature=Pc5WB8gokVn0xfeu%2FZV%2BiNM1dg*****
&SignatureMethod=HMAC-SHA1
&SignatureNonce=1521552885*****
&SignatureVersion=1.0
&AccessKeyId=LTAI4GENiH2u8MVj7Khh****
&Timestamp=2020-06-01T12:00:00Z
```

Common response parameters

API responses use the HTTP response format. Responses can be returned in either the JSON or XML format. You can specify the response format in the request. The default response format is XML. Every response returns a unique RequestId regardless of whether the call is successful.

- A `2xx` HTTP status code indicates a successful call.
- A `4xx` or `5xx` HTTP status code indicates a failed call.

Sample responses

- XML format

```
<?xml version="1.0" encoding="utf-8"?>
<!--Result Root Node-->
<Interface Name+Response>
<!--Return Request Tag-->
<RequestId>4C467B38-3910-447D-87BC-AC049166F216</RequestId>
<!--Return Result Data-->
</Interface Name+Response>
```

- JSON format

```
{  
    "RequestId": "4C467B38-3910-447D-87BC-AC049166F216"  
    /*Return Result Data*/  
}
```

5.RAM authorization

Before you use a RAM user to call the API operations of Resource Management to access the resources that belong to an Alibaba Cloud account, you must use the Alibaba Cloud account to create and attach the required policy to the RAM user. In the policy, you can specify the authorized API operations in the Action element and authorized resources in the Resource element. Each resource is indicated by its Alibaba Cloud Resource Name (ARN).

The following list describes the variables that you can specify in a policy. Replace the variables with actual values.

- <account_id>: the ID of an Alibaba Cloud account
- <resourcegroup_id>: the ID of a resource group
- <policy_name>: the name of a policy
- <role_name>: the name of a RAM role
- <resource_type>: the type of a resource
- <resource_id>: the ID of a resource
- <region_id>: the region ID
- <product>: the code of a service

Resource Group

The following table lists the Resource Group API operations that you can specify in the Action element and the ARN formats that are used in the Resource element.

Action	Resource
ram:CreateResourceGroup	acs:ram: $*$:<account_id>:resourcegroup/*
ram:DeleteResourceGroup	acs:ram: $*$:<account_id>:resourcegroup/<resourcegroup_id>
ram:UpdateResourceGroup	acs:ram: $*$:<account_id>:resourcegroup/<resourcegroup_id>
ram:CreatePolicy	acs:ram: $*$:<account_id>:policy/*
ram:DeletePolicy	acs:ram: $*$:<account_id>:policy/<policy_name>
ram>ListPolicies	acs:ram: $*$:<account_id>:policy/*
ram:GetPolicy	acs:ram: $*$:<account_id>:policy/<policy_name>
ram>CreatePolicyVersion	acs:ram: $*$:<account_id>:policy/<policy_name>
ram>DeletePolicyVersion	acs:ram: $*$:<account_id>:policy/<policy_name>
ram>ListPolicyVersions	acs:ram: $*$:<account_id>:policy/<policy_name>
ram:GetPolicyVersion	acs:ram: $*$:<account_id>:policy/<policy_name>
ram:SetDefaultPolicyVersion	acs:ram: $*$:<account_id>:policy/<policy_name>

Action	Resource
ram:AttachPolicy	<ul style="list-style-type: none"> ● Policy: acs:ram:*:system:policy/<policy_name> or acs:ram:*:<account_id>:policy/<policy_name> ● RAM user: acs:ims:*:<account_id>:user/* ● RAM user group: acs:ims:*:<account_id>:group/* ● RAM role: acs:ram:*:<account_id>:role/*
ram:DetachPolicy	<ul style="list-style-type: none"> ● Policy: acs:ram:*:system:policy/<policy_name> or acs:ram:*:<account_id>:policy/<policy_name> ● RAM user: acs:ims:*:<account_id>:user/* ● RAM user group: acs:ims:*:<account_id>:group/* ● RAM role: acs:ram:*:<account_id>:role/*
ram>ListPolicyAttachments	acs:ram:*:<account_id>:*
ram>CreateRole	acs:ram:*:<account_id>:role/*
ram>GetRole	acs:ram:*:<account_id>:role/<role_name>
ram>ListRoles	acs:ram:*:<account_id>:role/*
ram>UpdateRole	acs:ram:*:<account_id>:role/<role_name>
ram>DeleteRole	acs:ram:*:<account_id>:role/<role_name>
ram>CreateServiceLinkedRole	acs:ram:*:<account_id>:role/*
ram>DeleteServiceLinkedRole	acs:ram:*:<account_id>:role/<role_name>
ram>GetServiceLinkedRoleDeletionStatus	acs:ram:*:<account_id>:role/<role_name>

Resource Directory

The following table lists the Resource Directory API operations that you can specify in the Action element and the ARN formats that are used in the Resource element.

Action	Resource
resourcemanager:InitResourceDirectory	acs:resourcemanager:*<account_id>:*
resourcemanager:DestroyResourceDirectory	acs:resourcemanager:*<account_id>:*
resourcemanager:GetResourceDirectory	acs:resourcemanager:*<account_id>:*
resourcemanager>CreateResourceAccount	acs:resourcemanager:*<account_id>:*
resourcemanager>CreateCloudAccount	acs:resourcemanager:*<account_id>:*
resourcemanager>PromoteResourceAccount	acs:resourcemanager:*<account_id>:*
resourcemanager:ResendCreateCloudAccountEmail	acs:resourcemanager:*<account_id>:*
resourcemanager:ResendPromoteResourceAccountEmail	acs:resourcemanager:*<account_id>:*
resourcemanager:CancelCreateCloudAccount	acs:resourcemanager:*<account_id>:*
resourcemanager:CancelPromoteResourceAccount	acs:resourcemanager:*<account_id>:*
resourcemanager:RemoveCloudAccount	acs:resourcemanager:*<account_id>:*
resourcemanager:GetAccount	acs:resourcemanager:*<account_id>:*
resourcemanager:MoveAccount	acs:resourcemanager:*<account_id>:*
resourcemanager>ListAccountsForParent	acs:resourcemanager:*<account_id>:*
resourcemanager>ListAccounts	acs:resourcemanager:*<account_id>:*
resourcemanager:GetYayerForAccount	acs:resourcemanager:*<account_id>:*
resourcemanager:UpdateAccount	acs:resourcemanager:*<account_id>:*
resourcemanager>CreateFolder	acs:resourcemanager:*<account_id>:*
resourcemanager>DeleteFolder	acs:resourcemanager:*<account_id>:*
resourcemanager:GetFolder	acs:resourcemanager:*<account_id>:*

Action	Resource
resourcemanager>ListFoldersForParent	acs:resourcemanager:*<account_id>:*
resourcemanager>ListAncestors	acs:resourcemanager:*<account_id>:*
resourcemanager>UpdateFolder	acs:resourcemanager:*<account_id>:*
resourcemanager>InviteAccountToResourceDirectory	acs:resourcemanager:*<account_id>:*
resourcemanager>GetHandshake	acs:resourcemanager:*<account_id>:*
resourcemanager>AcceptHandshake	acs:resourcemanager:*<account_id>:*
resourcemanager>CancelHandshake	acs:resourcemanager:*<account_id>:*
resourcemanager>DeclineHandshake	acs:resourcemanager:*<account_id>:*
resourcemanager>ListHandshakesForAccount	acs:resourcemanager:*<account_id>:*
resourcemanager>ListHandshakesForResourceDirectory	acs:resourcemanager:*<account_id>:*
resourcemanager>ListTrustedServiceStatus	acs:resourcemanager:*<account_id>:*

Resource Sharing

The following table lists the Resource Sharing API operations that you can specify in the Action element and the ARN formats that are used in the Resource element.

 **Note** An asterisk (*) in the Resource element indicates all resources.

Action	Resource
resourcesharing>CreateResourceShare	*
resourcesharing>UpdateResourceShare	*
resourcesharing>DeleteResourceShare	*
resourcesharing>ListResourceShares	*
resourcesharing>AssociateResourceShare	*

Action	Resource
resourcesharing:DisassociateResourceShare	*
resourcesharing>ListResourceShareAssociations	*
resourcesharing>ListSharedResources	*
resourcesharing>ListSharedTargets	*

Tag

The following table lists the Tag API operations that you can specify in the Action element and the ARN formats that are used in the Resource element.

Action	Resource
tag>ListTagResources	acs:tag:<region_id>:<account_id>:<resource_type>/<resource_id>
tag:TagResources	<ul style="list-style-type: none"> • acs:tag:<region_id>:<account_id>:<resource_type>/<resource_id> • acs:<product>:<region_id>:<account_id>:<resource_type>/<resource_id>
tag:UntagResources	<ul style="list-style-type: none"> • acs:tag:<region_id>:<account_id>:<resource_type>/<resource_id> • acs:<product>:<region_id>:<account_id>:<resource_type>/<resource_id>
tag>ListTagKeys	acs:tag:<region_id>:<account_id>:/*
tag>ListTagValues	acs:tag:<region_id>:<account_id>:/*/*
tag>CreateTags	acs:tag:<region_id>:<account_id>:/*/*
tag>DeleteTag	acs:tag:<region_id>:<account_id>:/*/*

6. Obtain an AccessKey pair

You can create an AccessKey pair for an Alibaba Cloud account or a RAM user. When you call API operations, you must use the AccessKey pair to complete identity verification.

Context

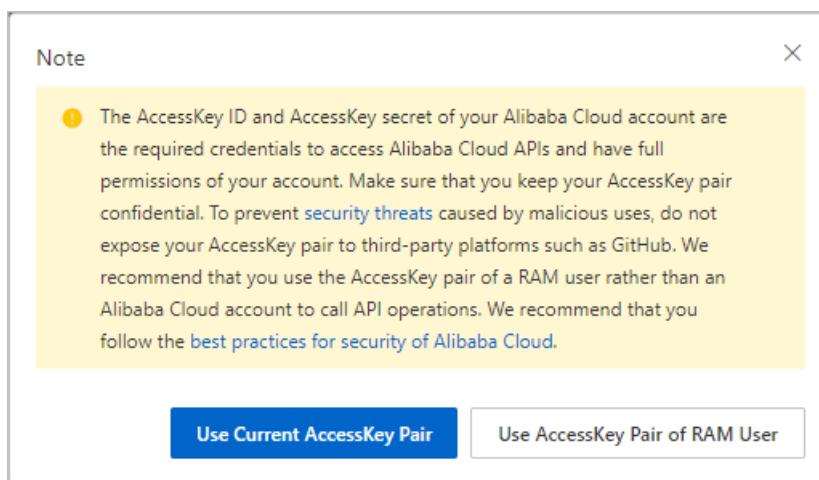
An AccessKey pair consists of an AccessKey ID and an AccessKey secret.

- The AccessKey ID is used to identify a user.
- The AccessKey secret is used to verify the identity of the user. You must keep your AccessKey secret strictly confidential.

 **Warning** If the AccessKey pair of your Alibaba Cloud account is leaked, your resources are exposed to potential risks. We recommend that you use the AccessKey pair of a RAM user to call API operations. This prevents the AccessKey pair of your Alibaba Cloud account from being leaked.

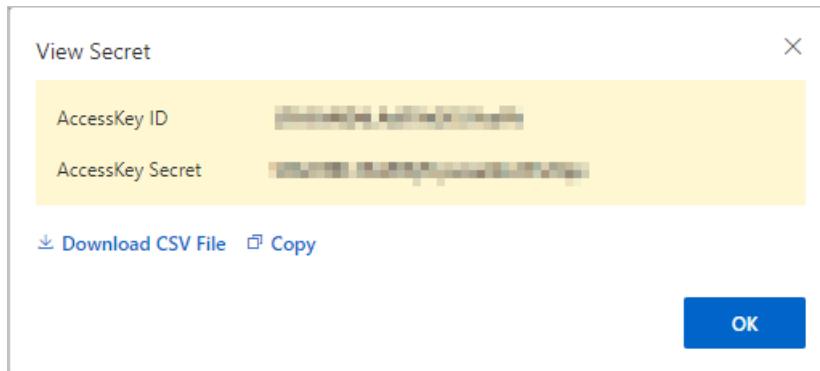
Procedure

1. Log on to the [Alibaba Cloud Management Console](#) by using your Alibaba Cloud account.
2. In the upper-right corner of the page, move the pointer over the profile picture and click [AccessKey Management](#).
3. In the **Note** dialog box, click [Use Current AccessKey Pair](#) or [Use AccessKey Pair of RAM User](#).



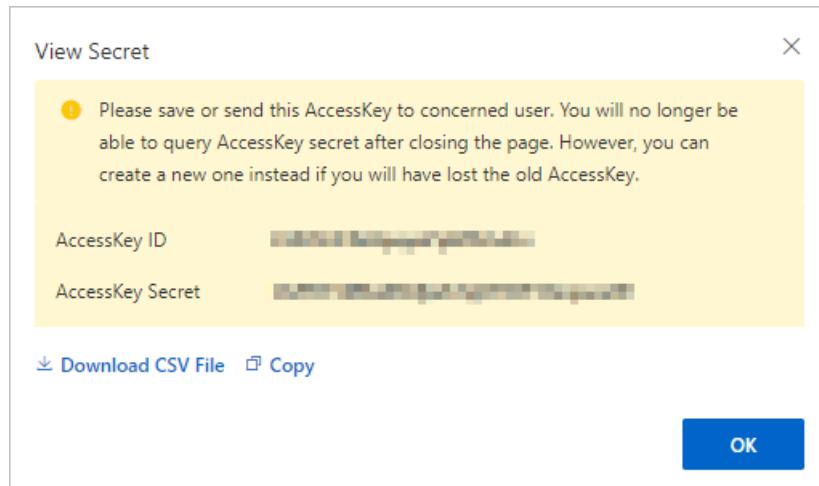
- Obtain the AccessKey pair of the Alibaba Cloud account
 - a. In the Note dialog box, click **Use Current AccessKey Pair**.
 - b. On the **AccessKey Pair** page, click **Create AccessKey Pair**.

- c. In the **View Secret** dialog box, view the AccessKey ID and AccessKey secret. Click **Download CSV File** to download the AccessKey pair or click **Copy** to copy the AccessKey pair.



- o Obtain the AccessKey pair of a RAM user
 - a. Click **Use AccessKey Pair of RAM User**. Then, you are redirected to the RAM console.
 - b. On the **Users** page of the **RAM console**, find the RAM user whose AccessKey pair you want to obtain.
- ? **Note** If you do not have a RAM user, create one first. For more information, see [Create a RAM user](#).
- c. Click the name of the RAM user in the User Logon Name/Display Name column.
 - d. In the **User AccessKeys** section of the **Authentication** tab, click **Create AccessKey**.

- e. In the **View Secret** dialog box, view the AccessKey ID and AccessKey secret. Click **Download CSV File** to download the AccessKey pair or click **Copy** to copy the AccessKey pair.



 **Note**

- An AccessKey secret is displayed only after you click Create AccessKey. You cannot query the AccessKey secret in subsequent operations. Therefore, you must back up your AccessKey secret.
- If your AccessKey pair is leaked or lost, you must create another AccessKey pair. You can create a maximum of two AccessKey pairs for each RAM user.

7. QPS limits

Resource Management limits the queries per second (QPS) of an API operation for a single user and all users. If the number of calls of an API operation per second exceeds a specific QPS limit, throttling is triggered. As a result, your services may be affected. We recommend that you take note of the limits when you call an API operation. This topic describes the QPS limits on an API operation of Resource Management.

Terms

Term	Description
Maximum QPS per user	<p>Maximum QPS per user refers to the total number of calls that a single Alibaba Cloud account, and the RAM users and RAM roles within the Alibaba Cloud account can make to an API operation per second.</p> <p>For example, the maximum QPS per user for an API operation is 20. This indicates that a single Alibaba Cloud account, and the RAM users and RAM roles within the Alibaba Cloud account can make a total number of 20 calls to the API operation per second. If the upper limit is exceeded, throttling is triggered.</p>
Maximum QPS for all users	<p>Maximum QPS for all users refers to the total number of calls that all Alibaba Cloud accounts, and all RAM users and RAM roles within the Alibaba Cloud accounts can make to an API operation per second.</p> <p>For example, the maximum QPS for all users for an API operation is 200. This indicates that all Alibaba Cloud accounts, and all RAM users and RAM roles within the Alibaba Cloud accounts can make a total number of 200 calls to the API operation per second. If the upper limit is exceeded, throttling is triggered.</p>

QPS limits on API operations of Resource Directory

Operation	Maximum QPS per user	Maximum QPS for all users
InitResourceDirectory	20	200
GetResourceDirectory	50	1,000
DestroyResourceDirectory	20	500
CreateFolder	20	500
ListFoldersForParent	50	1,000
ListAncestors	50	1,000
UpdateFolder	20	500
GetFolder	50	1,000
DeleteFolder	20	500

Operation	Maximum QPS per user	Maximum QPS for all users
InviteAccountToResourceDirectory	20	500
GetHandshake	50	1,000
AcceptHandshake	20	200
CancelHandshake	20	200
DeclineHandshake	20	200
ListHandshakesForAccount	50	1,000
ListHandshakesForResourceDirectory	50	1,000
CreateResourceAccount	20	200
CreateCloudAccount	10	800
PromoteResourceAccount	10	800
ResendCreateCloudAccountEmail	20	200
ResendPromoteResourceAccountEmail	20	200
CancelCreateCloudAccount	20	200
CancelPromoteResourceAccount	20	200
RemoveCloudAccount	20	200
GetAccount	50	1,000
MoveAccount	20	500
ListAccountsForParent	50	1,000
ListAccounts	50	1,000
GetPayerForAccount	50	500
UpdateAccount	20	500
ListTrustedServiceStatus	50	1,000
EnableControlPolicy	20	200
DisableControlPolicy	20	200

Operation	Maximum QPS per user	Maximum QPS for all users
GetControlPolicyEnablementStatus	50	500
CreateControlPolicy	20	200
GetControlPolicy	50	500
UpdateControlPolicy	20	200
DeleteControlPolicy	20	200
AttachControlPolicy	20	200
DetachControlPolicy	20	200
ListControlPolicies	50	500
ListControlPolicyAttachmentsForTarget	50	500
ListTargetAttachmentsForControlPolicy	50	500
RegisterDelegatedAdministrator	20	500
DeregisterDelegatedAdministrator	20	500
ListDelegatedAdministrators	20	500
ListDelegatedServicesForAccount	20	500

QPS limits on API operations of Resource Sharing

Operation	Maximum QPS per user	Maximum QPS for all users
AssociateResourceShare	10	500
CreateResourceShare	10	500
DeleteResourceShare	10	500
DescribeRegions	20	500
DisassociateResourceShare	10	500
EnableSharingWithResourceDirectory	10	500
ListResourceShareAssociations	20	500

Operation	Maximum QPS per user	Maximum QPS for all users
ListResourceShares	20	500
ListSharedResources	20	500
ListSharedTargets	20	500
UpdateResourceShare	10	500

8.API Reference (Resource Directory)

8.1. Services

8.1.1. EnableResourceDirectory

Enables a resource directory.

Usage notes

You can use the current account or a newly created account to enable a resource directory. For more information, see [Enable a resource directory](#).

In this example, the current account is used to enable a resource directory.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	EnableResourceDirectory	The operation that you want to perform. Set the value to EnableResourceDirectory .
MAName	String	No	user01@rdadmin.aliyunid.com	<p>The name of the newly created account.</p> <p>Specify the name in the <Prefix>@rdadmin.aliyunid.com format. The prefix can contain letters, digits, and special characters but cannot contain consecutive special characters. The prefix must start with a letter or digit and end with a letter or digit. Valid special characters include underscores (_), periods (.), and hyphens (-). The prefix must be 2 to 50 characters in length.</p>

Parameter	Type	Required	Example	Description
MASecureMobilePhone	String	No	xx-13900001234	<p>The mobile phone number that is bound to the newly created account.</p> <p>If you leave this parameter empty, the mobile phone number that is bound to the current account is used. The mobile phone number you specify must be the same as the mobile phone number that you specify when you call the SendVerificationCodeForEnableRD operation to obtain a verification code.</p> <p>Specify the mobile phone number in the <Country code>-<Mobile phone number> format.</p> <div style="background-color: #e1f5fe; padding: 10px; border-radius: 5px;"> ? Note Mobile phone numbers in the 86-<Mobile phone number> format in the Chinese mainland are not supported. </div>
VerificationCode	String	No	123456	<p>The verification code.</p> <p>You can call the SendVerificationCodeForEnableRD operation to obtain the verification code.</p>
EnableMode	String	Yes	CurrentAccount	<p>The mode in which you enable a resource directory. Valid values:</p> <ul style="list-style-type: none"> • CurrentAccount: indicates that the current account is used to enable a resource directory. • NewManagementAccount: indicates that a newly created account is used to enable a resource directory. If you select this mode, you must configure the <code>MAName</code>, <code>MASecureMobilePhone</code>, and <code>VerificationCode</code> parameters.

For more information about common request parameters, see [Common parameters](#).

Response parameters

Parameter	Type	Example	Description
ResourceDirectory	Object		The information of the resource directory.
ResourceDirectoryId	String	rd-54****	The ID of the resource directory.
MasterAccountId	String	507408460615****	The ID of the management account.
MasterAccountName	String	alice@example.com	The name of the management account.
RootFolderId	String	r-G9****	The ID of the Root folder.
CreateTime	String	2021-12-08T02:15:31.744Z	The time when the resource directory was enabled.
RequestId	String	EC2FE94D-A4A2-51A1-A493-5C273A36C46A	The ID of the request.

Examples

Sample requests

```
https://resourcemanager.aliyuncs.com/?Action=EnableResourceDirectory
&EnableMode=CurrentAccount
&<Common request parameters>
```

Sample success responses

XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<EnableResourceDirectoryResponse>
  <RequestId>EC2FE94D-A4A2-51A1-A493-5C273A36C46A</RequestId>
  <ResourceDirectory>
    <ResourceDirectoryId>rd-54****</ResourceDirectoryId>
    <MasterAccountName>alice@example.com</MasterAccountName>
    <RootFolderId>r-G9****</RootFolderId>
    <CreateTime>2021-12-08T02:15:31.744Z</CreateTime>
    <MasterAccountId>507408460615****</MasterAccountId>
  </ResourceDirectory>
</EnableResourceDirectoryResponse>
```

JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId" : "EC2FE94D-A4A2-51A1-A493-5C273A36C46A",
  "ResourceDirectory" : {
    "ResourceDirectoryId" : "rd-54****",
    "MasterAccountName" : "alice@example.com",
    "RootFolderId" : "r-G9****",
    "CreateTime" : "2021-12-08T02:15:31.744Z",
    "MasterAccountId" : "507408460615****"
  }
}
```

Error codes

HTTP status code	Error code	Error message	Description
409	InvalidEnterpriseName	You must specify the enterprise name.	The error message returned because no enterprise name is specified for the account. Specify an enterprise name for the account.
409	EnterpriseRealNameVerificationError	The specified account does not pass enterprise real-name verification. We recommend you first complete enterprise real-name verification for the account.	The error message returned because the account does not pass enterprise real-name verification. Complete enterprise real-name verification for the account first.
409	EntityAlreadyExists.ResourceDirectory	The resource directory for the account is already enabled. We recommend that you do not enable the resource directory again.	The error message returned because the account has been used to enable a resource directory. Do not use the account to enable a resource directory again.
409	InvalidParameter.ManagementAccountName.AlreadyUsed	The ManagementAccountName has been used.	The error message returned because the name specified for the management account already exists. Change the name.
409	InvalidVerificationCode	The verification code is invalid.	The error message returned because the verification code is invalid.
409	InvalidParameter.ManagementAccountName	The management account name is in the wrong format.	The error message returned because the format of the name specified for the management account is incorrect.

HTTP status code	Error code	Error message	Description
409	InvalidParameter.ManagementAccountSecurityInfo	The parameter management account secure mobile phone is invalid.	The error message returned because the format of the mobile phone number specified for security purposes is incorrect.
409	MissingSecureMobilePhone	Secure mobile phone is missing.	The error message returned because no mobile phone number is specified for security purposes.
409	MissingSecurityInfo	Security info is missing.	The error message returned because security information is not specified.
409	NotSupport.AccountInAnotherResourceDirectory	Your account is a management account for another resource directory or a member of another resource directory.	The error message returned because your account is the management account or a member of another resource directory.

For a list of error codes, visit the [API Error Center](#).

8.1.2. SendVerificationCodeForEnableRD

Sends a verification code to the mobile phone number bound to a newly created account when you use the account to enable a resource directory.

Usage notes

Each Alibaba Cloud account can be used to send a maximum of 100 verification codes per day.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	SendVerificationCodeForEnableRD	The operation that you want to perform. Set the value to <code>SendVerificationCodeForEnableRD</code> .

Parameter	Type	Required	Example	Description
SecureMobilePhone	String	No	xx-13900001234	<p>The mobile phone number that is bound to the newly created account. If you leave this parameter empty, the mobile phone number that is bound to the current account is used.</p> <p>Specify the mobile phone number in the <Country code>-<Mobile phone number> format.</p> <div style="background-color: #e0f2ff; padding: 10px;"> ? Note Mobile phone numbers in the 86-<Mobile phone number> format in the Chinese mainland are not supported. </div>

For more information about common request parameters, see [Common parameters](#).

Response parameters

Parameter	Type	Example	Description
RequestId	String	EC2FE94D-A4A2-51A1-A493-5C273A36C46A	The ID of the request.

Examples

Sample requests

```
https://resourcemanager.aliyuncs.com/?Action=SendVerificationCodeForEnableRD
&SecureMobilePhone=xx-13900001234
&<Common request parameters>
```

Sample success responses

`XML` format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<SendVerificationCodeForEnableRDResponse>
    <RequestId>EC2FE94D-A4A2-51A1-A493-5C273A36C46A</RequestId>
</SendVerificationCodeForEnableRDResponse>
```

`JSON` format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
    "RequestId" : "EC2FE94D-A4A2-51A1-A493-5C273A36C46A"
}
```

Error codes

HTTP status code	Error code	Error message	Description
409	NotSupport.Account.InAnotherResourceDirectory	The specified account is an Alibaba Cloud account or already exists in another resource directory.	The error message returned because the account is the management account or a member of another resource directory.
409	EntityAlreadyExists.ResourceDirectory	The resource directory for the account is already enabled. We recommend that you do not enable the resource directory again.	The error message returned because the account has been used to enable a resource directory. Do not use the account to enable a resource directory again.
409	SendValidateCodeExceedsLimitForAccount	For the same account, the number of verification codes sent exceeds the limit.	The error message returned because the number of verification codes that are sent per day by using the account has exceeded the upper limit.
409	InvalidParameter.MobileCountryCode	The current site does not support the country code.	The error message returned because the specified country code is not supported at the current site.

For a list of error codes, visit the [API Error Center](#).

8.1.3. GetResourceDirectory

Queries the information of a resource directory. If you use a management account to call this operation, the system returns the information of the resource directory that is enabled by using the management account. If you use an account that is a member to call this operation, the system returns the information of the resource directory to which the member belongs.

In this example, a management account is used to query the information of the resource directory that is enabled by using the management account.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	GetResourceDirectory	The operation that you want to perform. Set the value to GetResourceDirectory.

For more information about common request parameters, see [Common parameters](#).

Response parameters

Parameter	Type	Example	Description
RequestId	String	CD76D376-2517-4924-92C5-DBC52262F93A	The ID of the request.
ResourceDirectory	Object		The information of the resource directory.
RootFolderId	String	r-Zo****	The ID of the Root folder.
ResourceDirectoryId	String	rd-St****	The ID of the resource directory.
CreateTime	String	2019-02-18T15:32:10.473Z	The time when the resource directory was enabled.
MasterAccountId	String	172845045600****	The ID of the management account.
MasterAccountName	String	aliyun-admin	The name of the management account.
ControlPolicyStatus	String	Enabled	The status of the Control Policy feature. Valid values: <ul style="list-style-type: none">• Enabled: The feature is enabled.• PendingEnable: The feature is being enabled.• Disabled: The feature is disabled.• PendingDisable: The feature is being disabled.

Parameter	Type	Example	Description
MemberDeletionStatus	String	Enabled	<p>The status of the member deletion feature. Valid values:</p> <ul style="list-style-type: none">Enabled: The feature is enabled. You can delete members of the resource account type by calling the DeleteAccount operation.Disabled: The feature is disabled. You cannot delete members of the resource account type.

Examples

Sample requests

```
https://resourcemanager.aliyuncs.com/?Action=GetResourceDirectory  
&<Common request parameters>
```

Sample success responses

XML format

```
HTTP/1.1 200 OK  
Content-Type:application/xml  
<?xml version="1.0" encoding="UTF-8" ?>  
<GetResourceDirectoryResponse>  
    <ResourceDirectory>  
        <RootFolderId>r-Zo****</RootFolderId>  
        <ControlPolicyStatus>Enabled</ControlPolicyStatus>  
        <ResourceDirectoryId>rd-St****</ResourceDirectoryId>  
        <MasterAccountId>172845045600****</MasterAccountId>  
        <MasterAccountName>aliyun-admin</MasterAccountName>  
        <CreateTime>2019-02-18T15:32:10.473Z</CreateTime>  
        <MemberDeletionStatus>Enabled</MemberDeletionStatus>  
    </ResourceDirectory>  
    <RequestId>CD76D376-2517-4924-92C5-DBC52262F93A</RequestId>  
</GetResourceDirectoryResponse>
```

JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
    "ResourceDirectory": {
        "RootFolderId": "r-Zo****",
        "ControlPolicyStatus": "Enabled",
        "ResourceDirectoryId": "rd-St****",
        "MasterAccountId": "172845045600****",
        "MasterAccountName": "aliyun-admin",
        "CreateTime": "2019-02-18T15:32:10.473Z",
        "MemberDeletionStatus": "Enabled",
    },
    "RequestId": "CD76D376-2517-4924-92C5-DBC52262F93A"
}
```

Error codes

HTTP status code	Error code	Error message	Description
404	ResourceDirectoryNotInUse	The specified account is not an Alibaba Cloud account or a member account of the resource directory.	The error message returned because the account is not the management account or a member of the resource directory.

For a list of error codes, visit the [API Error Center](#).

8.1.4. DestroyResourceDirectory

Disables a resource directory. This operation cannot be undone. Therefore, exercise caution when you perform it.

Before you disable a resource directory, make sure that the following requirements are met:

- All member accounts must be removed from the resource directory. For more information about how to remove a member account, see [RemoveCloudAccount](#).
- All folders except the root folder must be deleted from the resource directory. For more information about how to delete a folder, see [DeleteFolder](#).

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
-----------	------	----------	---------	-------------

Parameter	Type	Required	Example	Description
Action	String	Yes	DestroyResourceDirectory	The operation that you want to perform. Set the value to DestroyResourceDirectory.

Response parameters

Parameter	Type	Example	Description
RequestId	String	9B34724D-54B0-4A51-B34D-4512372FE1BE	The ID of the request.

Examples

Sample requests

```
https://resourcemanager.aliyuncs.com/?Action=DestroyResourceDirectory
&<Common request parameters>
```

Sample success responses

XML format

```
<DestroyResourceDirectoryResponse>
    <RequestId>9B34724D-54B0-4A51-B34D-4512372FE1BE</RequestId>
</DestroyResourceDirectoryResponse>
```

JSON format

```
{
    "RequestId": "9B34724D-54B0-4A51-B34D-4512372FE1BE"
}
```

Error codes

HTTP status code	Error code	Error message	Description
404	EntityNotExists.ResourceDirectory	The resource directory for the account is not enabled. We recommend that you first enable the resource directory for the account.	The error message returned because the resource directory for the account is not enabled. Enable the resource directory for the account.

HTTP status code	Error code	Error message	Description
409	DeleteConflict.ResourceDirectory.Account	Failed to delete the resource directory because one or more member accounts exist. We recommend that you first remove these member accounts.	The error message returned because the resource directory contains member accounts. Remove the member accounts first.

For a list of error codes, visit the [API Error Center](#).

8.2. Folders

8.2.1. CreateFolder

Creates a folder.

 **Note** A maximum of five levels of folders can be created under the root folder.

In this example, a folder named `rdFolder` is created under the root folder.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	CreateFolder	The operation that you want to perform. Set the value to CreateFolder.
ParentFolderId	String	No	r-b1***	The ID of the parent folder.
FolderName	String	Yes	rdFolder	The name of the folder. The name must be 1 to 24 characters in length and can contain letters, digits, underscores (_), periods (.), and hyphens (-).

For more information about common request parameters, see [Common parameters](#).

Response parameters

Parameter	Type	Example	Description
RequestId	String	C2CBA30-C8DD-423E-B4AD-4FB694C9180C	The ID of the request.
Folder	object		The information of the folder.
FolderId	String	fd-u8B321****	The ID of the folder.
CreateTime	String	2019-02-19T09:34:50.757Z	The time when the folder was created.
ParentFolderId	String	r-b1****	The ID of the parent folder.
FolderName	String	rdFolder	The name of the folder.

Examples

Sample requests

```
https://resourcemanager.aliyuncs.com/?Action/CreateFolder  
&FolderName=rdFolder  
&<Common request parameters>
```

Sample success responses

XML format

```
HTTP/1.1 200 OK  
Content-Type:application/xml  
<?xml version="1.0" encoding="UTF-8" ?>  
<CreateFolderResponse>  
    <Folder>  
        <FolderName>rdFolder</FolderName>  
        <ParentFolderId>r-b1****</ParentFolderId>  
        <FolderId>fd-u8B321****</FolderId>  
        <CreateTime>2019-02-19T09:34:50.757Z</CreateTime>  
    </Folder>  
    <RequestId>C2CBA30-C8DD-423E-B4AD-4FB694C9180C</RequestId>  
</CreateFolderResponse>
```

JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "Folder" : {
    "FolderName" : "rdFolder",
    "ParentFolderId" : "r-b1****",
    "FolderId" : "fd-u8B321****",
    "CreateTime" : "2019-02-19T09:34:50.757Z"
  },
  "RequestId" : "C2CBCA30-C8DD-423E-B4AD-4FB694C9180C"
}
```

Error codes

Http status code	Error code	Error message	Description
400	InvalidParameter.ParentFolderId	The ParentFolderId is invalid.	The error message returned because the value of the ParentFolderId parameter is invalid. The value must start with r- followed by 6 characters or start with fd- followed by 10 characters. Valid characters are letters and digits.
400	MissingParameter.Folder.Name	You must specify the resource folder name.	The error message returned because the folder name is not specified. Specify a folder name.
400	InvalidParameter.Folder.Name	The Name of folder is invalid.	The error message returned because the folder name is invalid. The folder name can contain only letters, digits, underscores (_), periods (.), and hyphens (-).
400	InvalidParameter.Folder.Name.Length	The Name of folder exceeds the length limit.	The error message returned because the length of the folder name has exceeded the upper limit. The name must be 1 to 24 characters in length.
400	InvalidParameter.Folder.Name.AlreadyUsed	The name already exists under the same parent. Please change to another name.	The error message returned because the folder name already exists under the same parent folder. Change the name.
404	EntityNotExists.ResourceDirectory	The resource directory for the account is not enabled. We recommend that you first enable the resource directory for the account.	The error message returned because the resource directory for the account is not enabled. Enable the resource directory for the account.

Http status code	Error code	Error message	Description
404	EntityNotExists.Folder	The resource directory folder does not exist.	The error message returned because the folder does not exist. Create the folder first.
409	LimitExceeded.Folder.Depth	The folder depth exceeds the limit of 5.	The error message returned because the maximum number of folder levels has been reached. A maximum of five levels of folders can be created under the root folder.
409	QuotaExceeded.Folder.Count	The number of folders exceeds the quota.	The error message returned because the maximum number of folders has been reached.

For a list of error codes, visit the [API Error Center](#).

8.2.2. DeleteFolder

Deletes a folder.

 **Note** Before you delete a folder, make sure that the folder does not contain any member accounts or child folders.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	DeleteFolder	The operation that you want to perform. Set the value to DeleteFolder.
FolderId	String	Yes	fd-ae1in7****	The ID of the folder.

Response parameters

Parameter	Type	Example	Description
RequestId	String	9B34724D-54B0-4A51-B34D-4512372FE1BE	The ID of the request.

Examples

Sample requests

```
https://resourcemanager.aliyuncs.com/?Action=DeleteFolder
&FolderId=fd-ae1in7****
&<Common request parameters>
```

Sample success responses

XML format

```
<DeleteFolderResponse>
<RequestId>9B34724D-54B0-4A51-B34D-4512372FE1BE</RequestId>
</DeleteFolderResponse>
```

JSON format

```
{
  "RequestId": "9B34724D-54B0-4A51-B34D-4512372FE1BE"
}
```

Error codes

HTTP status code	Error code	Error message	Description
400	MissingParameter.FolderId	You must specify FolderId.	The error message returned because the FolderId parameter is not specified. Specify this parameter.
400	InvalidParameter.FolderId	The FolderId is invalid.	The error message returned because the value of the FolderId parameter is invalid. The value must start with r- followed by 6 characters or start with fd- followed by 10 characters. Valid characters are letters and digits.
409	DeleteConflict.Folder.SubFolder	This folder has sub folders.	The error message returned because the folder contains child folders. Delete the child folders first.

HTTP status code	Error code	Error message	Description
409	DeleteConflict.Folder.Account	This folder has accounts.	The error message returned because the folder contains member accounts. Remove the member accounts first.
404	EntityNotExists.ResourceDirectory	The resource directory for the account is not enabled. We recommend that you first enable the resource directory for the account.	The error message returned because the resource directory for the account is not enabled. Enable the resource directory for the account.
404	EntityNotExists.Folder	The resource directory folder does not exist.	The error message returned because the folder does not exist. Create the folder first.

For a list of error codes, visit the [API Error Center](#).

8.2.3. GetFolder

Queries the information of a folder.

In this example, the information of the folder `fd-Jy15U7****` is queried.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	GetFolder	The operation that you want to perform. Set the value to GetFolder.
FolderId	String	Yes	fd-Jy15U7****	The ID of the folder.

For more information about common request parameters, see [Common parameters](#).

Response parameters

Parameter	Type	Example	Description
RequestId	String	C2CBA30-C8DD-423E-B4AD-4FB694C9180C	The ID of the request.

Parameter	Type	Example	Description
Folder	Object		The information of the folder.
FolderId	String	fd-Jyl5U7****	The ID of the folder.
CreateTime	String	2021-06-15T06:39:08.521Z	The time when the folder was created.
ParentFolderId	String	r-Wm****	The ID of the parent folder.
FolderName	String	Applications	The name of the folder.
ResourceDirectoryPath	String	rd-3G****/r-Wm****/fd-Jyl5U7****	The path of the folder in the resource directory.

Examples

Sample requests

```
https://resourcemanager.aliyuncs.com/?Action=GetFolder
&FolderId=fd-Jyl5U7****
&<Common request parameters>
```

Sample success responses

XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<?xml version="1.0" encoding="UTF-8" ?>
<GetFolderResponse>
  <RequestId>88EF473E-D5CD-589F-AAB3-F6E0D12AECA3</RequestId>
  <Folder>
    <CreateTime>2021-06-15T06:39:08.521Z</CreateTime>
    <FolderId>fd-Jyl5U7****</FolderId>
    <FolderName>Applications</FolderName>
    <ParentFolderId>r-Wm****</ParentFolderId>
    <ResourceDirectoryPath>rd-3G****/r-Wm****/fd-Jyl5U7****</ResourceDirectoryPath>
  </Folder>
</GetFolderResponse>
```

JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId" : "88EF473E-D5CD-589F-AAB3-F6E0D12AECA3",
  "Folder" : {
    "CreateTime" : "2021-06-15T06:39:08.521Z",
    "FolderId" : "fd-Jyl5U7****",
    "FolderName" : "Applications",
    "ParentFolderId" : "r-Wm****",
    "ResourceDirectoryPath" : "rd-3G****/r-Wm****/fd-Jyl5U7****"
  }
}
```

Error codes

HTTP status code	Error code	Error message	Description
400	MissingParameter.FolderId	You must specify FolderId.	The error message returned because the FolderId parameter is not configured. Configure this parameter.
400	InvalidParameter.FolderId	The FolderId is invalid.	The error message returned because the value of the FolderId parameter is invalid. Specify a value that starts with r- followed by 6 characters or starts with fd- followed by 10 characters. Valid characters are letters and digits.
404	EntityNotExists.ResourceDirectory	The resource directory for the account is not enabled. We recommend that you first enable the resource directory for the account.	The error message returned because the resource directory for the account is not enabled. Enable the resource directory for the account.
404	EntityNotExists.Folder	The resource directory folder does not exist.	The error message returned because the folder does not exist. Create such a folder first.

For a list of error codes, visit the [API Error Center](#).

8.2.4. UpdateFolder

Changes the name of a folder.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	UpdateFolder	The operation that you want to perform. Set the value to UpdateFolder.
FolderId	String	Yes	fd-u8B321****	The ID of the folder.
NewFolderName	String	Yes	rdFolder	The new name of the folder. The name must be 1 to 24 characters in length and can contain letters, digits, underscores (_), periods (.), and hyphens (-).

Response parameters

Parameter	Type	Example	Description
Folder	Struct		The information of the folder.
CreateTime	String	2019-02-19T09:34:50.757Z	The time when the folder was created.
FolderId	String	fd-u8B321****	The ID of the folder.
FolderName	String	rdFolder	The name of the folder.
ParentFolderId	String	r-b1****	The ID of the parent folder.
RequestId	String	C2CBA30-C8DD-423E-B4AD-4FB694C9180C	The ID of the request.

Examples

Sample requests

```
https://resourcemanager.aliyuncs.com/?Action=UpdateFolder  
&FolderId=fd-u8B321****  
&NewFolderName=rdFolder  
&<Common request parameters>
```

Sample success responses

XML format

```
<UpdateFolderResponse>  
  <Folder>  
    <FolderName>rdFolder</FolderName>  
    <ParentFolderId>r-b1*****</ParentFolderId>  
    <FolderId>fd-u8B321****</FolderId>  
    <CreateTime>2019-02-19T09:34:50.757Z</CreateTime>  
  </Folder>  
  <RequestId>C2CBCA30-C8DD-423E-B4AD-4FB694C9180C</RequestId>  
</UpdateFolderResponse>
```

JSON format

```
{  
  "Folder": {  
    "FolderName": "rdFolder",  
    "ParentFolderId": "r-b1*****",  
    "FolderId": "fd-u8B321****",  
    "CreateTime": "2019-02-19T09:34:50.757Z"  
  },  
  "RequestId": "C2CBCA30-C8DD-423E-B4AD-4FB694C9180C"  
}
```

Error codes

HTTP status code	Error code	Error message	Description
400	MissingParameter.Folder.Name	You must specify the resource folder name.	The error message returned because the folder name is not specified. Specify a folder name.
400	InvalidParameter.Folder.Name	The Name of folder is invalid.	The error message returned because the folder name is invalid. The name can only contain letters, digits, underscores (_), periods (.), and hyphens (-).

HTTP status code	Error code	Error message	Description
400	InvalidParameter.Folder.Name.Length	The Name of folder exceeds the length limit.	The error message returned because the length of the folder name has exceeded the upper limit. The name must be 1 to 24 characters in length.
409	LimitExceeded.Folder.Depth	The folder depth exceeds the limit of 5.	The error message returned because the maximum number of folder levels has been reached. A maximum of five levels of folders can be created under the root folder.
404	EntityNotExists.ResourceDirectory	The resource directory for the account is not enabled. We recommend that you first enable the resource directory for the account.	The error message returned because the resource directory for the account is not enabled. Enable the resource directory for the account.
404	EntityNotExists.Folder	The resource directory folder does not exist.	The error message returned because the folder does not exist. Create the folder first.
400	InvalidParameter.Folder.Name.AlreadyUsed	The folder name has been used.	The error message returned because the folder name already exists. Change the name.
400	MissingParameter.FolderId	You must specify FolderId.	The error message returned because the FolderId parameter is not specified. Specify this parameter.
400	InvalidParameter.FolderId	The FolderId is invalid.	The error message returned because the value of the FolderId parameter is invalid. The value must start with r- followed by 6 characters or start with fd- followed by 10 characters. Valid characters are letters and digits.

For a list of error codes, visit the [API Error Center](#).

8.2.5. ListFoldersForParent

Queries the information of all subfolders of a folder.



Note You can view the information of only the first-level subfolders of a folder.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	ListFoldersForParent	The operation that you want to perform. Set the value to ListFoldersForParent .
ParentFolderId	String	No	r-b1***	The ID of the parent folder. If you leave this parameter empty, the information of the first-level subfolders of the Root folder is queried.
QueryKeyword	String	No	rdFolder	The keyword used for the query, such as a folder name. Fuzzy match is supported.
PageNumber	Integer	No	1	The number of the page to return. Pages start from page 1. Default value: 1.
PageSize	Integer	No	10	The number of entries to return on each page. Valid values: 1 to 100. Default value: 10.

Response parameters

Parameter	Type	Example	Description
TotalCount	Integer	2	The total number of entries returned.
RequestId	String	7B8A4E7D-6CFF-471D-84DF-195A7A241ECB	The ID of the request.
PageSize	Integer	5	The number of entries returned per page.

Parameter	Type	Example	Description
PageNumber	Integer	1	The page number of the returned page.
Folders	Array of Folder		The information of the folders.
Folder			
FolderId	String	rd-evic31****	The ID of the folder.
CreateTime	String	2015-01-23T12:33:18Z	The time when the folder was created.
FolderName	String	project-1	The name of the folder.

Examples

Sample requests

```
https://resourcemanager.aliyuncs.com/?Action=ListFoldersForParent
&ParentFolderId=r-b1****
&<Common request parameters>
```

Sample success responses

XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<?xml version="1.0" encoding="UTF-8" ?>
<ListFoldersForParentResponse>
    <RequestId>7B8A4E7D-6CFF-471D-84DF-195A7A241ECB</RequestId>
    <PageNumber>1</PageNumber>
    <PageSize>5</PageSize>
    <TotalCount>2</TotalCount>
    <Folders>
        <Folder>
            <FolderId>rd-evic31****</FolderId>
            <FolderName>project-1</FolderName>
            <CreateTime>2015-01-23T12:33:18Z</CreateTime>
        </Folder>
        <Folder>
            <FolderId>fd-evic31****</FolderId>
            <FolderName>project-2</FolderName>
            <CreateTime>2015-01-23T12:33:18Z</CreateTime>
        </Folder>
    </Folders>
</ListFoldersForParentResponse>
```

JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId" : "7B8A4E7D-6CFF-471D-84DF-195A7A241ECB",
  "PageNumber" : 1,
  "PageSize" : 5,
  "TotalCount" : 2,
  "Folders" : [
    "Folder" : [ {
      "FolderId" : "rd-evic31****",
      "Name" : "project-1",
      "CreateDate" : "2015-01-23T12:33:18Z"
    }, {
      "FolderId" : "fd-evic31****",
      "Name" : "project-2",
      "CreateDate" : "2015-01-23T12:33:18Z"
    } ]
  }
}
```

Error codes

HTTP status code	Error code	Error message	Description
400	InvalidParameter.ParentFolderId	The ParentFolderId is invalid.	The error message returned because the value of the ParentFolderId parameter is invalid. Specify a value that starts with r- followed by 6 characters or starts with fd- followed by 10 characters. Valid characters include letters and digits.
404	EntityNotExists.ResourceDirectory	The resource directory for the account is not enabled. We recommend that you first enable the resource directory for the account.	The error message returned because the account has not been used to enable a resource directory. Use the account to enable a resource directory first.
404	EntityNotExists.Folder	The resource directory folder does not exist.	The error message returned because the folder does not exist. Create such a folder first.

For a list of error codes, visit the [API Error Center](#).

8.2.6. ListAncestors

Queries the information of all the parent folders of a specified folder. The system returns the information of the folders based on their top-down hierarchy.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	ListAncestors	The operation that you want to perform. Set the value to ListAncestors.
ChildId	String	Yes	fd-i1c9nr****	The ID of the child folder.

Response parameters

Parameter	Type	Example	Description
Folders	Array		The information of the folders.
Folder			
CreateTime	String	2019-01-18T10:03:35.217Z	The time when the folder was created.
FolderId	String	r-b1****	The ID of the folder.
FolderName	String	root	The name of the folder.
RequestId	String	83AFBEB6-DC03-406E-9686-867461FF6698	The ID of the request.

Examples

Sample requests

```
https://resourcemanager.aliyuncs.com/?Action=ListAncestors
&ChildId=fd-i1c9nr****
&<Common request parameters>
```

Sample success responses

XML format

```
<ListAncestorsResponse>
  <Folders>
    <Folder>
      <FolderName>root</FolderName>
      <FolderId>r-b1****</FolderId>
      <CreateTime>2019-01-18T10:03:35.217Z</CreateTime>
    </Folder>
    <Folder>
      <FolderName>myFirstFd</FolderName>
      <FolderId>fd-0adR35****</FolderId>
      <CreateTime>2019-01-23T08:48:37.530Z</CreateTime>
    </Folder>
  </Folders>
  <RequestId>83AFBEB6-DC03-406E-9686-867461FF6698</RequestId>
</ListAncestorsResponse>
```

JSON format

```
{
  "Folders": {
    "Folder": [
      {
        "FolderName": "root",
        "FolderId": "r-b1****",
        "CreateTime": "2019-01-18T10:03:35.217Z"
      },
      {
        "FolderName": "myFirstFd",
        "FolderId": "fd-0adR35****",
        "CreateTime": "2019-01-23T08:48:37.530Z"
      }
    ],
    "RequestId": "83AFBEB6-DC03-406E-9686-867461FF6698"
  }
}
```

Error codes

HTTP status code	Error code	Error message	Description
400	MissingParameter.ChildId	You must specify ChildId.	The error message returned because the ChildId parameter is not specified. Specify this parameter.

HTTP status code	Error code	Error message	Description
400	InvalidParameter.ChildId	The ChildId is invalid.	The error message returned because the value of the ChildId parameter is invalid. The value must start with r- followed by 6 characters or start with fd- followed by 10 characters. Valid characters are letters and digits.
404	EntityNotExists.ResourceDirectory	The resource directory for the account is not enabled. We recommend that you first enable the resource directory for the account.	The error message returned because the resource directory for the account is not enabled. Enable the resource directory for the account.
404	EntityNotExists.Folder	The resource directory folder does not exist.	The error message returned because the folder does not exist. Create the folder first.

For a list of error codes, visit the [API Error Center](#).

8.3. Members

8.3.1. CreateResourceAccount

Creates a member of the resource account type.

Usage notes

A member serves as a container for resources and is also an organizational unit in a resource directory. A member indicates a project or application. The resources of different members are isolated.

In this example, a member is created in the `fd-r23M55****` folder. The display name of the member is `Dev`, and the prefix for the name of the Alibaba Cloud account that corresponds to the member is `alice`.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	CreateResourceAccount	The operation that you want to perform. Set the value to CreateResourceAccount.

Parameter	Type	Required	Example	Description
DisplayName	String	Yes	Dev	<p>The display name of the member.</p> <p>The name must be 2 to 50 characters in length.</p> <p>The name can contain letters, digits, underscores (_), periods (.), and hyphens (-).</p> <p>The name must be unique in the resource directory.</p>
ParentFolderId	String	No	fd-r23M55****	The ID of the parent folder.
PayerAccountId	String	No	12323344****	The ID of the billing account. If you leave this parameter empty, the current account is used as the billing account.
AccountNamePrefix	String	No	alice	<p>The prefix for the name of the Alibaba Cloud account that corresponds to the member. If you leave this parameter empty, the system randomly generates a prefix.</p> <p>The prefix must be 2 to 50 characters in length.</p> <p>The prefix can contain letters, digits, and special characters but cannot contain consecutive special characters.</p> <p>The prefix must start with a letter or digit and end with a letter or digit.</p> <p>Valid special characters include underscores (_), periods (.), and hyphens (-).</p> <p>The complete name of an Alibaba Cloud account that corresponds to a member in a resource directory is in the <AccountNamePrefix>@<ResourceDirectoryId>.aliyunid.com format, such as <code>alice@rd-3G****.aliyunid.com</code>.</p> <p>Each name must be unique in the resource directory.</p>

For more information about common request parameters, see [Common parameters](#).

Response parameters

Parameter	Type	Example	Description
Account	Object		The information of the member.
Status	String	CreateSuccess	The status of the member. The value CreateSuccess indicates that the member is created.
Type	String	ResourceAccount	The type of the member. The value ResourceAccount indicates that the member is a resource account.
DisplayName	String	Dev	The display name of the member.
FolderId	String	fd-r23M55****	The ID of the folder.
ResourceDirectoryId	String	rd-3G****	The ID of the resource directory.
JoinTime	String	2020-12-31T03:37:39.456Z	The time when the member joined the resource directory.
AccountId	String	112730938585****	The ID of the Alibaba Cloud account that corresponds to the member.
JoinMethod	String	created	<p>The way in which the member joins the resource directory. Valid values:</p> <ul style="list-style-type: none"> invited: The member is invited to join the resource directory. created: The member is directly created in the resource directory.
ModifyTime	String	2020-12-31T03:37:39.456Z	The time when the member was modified.
AccountName	String	alice@rd-3g****.aliyunid.com	The name of the Alibaba Cloud account that corresponds to the member.

Parameter	Type	Example	Description
RequestId	String	B356A415-D860-43E5-865A-E2193D62BBD6	The ID of the request.

Examples

Sample requests

```
https://resourcemanager.aliyuncs.com/?Action=CreateResourceAccount
&DisplayName=Dev
&ParentFolderId=fd-r23M55****
&AccountNamePrefix=alice
&<Common request parameters>
```

Sample success responses

XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<?xml version="1.0" encoding="UTF-8" ?>
<CreateResourceAccountResponse>
    <Account>
        <Status>CreateSuccess</Status>
        <ModifyTime>2020-12-31T03:37:39.456Z</ModifyTime>
        <JoinMethod>created</JoinMethod>
        <ResourceDirectoryId>rd-3G****</ResourceDirectoryId>
        <Type>ResourceAccount</Type>
        <AccountId>112730938585****</AccountId>
        <DisplayName>Dev</DisplayName>
        <JoinTime>2020-12-31T03:37:39.456Z</JoinTime>
        <FolderId>fd-r23M55****</FolderId>
        <AccountName>alice@rd-3g****.aliyunid.com</AccountName>
    </Account>
    <RequestId>B356A415-D860-43E5-865A-E2193D62BBD6</RequestId>
</CreateResourceAccountResponse>
```

JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "Account" : {
    "Status" : "CreateSuccess",
    "ModifyTime" : "2020-12-31T03:37:39.456Z",
    "JoinMethod" : "created",
    "ResourceDirectoryId" : "rd-3G****",
    "Type" : "ResourceAccount",
    "AccountId" : "112730938585****",
    "DisplayName" : "Dev",
    "JoinTime" : "2020-12-31T03:37:39.456Z",
    "FolderId" : "fd-r23M55****",
    "AccountName" : "alice@rd-3g****.aliyunid.com"
  },
  "RequestId" : "B356A415-D860-43E5-865A-E2193D62BBD6"
}
```

Error codes

HTTP status code	Error code	Error message	Description
400	MissingParameter.Account.DisplayName	You must specify DisplayName.	The error message returned because the DisplayName parameter is not configured. Configure this parameter.
400	InvalidParameter.Account.DisplayName	The DisplayName of account is invalid.	The error message returned because the value of the DisplayName parameter is invalid. The value can contain only letters, digits, underscores (_), periods (.), and hyphens (-).
400	InvalidParameter.Account.DisplayName.Length	The DisplayName of the account exceeds the length limit.	The error message returned because the length of the value specified for the DisplayName parameter has exceeded the upper limit. The value must be 2 to 50 characters in length.
400	InvalidParameter.ParentFolderId	The ParentFolderId is invalid.	The error message returned because the value of the ParentFolderId parameter is invalid. The value must start with r- followed by 6 characters or start with fd- followed by 10 characters. Valid characters include letters and digits.

HTTP status code	Error code	Error message	Description
400	InvalidParameter.Account.AccountNamePrefix	The account name prefix is invalid.	The error message returned because the value of the AccountNamePrefix parameter is invalid. Specify a valid value.
400	InvalidParameter.Account.AccountNamePrefix.Length	The account name prefix exceeds the length limit. The limit is 2 to 50 characters.	The error message returned because the length of the value specified for the AccountNamePrefix parameter has exceeded the upper limit. The value must be 2 to 50 characters in length.
404	EntityNotExists.ResourceDirectory	The resource directory for the account is not enabled. We recommend that you first enable the resource directory for the account.	The error message returned because the account has not been used to enable a resource directory. Use the account to enable a resource directory first.
404	EntityNotExists.Folder	The resource directory folder does not exist.	The error message returned because the folder does not exist. Create such a folder first.
409	LimitExceeded.Account	The maximum number of member accounts in a resource directory exceeds the limit.	The error message returned because the number of members in the resource directory has exceeded the upper limit.
409	InvalidParameter.Account.DisplayName.AlreadyUsed	The displayname of account has been used.	The error message returned because the display name of the member already exists. Change the name.
409	EntityAlreadyExists.ResourceDirectory.Account	The email address that the system generates when you create a member account already exists. Try again later.	The error message returned because the email address that is generated by the system already exists. Try again later.
409	Invalid.PayRelation	Failed to create a member. The specified billing account is unavailable. Please change to another billing account and try again.	The error message returned because the member has failed to be created. The specified billing account is unavailable. Specify a valid billing account and try again.
409	CreateAccountDisabled	The specified resource directory cannot create a new account.	The error message returned because you are not authorized to create a member.

HTTP status code	Error code	Error message	Description
409	PaymentAccountEnterpriseVerifyError	The type of the payment account is not enterprise verified.	The error message returned because the specified billing account does not pass enterprise real-name verification.
409	PaymentAccountFinancialRelationshipVerifyError	The payment account must not be the beneficiary account from other financial relationships.	The error message returned because the billing account cannot be a beneficiary account from other financial relationships.
409	PaymentAccountEnterpriseTypeError	The type of the payment account is not enterprise.	The error message returned because the billing account is not an enterprise account.
409	PaymentAccountFinancialRelationshipsChangeFrequencyVerifyError	The financial relationship of payment account changes too frequently. Please try again later.	The error message returned because the financial relationship of the billing account frequently changes. Try again later.
409	PaymentAccountVirtualCloudOperatorVerifyError	The type of the payment account must not be virtual operator.	The error message returned because the billing account is an account for a virtual network operator (VNO).
409	PaymentAccountCreditIdentityTypeError	The identity of the payment account is not credit.	The error message returned because the identity of the billing account is not a credit payment identity.
409	PaymentAccountEnterpriseInvoiceError	No enterprise invoice header information is set for the payment account.	The error message returned because the invoice title information is not specified for the billing account.
409	UnknownFinancialError	An unknown financial error occurred.	The error message returned because an unknown financial error has occurred.
409	BusinessRestricted	Business is restricted. Please contact your customer service manager.	The error message returned because your business is limited. Contact your customer business manager (CBM).
409	NotSupport.PayerAccountInAnotherResourceDirectory	The specified payment account does not exist in the resource directory. You must specify a valid payment account.	The error message returned because the billing account is not in the resource directory. Specify a valid billing account.

HTTP status code	Error code	Error message	Description
409	MemberAccountVirtualCloudOperatorVerifyError	The type of the member must not be virtual operator.	The error message returned because the member is an account for a VNO.
409	PaymentAccountResellerVerifyError	The type of the payment account must not be reseller.	The error message returned because the billing account is an account for a reseller.
409	InconsistentEnterpriseNameError	The enterprise name of the payment account and the member must be consistent.	The error message returned because the enterprise names of the billing account and the member are inconsistent.
409	MemberAccountResellerVerifyError	The type of the member must not be reseller.	The error message returned because the member is an account for a reseller.

For a list of error codes, visit the [API Error Center](#).

8.3.2. GetAccount

Queries the information of a member.

In this example, the information of the member whose Alibaba Cloud account ID is `181761095690****` is queried.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	GetAccount	The operation that you want to perform. Set the value to GetAccount.
AccountId	String	Yes	181761095690*** *	The Alibaba Cloud account ID of the member.

For more information about common request parameters, see [Common parameters](#).

Response parameters

Parameter	Type	Example	Description
Account	Object		The information of the member.
Status	String	CreateSuccess	<p>The status of the member. Valid values:</p> <ul style="list-style-type: none"> • CreateSuccess: The member is created. • PromoteVerifying: The upgrade of the member is under confirmation. • PromoteFailed: The upgrade of the member fails. • PromoteExpired: The upgrade of the member expires. • PromoteCancelled: The upgrade of the member is canceled. • PromoteSuccess: The member is upgraded. • InviteSuccess: The member accepts the invitation.
Type	String	ResourceAccount	<p>The type of the member.</p> <ul style="list-style-type: none"> • CloudAccount: cloud account • ResourceAccount: resource account
DisplayName	String	admin	The name of the member.
FolderId	String	fd-bVaRIG****	The ID of the folder.
ResourceDirectoryId	String	rd-k3****	The ID of the resource directory.
IdentityInformation	String	aliyun-admin	The real-name verification information.
JoinTime	String	2015-01-23T12:33:18Z	The time when the member joined the resource directory.
AccountId	String	181761095690****	The Alibaba Cloud account ID of the member.

Parameter	Type	Example	Description
JoinMethod	String	created	The way in which the member joins the resource directory. Valid values: <ul style="list-style-type: none">• invited: The member is invited to join the resource directory.• created: The member is directly created in the resource directory.
ModifyTime	String	2015-01-23T12:33:18Z	The time when the member was modified.
AccountName	String	someone@example.com	The Alibaba Cloud account name of the member.
ResourceDirectoryPath	String	rd-k3****/r-Wm****/fd-bVaRIG****/181761095690****	The path of the member in the resource directory.
RequestId	String	9B34724D-54B0-4A51-B34D-4512372FE1BE	The ID of the request.

Examples

Sample requests

```
https://resourcemanager.aliyuncs.com/?Action=GetAccount
&AccountId=181761095690****
&<Common request parameters>
```

Sample success responses

XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<?xml version="1.0" encoding="UTF-8" ?>
<GetAccountResponse>
    <RequestId>9B34724D-54B0-4A51-B34D-4512372FE1BE</RequestId>
    <Account>
        <ResourceDirectoryId>rd-k3****</ResourceDirectoryId>
        <AccountId>181761095690****</AccountId>
        <AccountName>someone@example.com</AccountName>
        <DisplayName>admin</DisplayName>
        <FolderId>fd-bVaRIG****</FolderId>
        <JoinMethod>created</JoinMethod>
        <JoinTime>2015-01-23T12:33:18Z</JoinTime>
        <IdentityInformation>aliyun-admin</IdentityInformation>
        <Type>ResourceAccount</Type>
        <Status>CreateSuccess</Status>
        <ModifyTime>2015-01-23T12:33:18Z</ModifyTime>
        <ResourceDirectoryPath>rd-k3****/r-Wm****/fd-bVaRIG****/181761095690****</ResourceDirectoryPath>
    </Account>
</GetAccountResponse>
```

JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
    "RequestId" : "9B34724D-54B0-4A51-B34D-4512372FE1BE",
    "Account" : {
        "ResourceDirectoryId" : "rd-k3****",
        "AccountId" : "181761095690****",
        "AccountName" : "someone@example.com",
        "DisplayName" : "admin",
        "FolderId" : "fd-bVaRIG****",
        "JoinMethod" : "created",
        "JoinTime" : "2015-01-23T12:33:18Z",
        "IdentityInformation" : "aliyun-admin",
        "Type" : "ResourceAccount",
        "Status" : "CreateSuccess",
        "ModifyTime" : "2015-01-23T12:33:18Z",
        "ResourceDirectoryPath" : "rd-k3****/r-Wm****/fd-bVaRIG****/181761095690****"
    }
}
```

Error codes

HTTP status code	Error code	Error message	Description

HTTP status code	Error code	Error message	Description
400	MissingParameter.AccountId	You must specify AccountId.	The error message returned because the AccountId parameter is not configured.
400	InvalidParameter.AccountId	The AccountId is invalid.	The error message returned because the value of the AccountId parameter is invalid. Specify a 16-digit ID.
404	EntityNotExists.Account	This resource directory account does not exist.	The error message returned because the member does not exist. Create such a member first.
404	EntityNotExists.ResourceDirectory	The resource directory for the account is not enabled. We recommend that you first enable the resource directory for the account.	The error message returned because the resource directory for the account is not enabled. Enable the resource directory for the account.

For a list of error codes, visit the [API Error Center](#).

8.3.3. MoveAccount

Moves a member account from a folder to another.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	MoveAccount	The operation that you want to perform. Set the value to MoveAccount.
AccountId	String	Yes	12323344****	The ID of the account you want to move.
DestinationFolderId	String	Yes	fd-bVaRIG****	The ID of the destination folder.

Response parameters

Parameter	Type	Example	Description
RequestId	String	9B34724D-54B0-4A51-B34D-4512372FE1BE	The ID of the request.

Examples

Sample requests

```
https://resourcemanager.aliyuncs.com/?Action=MoveAccount
&AccountId=12323344****
&DestinationFolderId=fd-bVaRIG****
&<Common request parameters>
```

Sample success responses

XML format

```
<MoveAccountResponse>
<RequestId>9B34724D-54B0-4A51-B34D-4512372FE1BE</RequestId>
</MoveAccountResponse>
```

JSON format

```
{
  "RequestId": "9B34724D-54B0-4A51-B34D-4512372FE1BE"
}
```

Error codes

HTTP status code	Error code	Error message	Description
400	MissingParameter.AccountId	You must specify AccountId.	The error message returned because the AccountId parameter is not specified.
400	InvalidParameter.AccountId	The AccountId is invalid.	The error message returned because the value of the AccountId parameter is invalid. Specify a 16-digit ID.
400	MissingParameter.DestinationFolderId	You must specify DestinationFolderId.	The error message returned because the DestinationFolderId parameter is not specified. Specify this parameter.

HTTP status code	Error code	Error message	Description
400	InvalidParameter.DestinationFolderId	The DestinationFolderId is invalid.	The error message returned because the value of the DestinationFolderId parameter is invalid. The value must start with r- followed by 6 characters or start with fd- followed by 10 characters. Valid characters are letters and digits.
404	EntityNotExists.Account	This resource directory account does not exist.	The error message returned because the member account does not exist. Create the member account first.
409	AccountTypeOrStatusMismatch	You cannot perform the action on the member account.	The error message returned because you cannot perform the operation on the member account.
404	EntityNotExists.ResourceDirectory	The resource directory for the account is not enabled. We recommend that you first enable the resource directory for the account.	The error message returned because the Resource Directory feature is not enabled for the account. Enable the feature for the account.
404	EntityNotExists.Folder	The resource directory folder does not exist.	The error message returned because the folder does not exist. Create the folder first.

For a list of error codes, visit the [API Error Center](#).

8.3.4. UpdateAccount

Changes the display name or type of a member.

Usage notes

- To ensure that the system can record the operators of management operations, you must use a RAM user or RAM role to which the AliyunResourceDirectoryFullAccess policy is attached within the management account of your resource directory to call this operation.
- Before you change the type of a member from resource account to cloud account, make sure that specific conditions are met. For more information about the conditions, see [Switch a resource account to a cloud account](#).
- Before you change the type of a member from cloud account to resource account, make sure that specific conditions are met. For more information about the conditions, see [Switch a cloud account to a resource account](#).

In this example, the display name of the member `12323344****` is changed to `admin`.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	UpdateAccount	The operation that you want to perform. Set the value to UpdateAccount .
NewDisplayName	String	No	admin	<p>The new display name of the member.</p> <div style="background-color: #e0f2ff; padding: 10px;"> ? Note You can configure either the <code>NewDisplayName</code> or <code>NewAccountType</code> parameter. </div>
NewAccountType	String	No	ResourceAccount	<p>The new type of the member. Valid values:</p> <ul style="list-style-type: none"> • ResourceAccount: indicates that the member is switched from a cloud account to a resource account. • CloudAccount: indicates that the member is switched from a resource account to a cloud account. <div style="background-color: #e0f2ff; padding: 10px;"> ? Note You can configure either the <code>NewDisplayName</code> or <code>NewAccountType</code> parameter. </div>
AccountId	String	Yes	12323344****	The ID of the Alibaba Cloud account that corresponds to the member.

For more information about common request parameters, see [Common parameters](#).

Response parameters

Parameter	Type	Example	Description
Account	Object		The information of the member.

Parameter	Type	Example	Description
Status	String	CreateSuccess	<p>The status of the member. Valid values:</p> <ul style="list-style-type: none"> • CreateSuccess: The member is created. • InviteSuccess: The member accepts the invitation. • Removed: The member is removed. • SwitchSuccess: The type of the member is changed.
Type	String	ResourceAccount	<p>The type of the member. Valid values:</p> <ul style="list-style-type: none"> • CloudAccount: cloud account • ResourceAccount: resource account
DisplayName	String	admin	The display name of the member.
FolderId	String	fd-bVaRIG****	The ID of the folder.
ResourceDirectoryId	String	rd-k3****	The ID of the resource directory.
JoinTime	String	2015-01-23T12:33:18Z	The time when the member joined the resource directory.
AccountId	String	12323344****	The ID of the Alibaba Cloud account that corresponds to the member.
JoinMethod	String	created	<p>The way in which the member joins the resource directory. Valid values:</p> <ul style="list-style-type: none"> • invited: The member is invited to join the resource directory. • created: The member is directly created in the resource directory.
ModifyTime	String	2015-01-23T12:33:18Z	The time when the member was modified.
AccountName	String	ecs-manager@aliyun.com	The name of the Alibaba Cloud account that corresponds to the member.
RequestId	String	9B34724D-54B0-4A51-B34D-4512372FE1BE	The ID of the request.

Examples

Sample requests

```
https://resourcemanager.aliyuncs.com/?Action=UpdateAccount  
&AccountId=12323344****  
&NewDisplayName=admin  
&<Common request parameters>
```

Sample success responses

XML format

```
HTTP/1.1 200 OK  
Content-Type:application/xml  
<?xml version="1.0" encoding="UTF-8" ?>  
<UpdateAccountResponse>  
  <RequestId>9B34724D-54B0-4A51-B34D-4512372FE1BE</RequestId>  
  <Account>  
    <ResourceDirectoryId>rd-k3****</ResourceDirectoryId>  
    <AccountId>12323344****</AccountId>  
    <DisplayName>admin</DisplayName>  
    <FolderId>fd-bVaRIG****</FolderId>  
    <JoinMethod>created</JoinMethod>  
    <JoinTime>2015-01-23T12:33:18Z</JoinTime>  
    <Type>ResourceAccount</Type>  
    <Status>CreateSuccess</Status>  
    <RecordId>06950264-3f0d-4ca9-82dd-6ee7a3d33d6b</RecordId>  
    <ModifyTime>2015-01-23T12:33:18Z</ModifyTime>  
  </Account>  
</UpdateAccountResponse>
```

JSON format

```
HTTP/1.1 200 OK  
Content-Type:application/json  
{  
  "RequestId" : "9B34724D-54B0-4A51-B34D-4512372FE1BE",  
  "Account" : {  
    "ResourceDirectoryId" : "rd-k3****",  
    "AccountId" : "12323344****",  
    "DisplayName" : "admin",  
    "FolderId" : "fd-bVaRIG****",  
    "JoinMethod" : "created",  
    "JoinTime" : "2015-01-23T12:33:18Z",  
    "Type" : "ResourceAccount",  
    "Status" : "CreateSuccess",  
    "RecordId" : "06950264-3f0d-4ca9-82dd-6ee7a3d33d6b",  
    "ModifyTime" : "2015-01-23T12:33:18Z"  
  }  
}
```

Error codes

HTTP status code	Error code	Error message	Description
404	EntityNotExists.ResourceDirectory	The resource directory for the account is not enabled. We recommend that you first enable the resource directory for the account.	The error message returned because the account has not been used to enable a resource directory. Use the account to enable a resource directory first.
404	EntityNotExists.Account	This resource directory account does not exist.	The error message returned because the member does not exist. Create such a member first.
409	MissingDisplayNameOrAccountType	Either display name or account type must be specified.	The error message returned because neither the display name of the member nor the type of the member is specified.
409	AccountTypeMismatch	The type or status of the member account cannot satisfy the current operation.	The error message returned because the type or status of the member does not meet the requirements for the current operation.
409	LegalEntityDifferent	The account legal entity is different from the one of the Management Account.	The error message returned because the legal entity of the account is inconsistent with the legal entity of the management account of the resource directory.
409	CallerIdentityError	Please use the RAM user or role of the Management Account.	The error message returned because only a RAM user or RAM role within the management account of the resource directory can be used to call this operation.
409	PrimaryAkInUse	The root user has an AccessKey pair in use.	The error message returned because the AccessKey pair of the root user for the member is in use.
409	MissingSecurityInfo	Security info is missing.	The error message returned because security information is not specified.
409	InvalidParameter.Account.DisplayName.AlreadyUsed	The display name of account has been used. You must specify a valid display name.	The error message returned because the display name of the member already exists. Change the name.

For a list of error codes, visit the [API Error Center](#).

8.3.5. RemoveCloudAccount

Removes a member of the cloud account type. After you remove a member of the cloud account type, the member is no longer managed by the management account of the resource directory to which the member belonged.

Usage notes

In a resource directory, members of the resource account type are resource containers that are created by using the management account of the resource directory. You cannot remove such members from the resource directory. For security purposes, you can use these members only within the resource directory.

In this example, the member `177242285274****` is removed.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	RemoveCloudAccount	The operation that you want to perform. Set the value to RemoveCloudAccount.
AccountId	String	Yes	177242285274*** *	The ID of the Alibaba Cloud account that corresponds to the member.

For more information about common request parameters, see [Common parameters](#).

Response parameters

Parameter	Type	Example	Description
RequestId	String	9B34724D-54B0-4A51-B34D-4512372FE1BE	The ID of the request.

Examples

Sample requests

```
https://resourcemanager.aliyuncs.com/?Action=RemoveCloudAccount  
&AccountId=177242285274****  
&<Common request parameters>
```

Sample success responses

XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<?xml version="1.0" encoding="UTF-8" ?>
<RemoveCloudAccountResponse>
  <RequestId>9B34724D-54B0-4A51-B34D-4512372FE1BE</RequestId>
</RemoveCloudAccountResponse>
```

JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId" : "9B34724D-54B0-4A51-B34D-4512372FE1BE"
}
```

Error codes

HTTP status code	Error code	Error message	Description
400	MissingParameter.AccountId	You must specify AccountId.	The error message returned because the AccountId parameter is not configured.
400	InvalidParameter.AccountId	The AccountId is invalid.	The error message returned because the value of the AccountId parameter is invalid. Specify a 16-digit ID.
404	EntityNotExists.Account	This resource directory account does not exist.	The error message returned because the member does not exist. Create such a member first.
404	EntityNotExists.ResourceDirectory	The resource directory for the account is not enabled. We recommend that you first enable the resource directory for the account.	The error message returned because the account has not been used to enable a resource directory. Use the account to enable a resource directory first.
409	AccountTypeOrStatusMismatch	You cannot perform the action on the member account.	The error message returned because you cannot perform the operation on the member.

HTTP status code	Error code	Error message	Description
409	Deny.TrustedService	You attempted to remove an account that is used in %s. To complete this operation, you must first remove this account from the Trusted Service.	The error message returned because the current account is used in a trusted service. Remove the account from the trusted service first.

For a list of error codes, visit the [API Error Center](#).

8.3.6. ListAccounts

Queries all the members in a resource directory.

Usage notes

You can use only the management account of a resource directory or a delegated administrator account of a trusted service to call this operation.

In this example, the management account of a resource directory is used to query all the members in the resource directory. The return result shows that the resource directory contains two members: the member whose Alibaba Cloud account ID is `184311716100****` and the member whose Alibaba Cloud account ID is `181761095690****`.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	ListAccounts	The operation that you want to perform. Set the value to ListAccounts .
PageNumber	Integer	No	1	The number of the page to return. Pages start from page 1. Default value: 1.
PageSize	Integer	No	10	The number of entries to return on each page. Valid values: 1 to 100. Default value: 10.

For more information about common request parameters, see [Common parameters](#).

Response parameters

Parameter	Type	Example	Description
TotalCount	Integer	2	The total number of entries returned.
RequestId	String	7B8A4E7D-6CFF-471D-84DF-195A7A241ECB	The ID of the request.
PageSize	Integer	5	The number of entries returned per page.
PageNumber	Integer	1	The page number of the returned page.
Accounts	Array of Account		The members returned.
Account			
Status	String	CreateSuccess	<p>The status of the member. Valid values:</p> <ul style="list-style-type: none"> • CreateSuccess: The member is created. • PromoteVerifying: The upgrade of the member is under confirmation. • PromoteFailed: The upgrade of the member fails. • PromoteExpired: The upgrade of the member expires. • PromoteCancelled: The upgrade of the member is canceled. • PromoteSuccess: The member is upgraded. • InviteSuccess: The member accepts the invitation.
Type	String	ResourceAccount	<p>The type of the member. Valid values:</p> <ul style="list-style-type: none"> • CloudAccount: cloud account • ResourceAccount: resource account
DisplayName	String	test	The name of the member account.
FolderId	String	fd-QRzuim****	The ID of the folder.
ResourceDirectoryId	String	rd-3G****	The ID of the resource directory.

Parameter	Type	Example	Description
JoinTime	String	2021-01-18T08:01:50.522Z	The time when the member joined the resource directory. The time is displayed in UTC.
AccountId	String	181761095690****	The Alibaba Cloud account ID of the member.
JoinMethod	String	created	The way in which the member joins the resource directory. Valid values: <ul style="list-style-type: none">• invited: The member is invited to join the resource directory.• created: The member is directly created in the resource directory.
ModifyTime	String	2021-01-18T08:04:37.668Z	The time when the member was modified. The time is displayed in UTC.
ResourceDirectoryPath	String	rd-3G****/r-Wm****/fd-QRzuim****/181761095690****	The path of the member in the resource directory.

Examples

Sample requests

```
https://resourcemanager.aliyuncs.com/?Action=ListAccounts  
&<Common request parameters>
```

Sample success responses

XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<ListAccountsResponse>
  <TotalCount>2</TotalCount>
  <PageSize>10</PageSize>
  <RequestId>85655883-7FCD-4367-B642-5AF0F49E78F8</RequestId>
  <PageNumber>1</PageNumber>
  <Accounts>
    <Account>
      <Status>CreateSuccess</Status>
      <ModifyTime>2021-03-31T06:04:58.374Z</ModifyTime>
      <JoinMethod>created</JoinMethod>
      <ResourceDirectoryId>rd-3G****</ResourceDirectoryId>
      <Type>ResourceAccount</Type>
      <AccountId>184311716100****</AccountId>
      <DisplayName>Info</DisplayName>
      <JoinTime>2021-03-31T03:23:27.803Z</JoinTime>
      <FolderId>r-Wm****</FolderId>
      <ResourceDirectoryPath>rd-3G****/r-Wm****/184311716100****</ResourceDirectoryPa
th>
    </Account>
    <Account>
      <Status>CreateSuccess</Status>
      <ModifyTime>2021-01-18T08:04:37.668Z</ModifyTime>
      <JoinMethod>created</JoinMethod>
      <ResourceDirectoryId>rd-3G****</ResourceDirectoryId>
      <Type>ResourceAccount</Type>
      <AccountId>181761095690****</AccountId>
      <DisplayName>test</DisplayName>
      <JoinTime>2021-01-18T08:01:50.522Z</JoinTime>
      <FolderId>fd-QRzuim****</FolderId>
      <ResourceDirectoryPath>rd-3G****/r-Wm****/fd-QRzuim****/181761095690****</Resou
rceDirectoryPath>
    </Account>
  </Accounts>
</ListAccountsResponse>
```

JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "TotalCount" : 2,
  "PageSize" : 10,
  "RequestId" : "85655883-7FCD-4367-B642-5AF0F49E78F8",
  "PageNumber" : 1,
  "Accounts" : [
    {
      "Account" : [ {
        "Status" : "CreateSuccess",
        "ModifyTime" : "2021-03-31T06:04:58.374Z",
        "JoinMethod" : "created",
        "ResourceDirectoryId" : "rd-3G****",
        "Type" : "ResourceAccount",
        "AccountId" : "184311716100****",
        "DisplayName" : "Info",
        "JoinTime" : "2021-03-31T03:23:27.803Z",
        "FolderId" : "r-Wm****",
        "ResourceDirectoryPath" : "rd-3G****/r-Wm****/184311716100****"
      }, {
        "Status" : "CreateSuccess",
        "ModifyTime" : "2021-01-18T08:04:37.668Z",
        "JoinMethod" : "created",
        "ResourceDirectoryId" : "rd-3G****",
        "Type" : "ResourceAccount",
        "AccountId" : "181761095690****",
        "DisplayName" : "test",
        "JoinTime" : "2021-01-18T08:01:50.522Z",
        "FolderId" : "fd-QRzuim****",
        "ResourceDirectoryPath" : "rd-3G****/r-Wm****/fd-QRzuim****/181761095690****"
      } ]
    }
  ]
}
```

Error codes

HTTP status code	Error code	Error message	Description
404	EntityNotExists.ResourceDirectory	The resource directory for the account is not enabled. We recommend that you first enable the resource directory for the account.	The error message returned because the resource directory for the account is not enabled. Enable the resource directory for the account.

For a list of error codes, visit the [API Error Center](#).

8.3.7. ListAccountsForParent

Queries the member accounts in a folder.

In this example, the member accounts in the `fd-bVaRIG****` folder are queried. The returned result shows that the folder contains two member accounts: member account whose Alibaba Cloud account ID is `181761095690****` and member account whose Alibaba Cloud account ID is `184311716100****`.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	ListAccountsForParent	The operation that you want to perform. Set the value to ListAccountsForParent.
ParentFolderId	String	No	fd-bVaRIG****	The ID of the folder.
QueryKeyword	String	No	admin	The keyword used for the query, such as a member account name. Fuzzy match is supported.
PageNumber	Integer	No	1	The number of the page to return. Pages start from page 1. Default value: 1.
PageSize	Integer	No	10	The number of entries to return on each page. Valid values: 1 to 100. Default value: 10.

For more information about common request parameters, see [Common parameters](#).

Response parameters

Parameter	Type	Example	Description
TotalCount	Integer	2	The total number of entries returned.
RequestId	String	7B8A4E7D-6CFF-471D-84DF-195A7A241ECB	The ID of the request.

Parameter	Type	Example	Description
PageSize	Integer	5	The number of entries returned per page.
PageNumber	Integer	1	The page number of the returned page.
Accounts	Array of Account		The information of the member accounts.
Account			
Status	String	CreateSuccess	<p>The status of the member account. Valid values:</p> <ul style="list-style-type: none"> • CreateSuccess: The member account is created. • PromoteVerifying: The upgrade of the member account is under confirmation. • PromoteFailed: The upgrade of the member account failed. • PromoteExpired: The upgrade of the member account expired. • PromoteCancelled: The upgrade of the member account is canceled. • PromoteSuccess: The member account is upgraded. • InviteSuccess: The owner of the member account accepted the invitation.
Type	String	ResourceAccount	<p>The type of the member account.</p> <ul style="list-style-type: none"> • CloudAccount: cloud account • ResourceAccount: resource account
DisplayName	String	admin	The name of the member account.
FolderId	String	fd-bVaRIG****	The ID of the folder.
ResourceDirectoryId	String	rd-k4****	The ID of the resource directory.
JoinTime	String	2015-01-23T12:33:18Z	The time when the member account joined the resource directory. The time is displayed in UTC.

Parameter	Type	Example	Description
AccountId	String	184311716100****	The Alibaba Cloud account ID of the member account.
JoinMethod	String	created	<p>The way in which the member account joins the resource directory. Valid values:</p> <ul style="list-style-type: none">invited: The member account is invited to join the resource directory.created: The member account is directly created in the resource directory.
ModifyTime	String	2015-01-23T12:33:18Z	The time when the member account was modified. The time is displayed in UTC.

Examples

Sample requests

```
https://resourcemanager.aliyuncs.com/?Action=ListAccountsForParent  
&ParentFolderId=fd-bVaRIG****  
&<Common request parameters>
```

Sample success responses

XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<?xml version="1.0" encoding="UTF-8" ?>
<ListAccountsForParentResponse>
    <RequestId>7B8A4E7D-6CFF-471D-84DF-195A7A241ECB</RequestId>
    <PageNumber>1</PageNumber>
    <PageSize>5</PageSize>
    <TotalCount>2</TotalCount>
    <Accounts>
        <Account>
            <ResourceDirectoryId>rd-k4****</ResourceDirectoryId>
            <AccountId>181761095690****</AccountId>
            <DisplayName>admin</DisplayName>
            <FolderId>fd-bVaRIG****</FolderId>
            <JoinMethod>created</JoinMethod>
            <JoinTime>2015-01-23T12:33:18Z</JoinTime>
            <Type>ResourceAccount</Type>
            <Status>CreateSuccess</Status>
            <ModifyTime>2015-01-23T12:33:18Z</ModifyTime>
        </Account>
        <Account>
            <ResourceDirectoryId>rd-k4****</ResourceDirectoryId>
            <AccountId>184311716100****</AccountId>
            <DisplayName>manager</DisplayName>
            <FolderId>fd-bVaRIG****</FolderId>
            <JoinMethod>created</JoinMethod>
            <JoinTime>2015-01-23T12:33:18Z</JoinTime>
            <Type>ResourceAccount</Type>
            <Status>CreateSuccess</Status>
            <ModifyTime>2015-01-23T12:33:18Z</ModifyTime>
        </Account>
    </Accounts>
</ListAccountsForParentResponse>
```

JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId" : "7B8A4E7D-6CFF-471D-84DF-195A7A241ECB",
  "PageNumber" : 1,
  "PageSize" : 5,
  "TotalCount" : 2,
  "Accounts" : [
    "Account" : [ {
      "ResourceDirectoryId" : "rd-k4****",
      "AccountId" : "181761095690****",
      "DisplayName" : "admin",
      "FolderId" : "fd-bVaRIG****",
      "JoinMethod" : "created",
      "JoinTime" : "2015-01-23T12:33:18Z",
      "Type" : "ResourceAccount",
      "Status" : "CreateSuccess",
      "ModifyTime" : "2015-01-23T12:33:18Z"
    }, {
      "ResourceDirectoryId" : "rd-k4****",
      "AccountId" : "184311716100****",
      "DisplayName" : "manager",
      "FolderId" : "fd-bVaRIG****",
      "JoinMethod" : "created",
      "JoinTime" : "2015-01-23T12:33:18Z",
      "Type" : "ResourceAccount",
      "Status" : "CreateSuccess",
      "ModifyTime" : "2015-01-23T12:33:18Z"
    } ]
  }
}
```

Error codes

HTTP status code	Error code	Error message	Description
400	InvalidParameter.ParentFolderId	The ParentFolderId is invalid.	The error message returned because the value of the ParentFolderId parameter is invalid. Specify a value that starts with r- followed by 6 characters or starts with fd- followed by 10 characters. Valid characters are letters and digits.
404	EntityNotExists.ResourceDirectory	The resource directory for the account is not enabled. We recommend that you first enable the resource directory for the account.	The error message returned because the resource directory for the account is not enabled. Enable the resource directory for the account.

HTTP status code	Error code	Error message	Description
404	EntityNotExists.Folder	The resource directory folder does not exist.	The error message returned because the folder does not exist. Create the folder first.

For a list of error codes, visit the [API Error Center](#).

8.3.8. GetPayerForAccount

Queries the information of a settlement account.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	GetPayerForAccount	The operation that you want to perform. Set the value to GetPayerForAccount.
AccountId	String	Yes	12323344****	The ID of the account.

Response parameters

Parameter	Type	Example	Description
PayerAccountId	String	172841235500****	The ID of the settlement account.
PayerAccountName	String	Alice	The name of the settlement account.
RequestId	String	9B34724D-54B0-4A51-B34D-4512372FE1BE	The ID of the request.

Examples

Sample requests

```
https://resourcemanager.aliyuncs.com/?Action=GetPayerForAccount
&AccountId=12323344****
&<Common request parameters>
```

Sample success responses

XML format

```
<GetPayerForAccountResponse>
  <RequestId>9B34724D-54B0-4A51-B34D-4512372FE1BE</RequestId>
  <PayerAccountId>172841235500****</PayerAccountId>
  <PayerAccountName>Alice</PayerAccountName>
</GetPayerForAccountResponse>
```

JSON format

```
{
  "RequestId": "9B34724D-54B0-4A51-B34D-4512372FE1BE",
  "PayerAccountId": "172841235500****",
  "PayerAccountName": "Alice"
}
```

Error codes

HTTP status code	Error code	Error message	Description
404	EntityNotExists.ResourceDirectory	The resource directory for the account is not enabled. We recommend that you first enable the resource directory for the account.	The error message returned because the resource directory for the account is not enabled. Enable the resource directory for the account.
404	EntityNotExists.Account	This resource directory account does not exist.	The error message returned because the member account does not exist. Create the member account first.

For a list of error codes, visit the [API Error Center](#).

8.3.9. InviteAccountToResourceDirectory

Invites an account to join a resource directory.

Usage notes

In this example, the account `someone@example.com` is invited to join a resource directory.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	InviteAccountToResourceDirectory	The operation that you want to perform. Set the value to InviteAccountToResourceDirectory .
TargetEntity	String	Yes	someone@example.com	The ID or logon email address of the account that you want to invite.
TargetType	String	Yes	Email	The type of the account. Valid values: <ul style="list-style-type: none">• Account: indicates the ID of the account.• Email: indicates the logon email address of the account.
Note	String	No	Welcome	The comment on the invitation. The comment can be up to 1,024 characters in length.

For more information about common request parameters, see [Common parameters](#).

Response parameters

Parameter	Type	Example	Description
RequestId	String	9B34724D-54B0-4A51-B34D-4512372FE1BE	The ID of the request.
Handshake	Object		The information of the invitation.
Status	String	Pending	The status of the invitation. Valid values: <ul style="list-style-type: none">• Pending: The invitation is waiting for confirmation.• Accepted: The invitation is accepted.• Cancelled: The invitation is canceled.• Declined: The invitation is rejected.• Expired: The invitation expires.
ExpireTime	String	2018-08-24T09:55:41Z	The time when the invitation expires. The time is displayed in UTC.
ResourceDirectoryId	String	rd-abcdef****	The ID of the resource directory.

Parameter	Type	Example	Description
CreateTime	String	2018-08-10T09:55:41Z	The time when the invitation was created. The time is displayed in UTC.
Note	String	Welcome	The comment on the invitation.
TargetEntity	String	someone@example.com	The ID or logon email address of the invited account.
MasterAccountId	String	172841235500****	The ID of the management account of the resource directory.
MasterAccountName	String	Alice	The name of the management account of the resource directory.
ModifyTime	String	2018-08-10T09:55:41Z	The time when the invitation was modified. The time is displayed in UTC.
TargetType	String	Email	The type of the invited account. Valid values: <ul style="list-style-type: none">• Account: indicates the ID of the account.• Email: indicates the logon email address of the account.
Handshakeld	String	h-ycm4rp****	The ID of the invitation.

Examples

Sample requests

```
https://resourcemanager.aliyuncs.com/?Action=InviteAccountToResourceDirectory
&TargetEntity=someone@example.com
&TargetType=Email
&<Common request parameters>
```

Sample success responses

XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<InviteAccountToResourceDirectoryResponse>
  <RequestId>9B34724D-54B0-4A51-B34D-4512372FE1BE</RequestId>
  <Handshake>
    <HandshakeId>h-ycm4rp****</HandshakeId>
    <ResourceDirectoryId>rd-abcdef****</ResourceDirectoryId>
    <MasterAccountId>172841235500****</MasterAccountId>
    <MasterAccountName>Alice</MasterAccountName>
    <TargetEntity>someone@example.com</TargetEntity>
    <TargetType>Email</TargetType>
    <Note>Welcome</Note>
    <Status>Pending</Status>
    <CreateTime>2018-08-10T09:55:41Z</CreateTime>
    <ModifyTime>2018-08-10T09:55:41Z</ModifyTime>
    <ExpireTime>2018-08-24T09:55:41Z</ExpireTime>
  </Handshake>
</InviteAccountToResourceDirectoryResponse>
```

JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId" : "9B34724D-54B0-4A51-B34D-4512372FE1BE",
  "Handshake" : {
    "HandshakeId" : "h-ycm4rp****",
    "ResourceDirectoryId" : "rd-abcdef****",
    "MasterAccountId" : "172841235500****",
    "MasterAccountName" : "Alice",
    "TargetEntity" : "someone@example.com",
    "TargetType" : "Email",
    "Note" : "Welcome",
    "Status" : "Pending",
    "CreateTime" : "2018-08-10T09:55:41Z",
    "ModifyTime" : "2018-08-10T09:55:41Z",
    "ExpireTime" : "2018-08-24T09:55:41Z"
  }
}
```

Error codes

HTTP status code	Error code	Error message	Description
400	MissingParameter.TargetEntity	You must specify TargetEntity.	The error message returned because the TargetEntity parameter is not configured. Configure this parameter.

HTTP status code	Error code	Error message	Description
400	InvalidParameter.TargetEntity	The TargetEntity is invalid.	The error message returned because the value of the TargetEntity parameter is invalid. The value must be the ID or logon email address of an account.
400	MissingParameter.TargetType	You must specify TargetType.	The error message returned because the TargetType parameter is not configured. Configure this parameter.
400	InvalidParameter.TargetType	The TargetType is invalid.	The error message returned because the value of the TargetType parameter is invalid. The value can be Account or Email.
400	InvalidParameter.Note.Length	The length of the invitation note exceeds the limit.	The error message returned because the length of the comment on the invitation has exceeded the upper limit. The comment can be up to 1,024 characters in length.
400	InvalidParameter.Note	The Note is invalid.	The error message returned because the value of the Note parameter is invalid.
404	EntityNotExists.ResourceDirectory	The resource directory for the account is not enabled. We recommend that you first enable the resource directory for the account.	The error message returned because the account has not been used to enable a resource directory. Use the account to enable a resource directory first.
409	LimitExceeded.Account	The maximum number of member accounts in a resource directory exceeds the limit.	The error message returned because the number of members in the resource directory has exceeded the upper limit.
409	LimitExceeded.InvitationRate	The number of invitations sent exceeds the limit.	The error message returned because the maximum number of invitations you can send per day has been reached. A maximum of 20 invitations can be sent per day.

HTTP status code	Error code	Error message	Description
409	EntityAlreadyExists.Handshake	Handshakes with the same target entity already exist.	The error message returned because the invited account has a pending invitation. The owner of the invited account must process the invitation first.
409	Invalid.AccountType	The specified profile type of account is invalid.	The error message returned because the account type is invalid. Use an enterprise account.

For a list of error codes, visit the [API Error Center](#).

8.3.10. GetHandshake

Queries the information of an invitation.

Usage notes

In this example, the information of the invitation whose ID is `h-ycm4rp****` is queried.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	GetHandshake	The operation that you want to perform. Set the value to GetHandshake .
Handshakeld	String	Yes	h-ycm4rp****	The ID of the invitation.

For more information about common request parameters, see [Common parameters](#).

Response parameters

Parameter	Type	Example	Description
RequestId	String	9B34724D-54B0-4A51-B34D-4512372FE1BE	The ID of the request.

Parameter	Type	Example	Description
Handshake	Object		The information of the invitation.
Status	String	Pending	<p>The status of the invitation. Valid values:</p> <ul style="list-style-type: none"> Pending: The invitation is waiting for confirmation. Accepted: The invitation is accepted. Cancelled: The invitation is canceled. Declined: The invitation is rejected. Expired: The invitation expires.
ExpireTime	String	2018-08-24T09:55:41Z	The time when the invitation expires. The time is displayed in UTC.
CreateTime	String	2018-08-10T09:55:41Z	The time when the invitation was created. The time is displayed in UTC.
TargetEntity	String	someone@example.com	The ID or logon email address of the invited account.
MasterAccountId	String	172841235500****	The ID of the management account of the resource directory.
HandshakeId	String	h-ycm4rp****	The ID of the invitation.
MasterAccountRealName	String	company	<p>The real-name verification information of the management account of the resource directory.</p> <div style="background-color: #e0f2ff; padding: 10px;"> ? Note This parameter is available only when an invitee calls this operation. </div>
ResourceDirectoryId	String	rd-abcdef****	The ID of the resource directory.
InvitedAccountRealName	String	Alice	<p>The real-name verification information of the invitee.</p> <div style="background-color: #e0f2ff; padding: 10px;"> ? Note This parameter is available only when an invitee calls this operation. </div>

Parameter	Type	Example	Description
Note	String	Welcome	The comment on the invitation.
MasterAccount Name	String	company@example.com	The name of the management account of the resource directory.
TargetType	String	Email	<p>The type of the invited account. Valid values:</p> <ul style="list-style-type: none"> • Account: indicates the ID of the account. • Email: indicates the logon email address of the account.
ModifyTime	String	2018-08-10T09:55:41Z	The time when the invitation was modified. The time is displayed in UTC.

Examples

Sample requests

```
https://resourcemanager.aliyuncs.com/?Action=GetHandshake
&HandshakeId=h-ycm4rp****
&<Common request parameters>
```

Sample success responses

XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<GetHandshakeResponse>
  <RequestId>9B34724D-54B0-4A51-B34D-4512372FE1BE</RequestId>
  <Handshake>
    <HandshakeId>h-ycm4rp****</HandshakeId>
    <ResourceDirectoryId>rd-abcdef****</ResourceDirectoryId>
    <MasterAccountId>172841235500****</MasterAccountId>
    <MasterAccountName>company@example.com</MasterAccountName>
    <MasterAccountRealName>company</MasterAccountRealName>
    <InvitedAccountRealName>Alice</InvitedAccountRealName>
    <TargetEntity>someone@example.com</TargetEntity>
    <TargetType>Email</TargetType>
    <Note>Welcome</Note>
    <Status>Pending</Status>
    <CreateTime>2018-08-10T09:55:41Z</CreateTime>
    <ModifyTime>2018-08-10T09:55:41Z</ModifyTime>
    <ExpireTime>2018-08-24T09:55:41Z</ExpireTime>
  </Handshake>
</GetHandshakeResponse>
```

JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId" : "9B34724D-54B0-4A51-B34D-4512372FE1BE",
  "Handshake" : {
    "HandshakeId" : "h-ycm4rp****",
    "ResourceDirectoryId" : "rd-abcdef****",
    "MasterAccountId" : "172841235500****",
    "MasterAccountName" : "company@example.com",
    "MasterAccountRealName" : "company",
    "InvitedAccountRealName" : "Alice",
    "TargetEntity" : "someone@example.com",
    "TargetType" : "Email",
    "Note" : "Welcome",
    "Status" : "Pending",
    "CreateTime" : "2018-08-10T09:55:41Z",
    "ModifyTime" : "2018-08-10T09:55:41Z",
    "ExpireTime" : "2018-08-24T09:55:41Z"
  }
}
```

Error codes

HTTP status code	Error code	Error message	Description
400	MissingParameter.HandshakeId	You must specify HandshakeId.	The error message returned because the HandshakeId parameter is not configured. Configure this parameter.
400	InvalidParameter.HandshakeId	The HandshakeId is invalid.	The error message returned because the value of the HandshakeId parameter is invalid. The value must start with h- followed by 16 characters. Valid characters include letters and digits.
404	EntityNotExists.Handshake	The specified handshake does not exist.	The error message returned because the invitation does not exist. Specify a valid invitation.
409	HandshakeStatusMismatch	The invitation is invalid.	The error message returned because the invitation is invalid.
409	MissingAccountRealName	The name of the invited account is not specified.	The error message returned because the name of the invited account is not specified.

HTTP status code	Error code	Error message	Description
409	NoRealNameAuthentication	The account invited has not passed real-name authentication.	The error message returned because the invited account has not passed real-name verification.

For a list of error codes, visit the [API Error Center](#).

8.3.11. AcceptHandshake

Accepts an invitation.

Usage notes

After an invited Alibaba Cloud account joins a resource directory, it becomes a member of the resource directory. By default, the name of the invited Alibaba Cloud account is used as the display name of the account in the resource directory.

This topic provides an example on how to call the API operation to accept the invitation `h-Ih8IuPfvV0t0****` that is initiated to invite the Alibaba Cloud account `177242285274****` to join the resource directory `rd-3G****`.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	AcceptHandshake	The operation that you want to perform. Set the value to AcceptHandshake .
Handshakeld	String	Yes	<code>h-Ih8IuPfvV0t0****</code>	The ID of the invitation. You can call the ListHandshakesForAccount operation to obtain the ID.

For more information about common request parameters, see [Common parameters](#).

Response parameters

Parameter	Type	Example	Description
RequestId	String	5828C836-3286-49A6-9006-15231BB19342	The ID of the request.
Handshake	Object		The information of the invitation.
Status	String	Accepted	<p>The status of the invitation. Valid values:</p> <ul style="list-style-type: none"> Pending: The invitation is waiting for confirmation. Accepted: The invitation is accepted. Cancelled: The invitation is canceled. Declined: The invitation is rejected. Expired: The invitation expires.
ExpireTime	String	2021-01-20T02:15:40Z	The time when the invitation expires. The time is displayed in UTC.
ResourceDirectoryId	String	rd-3G****	The ID of the resource directory.
CreateTime	String	2021-01-06T02:15:40Z	The time when the invitation was created. The time is displayed in UTC.
Note	String	Welcome	The comment on the invitation.
TargetEntity	String	177242285274****	The ID or logon email address of the invited Alibaba Cloud account.
MasterAccountId	String	151266687691****	The ID of the management account of the resource directory.
MasterAccountName	String	CompanyA	The name of the management account of the resource directory.
ModifyTime	String	2021-01-06T02:16:40Z	The time when the invitation was modified. The time is displayed in UTC.

Parameter	Type	Example	Description
TargetType	String	Account	<p>The type of the invited Alibaba Cloud account. Valid values:</p> <ul style="list-style-type: none"> • Account: indicates the ID of the Alibaba Cloud account. • Email: indicates the logon email address of the Alibaba Cloud account.
HandshakeId	String	h-Ih8IuPfvV0t0****	The ID of the invitation.

Examples

Sample requests

```
https://resourcemanager.aliyuncs.com/?Action=AcceptHandshake
&HandshakeId=h-Ih8IuPfvV0t0****
&<Common request parameters>
```

Sample success responses

XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<AcceptHandshakeResponse>
  <RequestId>5828C836-3286-49A6-9006-15231BB19342</RequestId>
  <Handshake>
    <Status>Accepted</Status>
    <ModifyTime>2021-01-06T02:16:40Z</ModifyTime>
    <ResourceDirectoryId>rd-3G****</ResourceDirectoryId>
    <HandshakeId>h-Ih8IuPfvV0t0****</HandshakeId>
    <Note>Welcome</Note>
    <CreateTime>2021-01-06T02:15:40Z</CreateTime>
    <TargetType>Account</TargetType>
    <MasterAccountId>151266687691****</MasterAccountId>
    <MasterAccountName>CompanyA</MasterAccountName>
    <ExpireTime>2021-01-20T02:15:40Z</ExpireTime>
    <TargetEntity>177242285274****</TargetEntity>
  </Handshake>
</AcceptHandshakeResponse>
```

JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId" : "5828C836-3286-49A6-9006-15231BB19342",
  "Handshake" : {
    "Status" : "Accepted",
    "ModifyTime" : "2021-01-06T02:16:40Z",
    "ResourceDirectoryId" : "rd-3G****",
    "HandshakeId" : "h-Ih8IuPfvV0t0****",
    "Note" : "Welcome",
    "CreateTime" : "2021-01-06T02:15:40Z",
    "TargetType" : "Account",
    "MasterAccountId" : "151266687691****",
    "MasterAccountName" : "CompanyA",
    "ExpireTime" : "2021-01-20T02:15:40Z",
    "TargetEntity" : "177242285274****"
  }
}
```

Error codes

HTTP status code	Error code	Error message	Description
400	MissingParameter.HandshakeId	You must specify HandshakeId.	The error message returned because the HandshakeId parameter is not specified. Specify this parameter.
400	InvalidParameter.HandshakeId	The HandshakeId is invalid.	The error message returned because the value of the HandshakeId parameter is invalid. The value must start with h- followed by 16 characters. Valid characters include letters and digits.
404	EntityNotExists.Handshake	The specified handshake does not exist.	The error message returned because the invitation does not exist. Specify a valid invitation.
404	SpecifiedResourceDirectoryNotExists	The specified resource directory does not exist. You must specify a valid resource directory.	The error message returned because the specified resource directory does not exist. Specify a valid resource directory.
409	HandshakeStatusMismatch	The invitation is invalid.	The error message returned because the invitation is invalid.

HTTP status code	Error code	Error message	Description
409	NotSupport.Account.InAnotherResourceDirectory	Your account is a management account for another resource directory or a member of another resource directory.	The error message returned because your account is the management account or a member of another resource directory.
409	Invalid.AccountType	The specified profile type of account is invalid.	The error message returned because the account type is invalid. Use an enterprise account..
409	NotSupport.Account.RealNameType	Your account is not a real-name of enterprise type, so you cannot accept the invitation.	The error message returned because your account does not pass enterprise real-name verification and you cannot accept the invitation.

For a list of error codes, visit the [API Error Center](#).

8.3.12. DeclineHandshake

Rejects an invitation.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	DeclineHandshake	The operation that you want to perform. Set the value to DeclineHandshake.
Handshakeld	String	Yes	h-ycm4rp****	The ID of the invitation.

Response parameters

Parameter	Type	Example	Description
Handshake	Struct		The information of the invitation.

Parameter	Type	Example	Description
CreateTime	String	2018-08-10T09:55:41Z	The time when the invitation was created.
ExpireTime	String	2018-08-10T09:55:41Z	The time when the invitation expires.
Handshakeld	String	h-ycm4rp****	The ID of the invitation.
MasterAccountId	String	172841235500****	The ID of the enterprise management account of the resource directory.
MasterAccountName	String	Alice	The name of the enterprise management account of the resource directory.
ModifyTime	String	2018-08-10T09:55:41Z	The time when the invitation was modified.
Note	String	Welcome	The invitation note.
ResourceDirectoryId	String	rd-abcdef****	The ID of the resource directory.
Status	String	Declined	<p>The status of the invitation. Valid values:</p> <ul style="list-style-type: none"> Pending: The invitation is waiting for confirmation. Accepted: The invitation is accepted. Cancelled: The invitation is canceled. Declined: The invitation is rejected. Expired: The invitation expired.
TargetEntity	String	someone@example.com	The ID or logon email address of the invited account.
TargetType	String	Email	<p>The type of the invited account. Valid values:</p> <ul style="list-style-type: none"> Account: indicates the ID of the account. Email: indicates the logon email address of the account.
RequestId	String	9B34724D-54B0-4A51-B34D-4512372FE1BE	The ID of the request.

Examples

Sample requests

```
https://resource-manager.aliyuncs.com/?Action=DeclineHandshake
&HandshakeId=h-ycm4rp****
&<Common request parameters>
```

Sample success responses

XML format

```
<DeclineHandshakeResponse>
    <RequestId>9B34724D-54B0-4A51-B34D-4512372FE1BE</RequestId>
    <Handshake>
        <HandshakeId>h-ycm4rp****</HandshakeId>
        <ResourceDirectoryId>rd-abcdef****</ResourceDirectoryId>
        <MasterAccountId>172841235500****</MasterAccountId>
        <MasterAccountName>Alice</MasterAccountName>
        <TargetEntity>someone@example.com</TargetEntity>
        <TargetType>Email</TargetType>
        <Note>Welcom</Note>
        <Status>Declined</Status>
        <CreateTime>2018-08-10T09:55:41Z</CreateTime>
        <ModifyTime>2018-08-10T09:55:41Z</ModifyTime>
        <ExpireTime>2018-08-17T09:55:41Z7</ExpireTime>
    </Handshake>
</DeclineHandshakeResponse>
```

JSON format

```
{
    "RequestId": "9B34724D-54B0-4A51-B34D-4512372FE1BE",
    "Handshake": {
        "HandshakeId": "h-ycm4rp****",
        "ResourceDirectoryId": "rd-abcdef****",
        "MasterAccountId": "172841235500****",
        "MasterAccountName": "Alice",
        "TargetEntity": "someone@example.com",
        "TargetType": "Email",
        "Note": "Welcom",
        "Status": "Declined",
        "CreateTime": "2018-08-10T09:55:41Z",
        "ModifyTime": "2018-08-10T09:55:41Z",
        "ExpireTime": "2018-08-17T09:55:41Z7"
    }
}
```

Error codes

HTTP status code	Error code	Error message	Description
400	MissingParameter.Handshakeld	You must specify Handshakeld.	The error message returned because the Handshakeld parameter is not specified. Specify this parameter.
400	InvalidParameter.Handshakeld	The Handshakeld is invalid.	The error message returned because the value of the Handshakeld parameter is invalid. The value must start with h- followed by 16 characters. Valid characters are letters and digits.
404	EntityNotExists.Handshake	The specified handshake does not exist.	The error message returned because the invitation does not exist. Specify a valid invitation.
409	HandshakeStatusMismatch	The invitation is invalid.	The error message returned because the invitation is invalid.

For a list of error codes, visit the [API Error Center](#).

8.3.13. CancelHandshake

Cancels an invitation.

Usage notes

This topic provides an example on how to call the API operation to cancel the invitation whose ID is `h-ycm4rp****`.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	CancelHandshake	The operation that you want to perform. Set the value to <code>CancelHandshake</code> .
Handshakeld	String	Yes	<code>h-ycm4rp****</code>	The ID of the invitation.

For more information about common request parameters, see [Common parameters](#).

Response parameters

Parameter	Type	Example	Description
RequestId	String	9B34724D-54B0-4A51-B34D-4512372FE1BE	The ID of the request.
Handshake	Object		The information of the invitation.
Status	String	Cancelled	<p>The status of the invitation. Valid values:</p> <ul style="list-style-type: none"> • Pending: The invitation is waiting for confirmation. • Accepted: The invitation is accepted. • Cancelled: The invitation is canceled. • Declined: The invitation is rejected. • Expired: The invitation expires.
ExpireTime	String	2018-08-24T09:55:41Z	The time when the invitation expires. The time is displayed in UTC.
ResourceDirectoryId	String	h-ycm4rp****	The ID of the resource directory.
CreateTime	String	2018-08-10T09:55:41Z	The time when the invitation was created. The time is displayed in UTC.
Note	String	Welcome	The comment on the invitation.
TargetEntity	String	someone@example.com	The ID or logon email address of the invited account.
MasterAccountId	String	172841235500****	The ID of the management account of the resource directory.
MasterAccountName	String	Alice	The name of the management account of the resource directory.
ModifyTime	String	2018-08-10T09:55:41Z	The time when the invitation was modified. The time is displayed in UTC.

Parameter	Type	Example	Description
TargetType	String	Email	The type of the invited account. Valid values: <ul style="list-style-type: none">• Account: indicates the ID of the account.• Email: indicates the logon email address of the account.
HandshakeId	String	h-ycm4rp****	The ID of the invitation.

For more information about common request parameters, see [Common parameters](#).

Examples

Sample requests

```
https://resourcemanager.aliyuncs.com/?Action=CancelHandshake  
&HandshakeId=h-ycm4rp****  
&<Common request parameters>
```

Sample success responses

XML format

```
HTTP/1.1 200 OK  
Content-Type:application/xml  
<CancelHandshakeResponse>  
  <RequestId>9B34724D-54B0-4A51-B34D-4512372FE1BE</RequestId>  
  <Handshake>  
    <HandshakeId>h-ycm4rp****</HandshakeId>  
    <ResourceDirectoryId>rd-abcdef****</ResourceDirectoryId>  
    <MasterAccountId>172841235500****</MasterAccountId>  
    <MasterAccountName>Alice</MasterAccountName>  
    <TargetEntity>someone@example.com</TargetEntity>  
    <TargetType>Email</TargetType>  
    <Note>Welcome</Note>  
    <Status>Cancelled</Status>  
    <CreateTime>2018-08-10T09:55:41Z</CreateTime>  
    <ModifyTime>2018-08-10T09:55:41Z</ModifyTime>  
    <ExpireTime>2018-08-24T09:55:41Z</ExpireTime>  
  </Handshake>  
</CancelHandshakeResponse>
```

JSON format

```

HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId" : "9B34724D-54B0-4A51-B34D-4512372FE1BE",
  "Handshake" : {
    "HandshakeId" : "h-ycm4rp****",
    "ResourceDirectoryId" : "rd-abcdef****",
    "MasterAccountId" : "172841235500****",
    "MasterAccountName" : "Alice",
    "TargetEntity" : "someone@example.com",
    "TargetType" : "Email",
    "Note" : "Welcome",
    "Status" : "Cancelled",
    "CreateTime" : "2018-08-10T09:55:41Z",
    "ModifyTime" : "2018-08-10T09:55:41Z",
    "ExpireTime" : "2018-08-24T09:55:41Z"
  }
}

```

Error codes

HTTP status code	Error code	Error message	Description
400	MissingParameter.HandshakeId	You must specify HandshakeId.	The error message returned because the HandshakeId parameter is not specified. Specify this parameter.
400	InvalidParameter.HandshakeId	The HandshakeId is invalid.	The error message returned because the value of the HandshakeId parameter is invalid. The value must start with h- followed by 16 characters. Valid characters include letters and digits.
404	EntityNotExists.Handshake	The specified handshake does not exist.	The error message returned because the invitation does not exist. Specify a valid invitation.
409	HandshakeStatusMismatch	The invitation is invalid.	The error message returned because the invitation is invalid.

For a list of error codes, visit the [API Error Center](#).

8.3.14. ListHandshakesForAccount

Queries the invitations that are associated with an account.

Usage notes

This topic provides an example on how to call the API operation to query the invitations that are associated with the management account `172841235500****`. The response shows that two invitations are associated with the management account.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	ListHandshakesForAccount	The operation that you want to perform. Set the value to <code>ListHandshakesForAccount</code> .
PageNumber	Integer	No	1	The number of the page to return. Pages start from page 1. Default value: 1.
PageSize	Integer	No	10	The number of entries to return on each page. Valid values: 1 to 100. Default value: 10.

For more information about common request parameters, see [Common parameters](#).

Response parameters

Parameter	Type	Example	Description
TotalCount	Integer	2	The total number of invitations.
RequestId	String	9B34724D-54B0-4A51-B34D-4512372FE1BE	The ID of the request.
PageSize	Integer	10	The number of entries returned per page.
PageNumber	Integer	1	The page number of the returned page.
Handshakes	Array of Handshake		The information of the invitations.
Handshake			

Parameter	Type	Example	Description
Status	String	Pending	<p>The status of the invitation. Valid values:</p> <ul style="list-style-type: none"> • Pending: The invitation is waiting for confirmation. • Accepted: The invitation is accepted. • Cancelled: The invitation is canceled. • Declined: The invitation is rejected. • Expired: The invitation expires.
ExpireTime	String	2018-08-24T09:55:41Z	The time when the invitation expires. The time is displayed in UTC.
ResourceDirectoryId	String	rd-abcdef****	The ID of the resource directory.
CreateTime	String	2018-08-10T09:55:41Z	The time when the invitation was created. The time is displayed in UTC.
Note	String	Welcome	The comment on the invitation.
TargetEntity	String	someone@example.com	The ID or logon email address of the invited Alibaba Cloud account.
MasterAccountId	String	172841235500****	The ID of the management account of the resource directory.
MasterAccountName	String	CompanyA	The name of the management account of the resource directory.
ModifyTime	String	2018-08-10T09:55:41Z	The time when the invitation was modified. The time is displayed in UTC.
TargetType	String	Email	<p>The type of the invited Alibaba Cloud account. Valid values:</p> <ul style="list-style-type: none"> • Account: indicates the ID of the account. • Email: indicates the logon email address of the account.
HandshakeId	String	h-4N57QZzCTtES****	The ID of the invitation.

Examples

Sample requests

```
https://resourcemanager.aliyuncs.com/?Action=ListHandshakesForAccount  
&<Common request parameters>
```

Sample success responses

XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<ListHandshakesForAccountResponse>
  <RequestId>9B34724D-54B0-4A51-B34D-4512372FE1BE</RequestId>
  <PageNumber>1</PageNumber>
  <PageSize>10</PageSize>
  <TotalCount>2</TotalCount>
  <Handshakes>
    <Handshake>
      <HandshakeId>h-4N57QZzCTtES****</HandshakeId>
      <ResourceDirectoryId>rd-abcdef****</ResourceDirectoryId>
      <MasterAccountId>172841235500****</MasterAccountId>
      <MasterAccountName>CompanyA</MasterAccountName>
      <TargetEntity>someone@example.com</TargetEntity>
      <TargetType>Email</TargetType>
      <Note>Welcome</Note>
      <Status>Pending</Status>
      <CreateTime>2018-08-10T09:55:41Z</CreateTime>
      <ModifyTime>2018-08-10T09:55:41Z</ModifyTime>
      <ExpireTime>2018-08-24T09:55:41Z</ExpireTime>
    </Handshake>
    <Handshake>
      <HandshakeId>h-BeJZW63fHT4l****</HandshakeId>
      <ResourceDirectoryId>rd-abcdef****</ResourceDirectoryId>
      <MasterAccountId>172841235500****</MasterAccountId>
      <MasterAccountName>CompanyA</MasterAccountName>
      <TargetEntity>172841235500****</TargetEntity>
      <TargetType>Account</TargetType>
      <Note>Welcome</Note>
      <Status>Pending</Status>
      <CreateTime>2018-08-10T09:55:41Z</CreateTime>
      <ModifyTime>2018-08-10T09:55:41Z</ModifyTime>
      <ExpireTime>2018-08-24T09:55:41Z</ExpireTime>
    </Handshake>
  </Handshakes>
</ListHandshakesForAccountResponse>
```

JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId" : "9B34724D-54B0-4A51-B34D-4512372FE1BE",
  "PageNumber" : 1,
  "PageSize" : 10,
  "TotalCount" : 2,
  "Handshakes" : [
    "Handshake" : [ {
      "HandshakeId" : "h-4N57QZzCTtES****",
      "ResourceDirectoryId" : "rd-abcdef****",
      "MasterAccountId" : "172841235500****",
      "MasterAccountName" : "CompanyA",
      "TargetEntity" : "someone@example.com",
      "TargetType" : "Email",
      "Note" : "Welcome",
      "Status" : "Pending",
      "CreateTime" : "2018-08-10T09:55:41Z",
      "ModifyTime" : "2018-08-10T09:55:41Z",
      "ExpireTime" : "2018-08-24T09:55:41Z"
    }, {
      "HandshakeId" : "h-BeJZW63fHT4l****",
      "ResourceDirectoryId" : "rd-abcdef****",
      "MasterAccountId" : "172841235500****",
      "MasterAccountName" : "CompanyA",
      "TargetEntity" : "172841235500****",
      "TargetType" : "Account",
      "Note" : "Welcome",
      "Status" : "Pending",
      "CreateTime" : "2018-08-10T09:55:41Z",
      "ModifyTime" : "2018-08-10T09:55:41Z",
      "ExpireTime" : "2018-08-24T09:55:41Z"
    } ]
  }
}
```

Error codes

For a list of error codes, visit the [API Error Center](#).

8.3.15. ListHandshakesForResourceDirectory

Queries invitations in a resource directory.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	ListHandshakesForResourceDirectory	The operation that you want to perform. Set the value to ListHandshakesForResourceDirectory .
PageNumber	Integer	No	1	The number of the page to return. Pages start from page 1. Default value: 1.
PageSize	Integer	No	10	The number of entries to return on each page. Valid values: 1 to 100. Default value: 10.

For more information about common request parameters, see [Common parameters](#).

Response parameters

Parameter	Type	Example	Description
TotalCount	Integer	2	The total number of entries returned.
RequestId	String	9B34724D-54B0-4A51-B34D-4512372FE1BE	The ID of the request.
PageSize	Integer	10	The number of entries returned per page.
PageNumber	Integer	1	The page number of the returned page.
Handshakes	Array of Handshake		The information of the invitations.
Handshake			
Status	String	Pending	The status of the invitation. Valid values: <ul style="list-style-type: none"> • Pending: The invitation is waiting for confirmation. • Accepted: The invitation is accepted. • Cancelled: The invitation is canceled. • Declined: The invitation is rejected. • Expired: The invitation expires.

Parameter	Type	Example	Description
ExpireTime	String	2018-08-24T09:55:41Z	The time when the invitation expires. The time is displayed in UTC.
ResourceDirectoryId	String	rd-abcdef****	The ID of the resource directory.
CreateTime	String	2018-08-10T09:55:41Z	The time when the invitation was created. The time is displayed in UTC.
Note	String	Welcome	The comment on the invitation.
TargetEntity	String	someone@example.com	The ID or logon email address of the invited account.
MasterAccountId	String	172841235500****	The ID of the management account of the resource directory.
MasterAccountName	String	Alice	The name of the management account of the resource directory.
ModifyTime	String	2018-08-10T09:55:41Z	The time when the invitation was modified. The time is displayed in UTC.
TargetType	String	Email	The type of the invited account. Valid values: <ul style="list-style-type: none">• Account: indicates the ID of the account.• Email: indicates the logon email address of the account.
HandshakeId	String	h-ycm4rp****	The ID of the invitation.

Examples

Sample requests

```
https://resourcemanager.aliyuncs.com/?Action=ListHandshakesForResourceDirectory
&<Common request parameters>
```

Sample success responses

XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<ListHandshakesForResourceDirectoryResponse>
  <RequestId>9B34724D-54B0-4A51-B34D-4512372FE1BE</RequestId>
  <PageNumber>1</PageNumber>
  <PageSize>10</PageSize>
  <TotalCount>2</TotalCount>
  <Handshakes>
    <Handshake>
      <HandshakeId>h-ycm4rp****</HandshakeId>
      <ResourceDirectoryId>rd-abcdef****</ResourceDirectoryId>
      <MasterAccountId>172841235500****</MasterAccountId>
      <MasterAccountName>Alice</MasterAccountName>
      <InviteEntity>someone@example.com</InviteEntity>
      <InviteType>Email</InviteType>
      <Note>Welcome</Note>
      <Status>Pending</Status>
      <CreateTime>2018-08-10T09:55:41Z</CreateTime>
      <ModifyTime>2018-08-10T09:55:41Z</ModifyTime>
      <ExpireTime>2018-08-24T09:55:41Z</ExpireTime>
    </Handshake>
    <Handshake>
      <HandshakeId>h-ycm4rp****</HandshakeId>
      <ResourceDirectoryId>rd-abcdef****</ResourceDirectoryId>
      <MasterAccountId>172841235500****</MasterAccountId>
      <MasterAccountName>Alice</MasterAccountName>
      <TargetEntity>172841235500****</TargetEntity>
      <TargetType>Account</TargetType>
      <Note>Welcome</Note>
      <Status>Pending</Status>
      <CreateTime>2018-08-10T09:55:41Z</CreateTime>
      <ModifyTime>2018-08-10T09:55:41Z</ModifyTime>
      <ExpireTime>2018-08-24T09:55:41Z</ExpireTime>
    </Handshake>
  </Handshakes>
</ListHandshakesForResourceDirectoryResponse>
```

JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId" : "9B34724D-54B0-4A51-B34D-4512372FE1BE",
  "PageNumber" : 1,
  "PageSize" : 10,
  "TotalCount" : 2,
  "Handshakes" : [
    "Handshake" : [ {
      "HandshakeId" : "h-ycm4rp****",
      "ResourceDirectoryId" : "rd-abcdef****",
      "MasterAccountId" : "172841235500****",
      "MasterAccountName" : "Alice",
      "InviteEntity" : "someone@example.com",
      "InviteType" : "Email",
      "Note" : "Welcome",
      "Status" : "Pending",
      "CreateTime" : "2018-08-10T09:55:41Z",
      "ModifyTime" : "2018-08-10T09:55:41Z",
      "ExpireTime" : "2018-08-24T09:55:41Z"
    }, {
      "HandshakeId" : "h-ycm4rp****",
      "ResourceDirectoryId" : "rd-abcdef****",
      "MasterAccountId" : "172841235500****",
      "MasterAccountName" : "Alice",
      "TargetEntity" : "172841235500****",
      "TargetType" : "Account",
      "Note" : "Welcome",
      "Status" : "Pending",
      "CreateTime" : "2018-08-10T09:55:41Z",
      "ModifyTime" : "2018-08-10T09:55:41Z",
      "ExpireTime" : "2018-08-24T09:55:41Z"
    } ]
  }
}
```

Error codes

HTTP status code	Error code	Error message	Description
404	EntityNotExists.ResourceDirectory	The resource directory for the account is not enabled. We recommend that you first enable the resource directory for the account.	The error message returned because the account has not been used to enable a resource directory. Use the account to enable a resource directory first.

For a list of error codes, visit the [API Error Center](#).

8.3.16.

SendVerificationCodeForBindSecureMobilePhone

Sends a verification code to the mobile phone number that you want to bind to a resource account in a resource directory for security purposes.

Usage notes

To ensure that the system can record the operators of management operations, you must use a RAM user or RAM role to which the AliyunResourceDirectoryFullAccess policy is attached within the management account of your resource directory to call this operation.

In this example, a verification code is sent to the mobile phone number that you want to bind to the resource account `138660628348****`.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	SendVerificationCodeForBindSecureMobilePhone	The operation that you want to perform. Set the value to <code>SendVerificationCodeForBindSecureMobilePhone</code> .
SecureMobilePhone	String	Yes	xx-13900001234	The mobile phone number that you want to bind to the resource account. Specify the mobile phone number in the <Country code>-<Mobile phone number> format. <div style="background-color: #e0f2ff; padding: 10px; border-radius: 5px;">? Note Mobile phone numbers in the 86-<Mobile phone number> format in the Chinese mainland are not supported.</div>
AccountId	String	Yes	138660628348*** *	The ID of the resource account.

For more information about common request parameters, see [Common parameters](#).

Response parameters

Parameter	Type	Example	Description
RequestId	String	DCD43660-75DD-5D15-B342-1B83FCA5B913	The ID of the request.
ExpirationDate	String	2021-12-17T07:38:41.747Z	The time when the verification code expires.

Examples

Sample requests

```
https://resourcemanager.aliyuncs.com/?Action=SendVerificationCodeForBindSecureMobilePhone
&SecureMobilePhone=xx-13900001234
&AccountId=138660628348****
&<Common request parameters>
```

Sample success responses

XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<SendVerificationCodeForBindSecureMobilePhoneResponse>
    <RequestId>DCD43660-75DD-5D15-B342-1B83FCA5B913</RequestId>
    <ExpirationDate>2021-12-17T07:38:41.747Z</ExpirationDate>
</SendVerificationCodeForBindSecureMobilePhoneResponse>
```

JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
    "RequestId" : "DCD43660-75DD-5D15-B342-1B83FCA5B913",
    "ExpirationDate" : "2021-12-17T07:38:41.747Z"
}
```

Error codes

HTTP status code	Error code	Error message	Description
409	EntityAlreadyExists.ResourceDirectory	The resource directory for the account is already enabled. We recommend that you do not enable the resource directory again.	The error message returned because the account has been used to enable a resource directory. Do not use the account to enable a resource directory again.

HTTP status code	Error code	Error message	Description
409	SendValidateCodeExceedsLimitForAccount	For the same account, the number of verification codes sent exceeds the limit.	The error message returned because the number of verification codes that are sent per day by using the account has exceeded the upper limit.
409	InvalidParameter.MobileCountryCode	The current site does not support the country code.	The error message returned because the specified country code is not supported at the current site.
409	NotSupport.AccountInAnotherResourceDirectory	Your account is a management account for another resource directory or a member of another resource directory.	The error message returned because your account is the management account or a member of another resource directory.

For a list of error codes, visit the [API Error Center](#).

8.3.17. BindSecureMobilePhone

Binds a mobile phone number to a resource account in a resource directory for security purposes.

Usage notes

You can call this operation only to bind a mobile phone number to a resource account. You cannot call this operation to modify the mobile phone number that is bound to a resource account.

To ensure that the system can record the operators of management operations, you must use a RAM user or RAM role to which the AliyunResourceDirectoryFullAccess policy is attached within the management account of your resource directory to call this operation.

In this example, a mobile phone number is bound to the resource account `138660628348****` for security purposes.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	BindSecureMobilePhone	The operation that you want to perform. Set the value to <code>BindSecureMobilePhone</code> .

Parameter	Type	Required	Example	Description
VerificationCode	String	Yes	123456	<p>The verification code.</p> <p>You can call the SendVerificationCodeForBindSecureMobilePhone operation to obtain the verification code.</p>
SecureMobilePhone	String	Yes	xx-13900001234	<p>The mobile phone number that you want to bind to the resource account.</p> <p>The mobile phone number you specify must be the same as the mobile phone number that you specify when you call the SendVerificationCodeForBindSecureMobilePhone operation to obtain a verification code.</p> <p>Specify the mobile phone number in the <Country code>-<Mobile phone number> format.</p> <div style="background-color: #e1f5fe; padding: 10px; border-radius: 5px;"> ? Note Mobile phone numbers in the 86-<Mobile phone number> format in the Chinese mainland are not supported. </div>
AccountId	String	Yes	138660628348****	The ID of the resource account.

For more information about common request parameters, see [Common parameters](#).

Response parameters

Parameter	Type	Example	Description
RequestId	String	0217AFEB-5318-56D4-B167-1933D83EDF3F	The ID of the request.

Examples

Sample requests

```
https://resourcemanager.aliyuncs.com/?Action=BindSecureMobilePhone
&VerificationCode=123456
&SecureMobilePhone=xx-13900001234
&AccountId=138660628348****
&<Common request parameters>
```

Sample success responses

XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<BindSecureMobilePhoneResponse>
  <RequestId>0217AFEB-5318-56D4-B167-1933D83EDF3F</RequestId>
</BindSecureMobilePhoneResponse>
```

JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId" : "0217AFEB-5318-56D4-B167-1933D83EDF3F"
}
```

Error codes

HTTP status code	Error code	Error message	Description
409	Invalid.EnterpriseName	You must specify the enterprise name.	The error message returned because no enterprise name is specified for the account. Specify an enterprise name for the account.
409	EnterpriseRealNameVerificationError	The specified account does not pass enterprise real-name verification. We recommend you first complete enterprise real-name verification for the account.	The error message returned because the account does not pass enterprise real-name verification. Complete enterprise real-name verification first.
409	EntityAlreadyExists.ResourceDirectory	The resource directory for the account is already enabled. We recommend that you do not enable the resource directory again.	The error message returned because the account has been used to enable a resource directory. Do not use the account to enable a resource directory again.
409	Invalid.VerificationCode	The verification code is invalid.	The error message returned because the verification code is invalid.
409	AccountTypeMismatch	The type or status of the member account cannot satisfy the current operation.	The error message returned because the type or status of the member does not meet the requirements for the current operation.

HTTP status code	Error code	Error message	Description
409	AccountSecureMobileAlreadyExists	The secure mobile number of the member already exists.	The error message returned because a mobile phone number has been bound to the member for security purposes.
409	CallerIdentityError	Please use the RAM user or role of the Management Account.	The error message returned because only a RAM user or RAM role within the management account of the resource directory can be used to call this operation.
409	NotSupport.AccountInAnotherResourceDirectory	Your account is a management account for another resource directory or a member of another resource directory.	The error message returned because your account is the management account or a member of another resource directory.

For a list of error codes, visit the [API Error Center](#).

8.4. Access control policies

8.4.1. EnableControlPolicy

Enables the Control Policy feature.

The Control Policy feature allows you to manage the permission boundaries of the folders or member accounts in a resource directory in a centralized manner. This feature is implemented based on the resource directory. You can use this feature to develop common or dedicated rules for access control. The Control Policy feature does not grant permissions but only defines permission boundaries. A member account in a resource directory can be used to access resources only after it is granted the required permissions by using the Resource Access Management (RAM) service. For more information, see [Overview of the Control Policy feature](#).

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	EnableControlPolicy	The operation that you want to perform. Set the value to EnableControlPolicy.

For more information about common request parameters, see [Common parameters](#).

Response parameters

Parameter	Type	Example	Description
EnablementStatus	String	PendingEnable	<p>The status of the Control Policy feature.</p> <p>Valid values:</p> <ul style="list-style-type: none">Enabled: The Control Policy feature is enabled.PendingEnable: The Control Policy feature is being enabled.Disabled: The Control Policy feature is disabled.PendingDisable: The Control Policy feature is being disabled.
RequestId	String	8CE7BD95-EFFA-4911-A1E0-BD4412697FEB	The ID of the request.

Examples

Sample requests

```
https://resourcemanager.aliyuncs.com/?Action=EnableControlPolicy  
&<Common request parameters>
```

Sample success responses

XML format

```
<EnableControlPolicyResponse>  
  <EnablementStatus>PendingEnable</EnablementStatus>  
  <RequestId>8CE7BD95-EFFA-4911-A1E0-BD4412697FEB</RequestId>  
</EnableControlPolicyResponse>
```

JSON format

```
{  
  "EnablementStatus": "PendingEnable",  
  "RequestId": "8CE7BD95-EFFA-4911-A1E0-BD4412697FEB"  
}
```

Error codes

HTTP status code	Error code	Error message	Description
409	Throttling.EnableControlPolicy	The enable operation is too frequent. Please try again in %s minute(s).	The error message returned because frequent enabling operations are performed for the Control Policy feature. Try to enable the feature a few minutes later.

For a list of error codes, visit the [API Error Center](#).

8.4.2. DisableControlPolicy

Disables the Control Policy feature.

After you disable the Control Policy feature, the system automatically detaches all control policies that are attached to folders and member accounts. The system does not delete these control policies, but you cannot attach them to folders or member accounts again.

Note If you disable the Control Policy feature, the permissions of all folders and member accounts in a resource directory are affected. You must proceed with caution.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	DisableControlPolicy	The operation that you want to perform. Set the value to DisableControlPolicy.

For more information about common request parameters, see [Common parameters](#).

Response parameters

Parameter	Type	Example	Description

Parameter	Type	Example	Description
EnablementStatus	String	PendingDisable	<p>The status of the Control Policy feature. Valid values:</p> <ul style="list-style-type: none">Enabled: The Control Policy feature is enabled.PendingEnable: The Control Policy feature is being enabled.Disabled: The Control Policy feature is disabled.PendingDisable: The Control Policy feature is being disabled.
RequestId	String	7C709979-451D-4C92-835D-7DDCAA562E9	The ID of the request.

Examples

Sample requests

```
https://resourcemanager.aliyuncs.com/?Action=DisableControlPolicy  
&<Common request parameters>
```

Sample success responses

XML format

```
<DisableControlPolicyResponse>  
  <EnablementStatus>PendingDisable</EnablementStatus>  
  <RequestId>7C709979-451D-4C92-835D-7DDCAA562E9</RequestId>  
</DisableControlPolicyResponse>
```

JSON format

```
{  
  "EnablementStatus": "PendingDisable",  
  "RequestId": "7C709979-451D-4C92-835D-7DDCAA562E9"  
}
```

Error codes

For a list of error codes, visit the [API Error Center](#).

8.4.3. GetControlPolicyEnablementStatus

Queries the status of the Control Policy feature.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	GetControlPolicyEnablementStatus	The operation that you want to perform. Set the value to GetControlPolicyEnablementStatus.

For more information about common request parameters, see [Common parameters](#).

Response parameters

Parameter	Type	Example	Description
EnablementStatus	String	Disabled	<p>The status of the Control Policy feature. Valid values:</p> <ul style="list-style-type: none">Enabled: The Control Policy feature is enabled.PendingEnable: The Control Policy feature is being enabled.Disabled: The Control Policy feature is disabled.PendingDisable: The Control Policy feature is being disabled.
RequestId	String	1DC39A4E-3B52-4EFE-9F93-4897D7FFA0C4	The ID of the request.

Examples

Sample requests

```
https://resourcemanager.aliyuncs.com/?Action=GetControlPolicyEnablementStatus  
&<Common request parameters>
```

Sample success responses

XML format

```
<GetControlPolicyEnablementStatusResponse>  
  <EnablementStatus>Disabled</EnablementStatus>  
  <RequestId>1DC39A4E-3B52-4EFE-9F93-4897D7FFA0C4</RequestId>  
</GetControlPolicyEnablementStatusResponse>
```

JSON format

```
{  
    "EnablementStatus": "Disabled",  
    "RequestId": "1DC39A4E-3B52-4EFE-9F93-4897D7FFA0C4"  
}
```

Error codes

For a list of error codes, visit the [API Error Center](#).

8.4.4. CreateControlPolicy

Creates a custom access control policy.

Usage notes

This topic provides an example on how to call the API operation to create a custom access control policy named `ExampleControlPolicy`. This access control policy is used to prohibit modifications to the ResourceDirectoryAccountAccessRole role and the permissions of the role.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	CreateControlPolicy	The operation that you want to perform. Set the value to CreateControlPolicy .
PolicyName	String	Yes	ExampleControlPolicy	The name of the access control policy. The name must be 1 to 128 characters in length. The name can contain letters, digits, and hyphens (-) and must start with a letter.
Description	String	No	ExampleControlPolicy	The description of the access control policy. The description must be 1 to 1,024 characters in length. The description can contain letters, digits, underscores (_), and hyphens (-) and must start with a letter.

Parameter	Type	Required	Example	Description
EffectScope	String	Yes	RAM	<p>The effective scope of the access control policy.</p> <p>The value RAM indicates that the access control policy takes effect only for RAM users and RAM roles.</p>
PolicyDocument	String	Yes	null	<p>The document of the access control policy.</p> <p>The document can be a maximum of 4,096 characters in length.</p> <p>For more information about the languages of access control policies, see Languages of access control policies.</p> <p>For more information about the examples of access control policies, see Examples of custom access control policies.</p>

For more information about common request parameters, see [Common parameters](#).

Response parameters

Parameter	Type	Example	Description
ControlPolicy	Object		The details of the access control policy.
UpdateDate	String	2021-03-18T09:24:19Z	The time when the access control policy was updated.
Description	String	ExampleControlPolicy	The description of the access control policy.
EffectScope	String	RAM	<p>The effective scope of the access control policy.</p> <p>The value RAM indicates that the access control policy takes effect only for RAM users and RAM roles.</p>
AttachmentCount	String	0	The number of times that the access control policy is referenced.

Parameter	Type	Example	Description
PolicyName	String	ExampleControlPolicy	The name of the access control policy.
PolicyId	String	cp-jExXAqlYkwHN****	The ID of the access control policy.
CreateDate	String	2021-03-18T09:24:19Z	The time when the access control policy was created.
PolicyType	String	Custom	The type of the access control policy. Valid values: <ul style="list-style-type: none">• System: system access control policy• Custom: custom access control policy
RequestId	String	776B05B3-A0B0-464B-A191-F4E1119A94B2	The ID of the request.

Examples

Sample requests

```
https://resourcemanager.aliyuncs.com/?Action=CreateControlPolicy
&EffectScope=RAM
&PolicyDocument={"Version":"1","Statement":[{"Effect":"Deny","Action":["ram:UpdateRole","ram:DeleteRole","ram:AttachPolicyToRole","ram:DetachPolicyFromRole"],"Resource":"acs:ram:*:*:role/ResourceDirectoryAccountAccessRole"}]}
&PolicyName=ExampleControlPolicy
&Description=ExampleControlPolicy
&<Common request parameters>
```

Sample success responses

XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<?xml version="1.0" encoding="UTF-8" ?>
<CreateControlPolicyResponse>
<ControlPolicy>
<PolicyType>Custom</PolicyType>
<UpdateDate>2021-03-18T09:24:19Z</UpdateDate>
<Description>ExampleControlPolicy</Description>
<AttachmentCount>0</AttachmentCount>
<PolicyName>ExampleControlPolicy</PolicyName>
<CreateDate>2021-03-18T09:24:19Z</CreateDate>
<PolicyId>cp-jExXAqIYkwHN****</PolicyId>
<EffectScope>RAM</EffectScope>
</ControlPolicy>
<RequestId>776B05B3-A0B0-464B-A191-F4E1119A94B2</RequestId>
</CreateControlPolicyResponse>
```

JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "ControlPolicy" : {
    "PolicyType" : "Custom",
    "UpdateDate" : "2021-03-18T09:24:19Z",
    "Description" : "ExampleControlPolicy",
    "AttachmentCount" : 0,
    "PolicyName" : "ExampleControlPolicy",
    "CreateDate" : "2021-03-18T09:24:19Z",
    "PolicyId" : "cp-jExXAqIYkwHN****",
    "EffectScope" : "RAM"
  },
  "RequestId" : "776B05B3-A0B0-464B-A191-F4E1119A94B2"
}
```

Error codes

For a list of error codes, visit the [API Error Center](#).

8.4.5. GetControlPolicy

Queries the details of a control policy.

In this example, the details of the control policy `cp-SImPt8GCEwiq****` are queried.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	GetControlPolicy	The operation that you want to perform. Set the value to GetControlPolicy.
PolicyId	String	Yes	cp-SlmpPt8GCEwiq****	The ID of the control policy.
Language	String	No	zh-CN	<p>The language that is used to return the description of the control policy. Valid values:</p> <ul style="list-style-type: none"> • zh-CN: Chinese (default value) • en: English • ja: Japanese

For more information about common request parameters, see [Common parameters](#).

Response parameters

Parameter	Type	Example	Description
ControlPolicy	Struct		The details of the control policy.
AttachmentCount	String	0	The number of times that the control policy is referenced.
CreateDate	String	2021-03-18T08:51:33Z	The time when the policy was created.
Description	String	ExampleControlPolicy	The description of the control policy.
EffectScope	String	RAM	<p>The effective scope of the control policy. Valid values:</p> <ul style="list-style-type: none"> • All: The control policy is in effect for Alibaba Cloud accounts, RAM users, and RAM roles. • RAM: The control policy is in effect for RAM users and RAM roles.

Parameter	Type	Example	Description
PolicyDocument	String	{"Version": "1", "Statement": [{"Effect": "Deny", "Action": ["ram:UpdateRole", "ram:DeleteRole", "ram:AttachPolicyToRole", "ram:DetachPolicyFromRole"], "Resource": "acs:ram:*:role/ResourceDirectoryAccountAccessRole"}]}	The document of the control policy.
PolicyId	String	cp-SImPt8GCEwiq****	The ID of the control policy.
PolicyName	String	test	The name of the control policy.
PolicyType	String	Custom	The type of the control policy. Valid values: • System: system control policy • Custom: custom control policy
UpdateDate	String	2021-03-18T08:51:33Z	The time when the control policy was updated.
RequestId	String	AB769936-CDFA-4D52-8CE2-A3581800044A	The ID of the request.

Examples

Sample requests

```
https://resourcemanager.aliyuncs.com/?Action=GetControlPolicy
&PolicyId=cp-SImPt8GCEwiq****
&<Common request parameters>
```

Sample success responses

XML format

```
<GetControlPolicyResponse>
  <ControlPolicy>
    <PolicyType>Custom</PolicyType>
    <UpdateDate>2021-03-18T08:51:33Z</UpdateDate>
    <Description>ExampleControlPolicy</Description>
    <AttachmentCount>0</AttachmentCount>
    <PolicyName>test</PolicyName>
    <PolicyDocument>{"Version":"1","Statement":[{"Effect":"Deny","Action":["ram:UpdateRole","ram:DeleteRole","ram:AttachPolicyToRole","ram:DetachPolicyFromRole"],"Resource":"acs:ram:*:role/ResourceDirectoryAccountAccessRole"}]}</PolicyDocument>
    <CreateDate>2021-03-18T08:51:33Z</CreateDate>
    <PolicyId>cp-SImPt8GCEwiq****</PolicyId>
    <EffectScope>RAM</EffectScope>
  </ControlPolicy>
  <RequestId>AB769936-CDFA-4D52-8CE2-A3581800044A</RequestId>
</GetControlPolicyResponse>
```

JSON format

```
{
  "ControlPolicy": {
    "PolicyType": "Custom",
    "UpdateDate": "2021-03-18T08:51:33Z",
    "Description": "ExampleControlPolicy",
    "AttachmentCount": 0,
    "PolicyName": "test",
    "PolicyDocument": "{\"Version\":\"1\",\"Statement\":[{\"Effect\":\"Deny\",\"Action\":[\"ram:UpdateRole\",\"ram:DeleteRole\",\"ram:AttachPolicyToRole\",\"ram:DetachPolicyFromRole\"]},{\"Resource\":\"acs:ram:*:role/ResourceDirectoryAccountAccessRole\"}]}",
    "CreateDate": "2021-03-18T08:51:33Z",
    "PolicyId": "cp-SImPt8GCEwiq****",
    "EffectScope": "RAM"
  },
  "RequestId": "AB769936-CDFA-4D52-8CE2-A3581800044A"
}
```

Error codes

For a list of error codes, visit the [API Error Center](#).

8.4.6. UpdateControlPolicy

Updates a custom access control policy.

Usage notes

In this example, the name of the access control policy whose ID is `cp-jExXAqIYkwHN****` is changed to `NewControlPolicy`.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	UpdateControlPolicy	The operation that you want to perform. Set the value to UpdateControlPolicy .
PolicyId	String	Yes	cp-jExXAqIYkwHN***	The ID of the access control policy.
NewPolicyName	String	No	NewControlPolicy	<p>The new name of the access control policy.</p> <p>The name must be 1 to 128 characters in length. The name can contain letters, digits, and hyphens (-) and must start with a letter.</p>
NewDescription	String	No	ExampleControlPolicy	<p>The new description of the access control policy.</p> <p>The description must be 1 to 1,024 characters in length. The description can contain letters, digits, underscores (_), and hyphens (-) and must start with a letter.</p>
NewPolicyDocument	String	No	{"Version":"1","Statement":[{"Effect":"Deny","Action":["ram:UpdateRole","ram:DeleteRole","ram:AttachPolicyToRole","ram:DetachPolicyFromRole"],"Resource":"acs:ram:*:*:role/ResourceDirectoryAccountAccessRole"}]}	<p>The new document of the access control policy.</p> <p>The document can be a maximum of 4,096 characters in length.</p> <p>For more information about the languages of access control policies, see Languages of access control policies.</p> <p>For more information about the examples of access control policies, see Examples of custom access control policies.</p>

For more information about common request parameters, see [Common parameters](#).

Response parameters

Parameter	Type	Example	Description
ControlPolicy	Object		The details of the access control policy.
UpdateDate	String	2021-03-18T10:04:55Z	The time when the access control policy was updated.
Description	String	ExampleControlPolicy	The description of the access control policy.
EffectScope	String	RAM	<p>The effective scope of the access control policy. Valid values:</p> <ul style="list-style-type: none"> • All: The access control policy is in effect for Alibaba Cloud accounts, RAM users, and RAM roles. • RAM: The access control policy is in effect only for RAM users and RAM roles.
AttachmentCount	String	0	The number of times that the access control policy is referenced.
PolicyName	String	NewControlPolicy	The name of the access control policy.
PolicyId	String	cp-jExXAqlYkwHN****	The ID of the access control policy.
CreateDate	String	2021-03-18T09:24:19Z	The time when the access control policy was created.
PolicyType	String	Custom	<p>The type of the access control policy. Valid values:</p> <ul style="list-style-type: none"> • System: system access control policy • Custom: custom access control policy
RequestId	String	2DFCE4C9-04A9-4C83-BB14-FE791275EC53	The ID of the request.

Examples

Sample requests

```
https://resourcemanager.aliyuncs.com/?Action=UpdateControlPolicy  
&PolicyId=cp-jExXAqIYkwHN****  
&NewPolicyName>NewControlPolicy  
&<Common request parameters>
```

Sample success responses

XML format

```
HTTP/1.1 200 OK  
Content-Type:application/xml  
<?xml version="1.0" encoding="UTF-8" ?>  
<UpdateControlPolicyResponse>  
  <ControlPolicy>  
    <PolicyType>Custom</PolicyType>  
    <UpdateDate>2021-03-18T10:04:55Z</UpdateDate>  
    <Description>ExampleControlPolicy</Description>  
    <AttachmentCount>0</AttachmentCount>  
    <PolicyName>NewControlPolicy</PolicyName>  
    <CreateDate>2021-03-18T09:24:19Z</CreateDate>  
    <PolicyId>cp-jExXAqIYkwHN****</PolicyId>  
    <EffectScope>RAM</EffectScope>  
  </ControlPolicy>  
  <RequestId>2DFCE4C9-04A9-4C83-BB14-FE791275EC53</RequestId>  
</UpdateControlPolicyResponse>
```

JSON format

```
HTTP/1.1 200 OK  
Content-Type:application/json  
{  
  "ControlPolicy" : {  
    "PolicyType" : "Custom",  
    "UpdateDate" : "2021-03-18T10:04:55Z",  
    "Description" : "ExampleControlPolicy",  
    "AttachmentCount" : 0,  
    "PolicyName" : "NewControlPolicy",  
    "CreateDate" : "2021-03-18T09:24:19Z",  
    "PolicyId" : "cp-jExXAqIYkwHN****",  
    "EffectScope" : "RAM"  
  },  
  "RequestId" : "2DFCE4C9-04A9-4C83-BB14-FE791275EC53"  
}
```

Error codes

For a list of error codes, visit the [API Error Center](#).

8.4.7. DeleteControlPolicy

Deletes a custom control policy.

If you want to delete a custom control policy that is attached to folders or member accounts, you must call the [DetachControlPolicy](#) operation to detach the policy before you delete it.

In this example, the custom control policy `cp-SImPt8GCEwiq****` is deleted.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	DeleteControlPolicy	The operation that you want to perform. Set the value to DeleteControlPolicy.
PolicyId	String	Yes	<code>cp-SImPt8GCEwiq****</code>	The ID of the control policy.

For more information about common request parameters, see [Common parameters](#).

Response parameters

Parameter	Type	Example	Description
RequestId	String	C8541E06-B207-46BF-92C9-DC8DE4609D75	The ID of the request.

Examples

Sample requests

```
https://resourcemanager.aliyuncs.com/?Action=DeleteControlPolicy
&PolicyId=cp-SImPt8GCEwiq****
&<Common request parameters>
```

Sample success responses

`XML` format

```
<DeleteControlPolicyResponse>
  <RequestId>C8541E06-B207-46BF-92C9-DC8DE4609D75</RequestId>
</DeleteControlPolicyResponse>
```

`JSON` format

```
{  
    "RequestId": "C8541E06-B207-46BF-92C9-DC8DE4609D75"  
}
```

Error codes

For a list of error codes, visit the [API Error Center](#).

8.4.8. AttachControlPolicy

Attaches an access control policy.

Usage notes

After you attach an access control policy, the operations performed on resources by using members are limited by the policy. Make sure that the attached policy meets your expectations. Otherwise, your business may be affected.

By default, the system access control policy FullAliyunAccess is attached to each folder and member.

The access control policy that is attached to a folder also applies to all its subfolders and all members in the subfolders.

A maximum of 10 access control policies can be attached to a folder or member.

This topic provides an example on how to call the API operation to attach the custom access control policy `cp-jExXAqIYkwHN****` to the folder `fd-ZDNPiT****`.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	AttachControlPolicy	The operation that you want to perform. Set the value to <code>AttachControlPolicy</code> .
PolicyId	String	Yes	cp-jExXAqIYkwHN****	The ID of the access control policy.
TargetId	String	Yes	fd-ZDNPiT****	The ID of the object to which you want to attach the access control policy. Access control policies can be attached to the following objects: <ul style="list-style-type: none">• Root folder• Subfolders of the Root folder• Members

For more information about common request parameters, see [Common parameters](#).

Response parameters

Parameter	Type	Example	Description
RequestId	String	95060F1D-6990-4645-8920-A81D1BBFE992	The ID of the request.

Examples

Sample requests

```
https://resourcemanager.aliyuncs.com/?Action=AttachControlPolicy
&PolicyId=cp-jExXAqIYkwHN****
&TargetId=fd-ZDNPiT****
&<Common request parameters>
```

Sample success responses

XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<?xml version="1.0" encoding="UTF-8" ?>
<AttachControlPolicyResponse>
  <RequestId>95060F1D-6990-4645-8920-A81D1BBFE992</RequestId>
</AttachControlPolicyResponse>
```

JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId" : "95060F1D-6990-4645-8920-A81D1BBFE992"
}
```

Error codes

HTTP status code	Error code	Error message	Description
404	EntityNotExists.Target	The specified target does not exist in the resource directory.	The error message returned because the specified object does not exist in the resource directory.

For a list of error codes, visit the [API Error Center](#).

8.4.9. DetachControlPolicy

Detaches an access control policy.

Usage notes

After you detach an access control policy, the operations performed on resources by using members are not limited by the policy. Make sure that the detached policy meets your expectations. Otherwise, your business may be affected.

Both the system and custom access control policies can be detached. If an object has only one access control policy attached, the policy cannot be detached.

This topic provides an example on how to call the API operation to detach the custom control policy `cp-jExXAqIYkwHN****` from the folder `fd-ZDNPiT****`.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	DetachControlPolicy	The operation that you want to perform. Set the value to DetachControlPolicy .
PolicyId	String	Yes	cp-jExXAqIYkwHN****	The ID of the access control policy.
TargetId	String	Yes	fd-ZDNPiT****	The ID of the object from which you want to detach the access control policy. Access control policies can be attached to the following objects: <ul style="list-style-type: none">• Root folder• Subfolders of the Root folder• Members

For more information about common request parameters, see [Common parameters](#).

Response parameters

Parameter	Type	Example	Description
RequestId	String	9EA4F962-1A2E-4AFE-BE0C-B14736FC46CC	The ID of the request.

Examples

Sample requests

```
https://resourcemanager.aliyuncs.com/?Action=DetachControlPolicy  
&PolicyId=cp-jExXAqIYkwHN****  
&TargetId=fd-ZDNPiT****  
&<Common request parameters>
```

Sample success responses

XML format

```
HTTP/1.1 200 OK  
Content-Type:application/xml  
<?xml version="1.0" encoding="UTF-8" ?>  
<DetachControlPolicyResponse>  
  <RequestId>9EA4F962-1A2E-4AFE-BE0C-B14736FC46CC</RequestId>  
</DetachControlPolicyResponse>
```

JSON format

```
HTTP/1.1 200 OK  
Content-Type:application/json  
{  
  "RequestId" : "9EA4F962-1A2E-4AFE-BE0C-B14736FC46CC"  
}
```

Error codes

HTTP status code	Error code	Error message	Description
400	NotSupportDetachLastControlPolicy	It is not detach the last control policy on the target node.	The error message returned because you are not allowed to detach the only access control policy from the object.
404	EntityNotExists.Target	The specified target does not exist in the resource directory.	The error message returned because the specified object does not exist in the resource directory.

For a list of error codes, visit the [API Error Center](#).

8.4.10. ListControlPolicies

Queries control policies.

In this example, the system control policies within a resource directory are queried. The returned result shows that the resource directory has only one system control policy. The policy is named `FullAliyunAccess`.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	ListControlPolicies	The operation that you want to perform. Set the value to ListControlPolicies.
PolicyType	String	Yes	System	The type of control policies. Valid values: <ul style="list-style-type: none">• System: system control policy• Custom: custom control policy
PageNumber	Integer	No	1	The number of the page to return. Pages start from page 1. Default value: 1.
PageSize	Integer	No	10	The number of entries to return on each page. Valid values: 1 to 100. Default value: 10.
Language	String	No	zh-CN	The language that is used to return the descriptions of the control policies. Valid values: <ul style="list-style-type: none">• zh-CN: Chinese (default value)• en: English• ja: Japanese

For more information about common request parameters, see [Common parameters](#).

Response parameters

Parameter	Type	Example	Description
ControlPolicies	Array of ControlPolicy		The list of control policies.

Parameter	Type	Example	Description
-----------	------	---------	-------------

ControlPolicy			
AttachmentCount	String	44	The number of times that the control policy is referenced.
CreateDate	String	2020-08-05T06:32:24Z	The time when the control policy was created.
Description	String	System control policy available for all operations on the cloud	The description of the control policy.
EffectScope	String	All	<p>The effective scope of the control policy. Valid values:</p> <ul style="list-style-type: none"> • All: The control policy is in effect for Alibaba Cloud accounts, RAM users, and RAM roles. • RAM: The control policy is in effect for RAM users and RAM roles.
PolicyId	String	cp-FullAliyunAccess	The ID of the control policy.
PolicyName	String	FullAliyunAccess	The name of the control policy.
PolicyType	String	System	<p>The type of the control policy. Valid values:</p> <ul style="list-style-type: none"> • System: system control policy • Custom: custom control policy
UpdateDate	String	2020-08-05T06:32:24Z	The time when the control policy was updated.
PageNumber	Integer	1	The page number of the returned page.
PageSize	Integer	10	The number of entries returned per page.
RequestId	String	9424A34C-3471-45AD-B6AB-924BBDFE42F9	The ID of the request.

Parameter	Type	Example	Description
TotalCount	Integer	1	The number of control policies.

Examples

Sample requests

```
https://resourcemanager.aliyuncs.com/?Action=ListControlPolicies  
&PolicyType=System  
&<Common request parameters>
```

Sample success responses

XML format

```
<ListControlPoliciesResponse>  
    <TotalCount>1</TotalCount>  
    <RequestId>9424A34C-3471-45AD-B6AB-924BBDDE42F9</RequestId>  
    <PageSize>10</PageSize>  
    <PageNumber>1</PageNumber>  
    <ControlPolicies>  
        <ControlPolicy>  
            <PolicyType>System</PolicyType>  
            <UpdateDate>2020-08-05T06:32:24Z</UpdateDate>  
            <Description>System control policy available for all operations on the cloud</Description>  
            <AttachmentCount>44</AttachmentCount>  
            <PolicyName>FullAliyunAccess</PolicyName>  
            <CreateDate>2020-08-05T06:32:24Z</CreateDate>  
            <PolicyId>cp-FullAliyunAccess</PolicyId>  
            <EffectScope>All</EffectScope>  
        </ControlPolicy>  
    </ControlPolicies>  
</ListControlPoliciesResponse>
```

JSON format

```
{  
    "TotalCount": 1,  
    "RequestId": "9424A34C-3471-45AD-B6AB-924BBDFE42F9",  
    "PageSize": 10,  
    "PageNumber": 1,  
    "ControlPolicies": {  
        "ControlPolicy": [  
            {  
                "PolicyType": "System",  
                "UpdateDate": "2020-08-05T06:32:24Z",  
                "Description": "System control policy available for all operations on the cloud",  
                "AttachmentCount": 44,  
                "PolicyName": "FullAliyunAccess",  
                "CreateDate": "2020-08-05T06:32:24Z",  
                "PolicyId": "cp-FullAliyunAccess",  
                "EffectScope": "All"  
            }  
        ]  
    }  
}
```

Error codes

For a list of error codes, visit the [API Error Center](#).

8.4.11. ListControlPolicyAttachmentsForTarget

Queries the control policies that are attached to a folder or member account.

In this example, the control policies that are attached to the folder `fd-ZDNPiT****` are queried.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	ListControlPolicyAttachmentsForTarget	The operation that you want to perform. Set the value to <code>ListControlPolicyAttachmentsForTarget</code> .

Parameter	Type	Required	Example	Description
TargetId	String	Yes	fd-ZDNPiT****	<p>The ID of the object whose control policies you want to query. Control policies can be attached to the following objects:</p> <ul style="list-style-type: none"> • Root folder • Child folders of the Root folder • Member accounts
Language	String	No	zh-CN	<p>The language that is used to return the descriptions of the control policies. Valid values:</p> <ul style="list-style-type: none"> • zh-CN: Chinese (default value) • en: English • ja: Japanese

For more information about common request parameters, see [Common parameters](#).

Response parameters

Parameter	Type	Example	Description
ControlPolicyAttachments	Array of ControlPolicyAttachment		The list of attached control policies.
ControlPolicyAttachment			
AttachDate	String	2021-03-19T02:56:24Z	The time when the control policy was attached.
Description	String	ExampleControlPolicy	The description of the control policy.
PolicyId	String	cp-jExXAqIYkwHN****	The ID of the control policy.
PolicyName	String	ExampleControlPolicy	The name of the control policy.
PolicyType	String	Custom	<p>The type of the control policy. Valid values:</p> <ul style="list-style-type: none"> • System: system control policy • Custom: custom control policy

Parameter	Type	Example	Description
RequestId	String	C276B600-7B7A-49E8-938C-E16CFA955A82	The ID of the request.

Examples

Sample requests

```
https://resourcemanager.aliyuncs.com/?Action=ListControlPolicyAttachmentsForTarget
&TargetId=fd-ZDNPiT****
&<Common request parameters>
```

Sample success responses

XML format

```
<ListControlPolicyAttachmentsForTargetResponse>
  <RequestId>C276B600-7B7A-49E8-938C-E16CFA955A82</RequestId>
  <ControlPolicyAttachments>
    <ControlPolicyAttachment>
      <PolicyType>System</PolicyType>
      <Description>System control policy available for all operations on the cloud</Description>
      <AttachDate>2021-03-18T07:27:59Z</AttachDate>
      <PolicyName>FullAliyunAccess</PolicyName>
      <PolicyId>cp-FullAliyunAccess</PolicyId>
    </ControlPolicyAttachment>
    <ControlPolicyAttachment>
      <PolicyType>Custom</PolicyType>
      <Description>ExampleControlPolicy</Description>
      <AttachDate>2021-03-19T02:56:24Z</AttachDate>
      <PolicyName>ExampleControlPolicy</PolicyName>
      <PolicyId>cp-jExXAqIYkwHN****</PolicyId>
    </ControlPolicyAttachment>
  </ControlPolicyAttachments>
</ListControlPolicyAttachmentsForTargetResponse>
```

JSON format

```
{
  "RequestId": "C276B600-7B7A-49E8-938C-E16CFA955A82",
  "ControlPolicyAttachments": {
    "ControlPolicyAttachment": [
      {
        "PolicyType": "System",
        "Description": "System control policy available for all operations on the cloud",
        "AttachDate": "2021-03-18T07:27:59Z",
        "PolicyName": "FullAliyunAccess",
        "PolicyId": "cp-FullAliyunAccess"
      },
      {
        "PolicyType": "Custom",
        "Description": "ExampleControlPolicy",
        "AttachDate": "2021-03-19T02:56:24Z",
        "PolicyName": "ExampleControlPolicy",
        "PolicyId": "cp-jExXAqIYkwHN****"
      }
    ]
  }
}
```

Error codes

HTTP status code	Error code	Error message	Description
404	EntityNotExists.Target	The specified target does not exist in the resource directory.	The error message returned because the specified object does not exist in the resource directory.

For a list of error codes, visit the [API Error Center](#).

8.4.12. ListTargetAttachmentsForControlPolicy

Queries the objects to which a specific control policy is attached.

In this example, the folders or member accounts to which the control policy `cp-jExXAqIYkwHN****` is attached are queried. The returned result shows that the control policy is attached to the folder `fd-ZDNPiT****`.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	ListTargetAttachmentsForControlPolicy	The operation that you want to perform. Set the value to ListTargetAttachmentsForControlPolicy.
PolicyId	String	Yes	cp-jExXAqlYkwHN****	The ID of the control policy.
PageNumber	Integer	No	1	The number of the page to return. Pages start from page 1. Default value: 1.
PageSize	Integer	No	10	The number of entries to return on each page. Valid values: 1 to 100. Default value: 10.

For more information about common request parameters, see [Common parameters](#).

Response parameters

Parameter	Type	Example	Description
PageNumber	Integer	1	The page number of the returned page.
PageSize	Integer	10	The number of entries returned per page.
RequestId	String	B32BD3D6-1089-41F3-8E70-E0079BC7D760	The ID of the request.
TargetAttachments	Array of TargetAttachment		The list of objects to which the control policy is attached.
TargetAttachment			
AttachDate	String	2021-03-19T02:56:24Z	The time when the control policy was attached to the object.
TargetId	String	fd-ZDNPiT****	The ID of the object.

Parameter	Type	Example	Description
TargetName	String	Dev_Department	The name of the object.
TargetType	String	Folder	The type of the object. Valid values: <ul style="list-style-type: none">• Root: Root folder• Folder: child folder of the Root folder• Account: member account
TotalCount	Integer	1	The total number of objects to which the control policy is attached.

Examples

Sample requests

```
https://resourcemanager.aliyuncs.com/?Action=ListTargetAttachmentsForControlPolicy  
&PolicyId=cp-jExXAqIYkwHN****  
&<Common request parameters>
```

Sample success responses

XML format

```
<ListTargetAttachmentsForControlPolicyResponse>  
  <TotalCount>1</TotalCount>  
  <RequestId>B32BD3D6-1089-41F3-8E70-E0079BC7D760</RequestId>  
  <PageSize>10</PageSize>  
  <PageNumber>1</PageNumber>  
  <TargetAttachments>  
    <TargetAttachment>  
      <AttachDate>2021-03-19T02:56:24Z</AttachDate>  
      <TargetType>Folder</TargetType>  
      <TargetName>Dev_Department</TargetName>  
      <TargetId>fd-ZDNPiT****</TargetId>  
    </TargetAttachment>  
  </TargetAttachments>  
</ListTargetAttachmentsForControlPolicyResponse>
```

JSON format

```
{  
    "TotalCount": 1,  
    "RequestId": "B32BD3D6-1089-41F3-8E70-E0079BC7D760",  
    "PageSize": 10,  
    "PageNumber": 1,  
    "TargetAttachments": {  
        "TargetAttachment": [  
            {  
                "AttachDate": "2021-03-19T02:56:24Z",  
                "TargetType": "Folder",  
                "TargetName": "Dev_Department",  
                "TargetId": "fd-ZDNPiT****"  
            }  
        ]  
    }  
}
```

Error codes

For a list of error codes, visit the [API Error Center](#).

8.5. Trusted services

8.5.1. ListTrustedServiceStatus

Queries the trusted services that are enabled within an enterprise management account or delegated administrator account.

 **Note** Only an enterprise management account or delegated administrator account can be used to call this operation.

In this example, the trusted services that are enabled within an enterprise management account are queried. The returned result shows that the trusted services Cloud Config and ActionTrail are enabled within the enterprise management account.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	ListTrustedServiceStatus	The operation that you want to perform. Set the value to ListTrustedServiceStatus.

Parameter	Type	Required	Example	Description
PageNumber	Integer	No	1	The number of the page to return. Pages start from page 1. Default value: 1.
PageSize	Integer	No	10	The number of entries to return on each page. Valid values: 1 to 100. Default value: 10.
AdminAccountId	String	No	177242285274*** *	The ID of the enterprise management account or delegated administrator account. <ul style="list-style-type: none">• If you set this parameter to the ID of an enterprise management account, the trusted services that are enabled within the enterprise management account are queried. The default value of this parameter is the ID of an enterprise management account.• If you set this parameter to the ID of a delegated administrator account, the trusted services that are enabled within the delegated administrator account are queried. For more information about trusted services and delegated administrator accounts, see Overview of trusted services and Delegated administrator accounts .

For more information about common request parameters, see [Common parameters](#).

Response parameters

Parameter	Type	Example	Description
TotalCount	Integer	2	The total number of entries returned.
RequestId	String	CD76D376-2517-4924-92C5-DBC52262F93A	The ID of the request.
PageSize	Integer	10	The number of entries returned per page.

Parameter	Type	Example	Description
PageNumber	Integer	1	The page number of the returned page.
EnabledServicePrincipals	Array of EnabledServicePrincipal		The trusted services that are enabled.
EnabledServicePrincipal			
ServicePrincipal	String	config.aliyuncs.com	The identification of the trusted service.
EnableTime	String	2019-02-18T15:32:10.473Z	The time when the trusted service was enabled.

Examples

Sample requests

```
https://resourcemanager.aliyuncs.com/?Action=ListTrustedServiceStatus  
&<Common request parameters>
```

Sample success responses

XML format

```
HTTP/1.1 200 OK  
Content-Type:application/xml  
<?xml version="1.0" encoding="UTF-8" ?>  
<ListTrustedServiceStatusResponse>  
    <EnabledServicePrincipal>  
        <ServicePrincipal>config.aliyuncs.com</ServicePrincipal>  
        <EnableTime>2019-02-18T15:32:10.473Z</EnableTime>  
    </EnabledServicePrincipal>  
    <EnabledServicePrincipal>  
        <ServicePrincipal>actiontrail.aliyuncs.com</ServicePrincipal>  
        <EnableTime>2019-02-16T15:32:10.473Z</EnableTime>  
    </EnabledServicePrincipal>  
    <RequestId>CD76D376-2517-4924-92C5-DBC52262F93A</RequestId>  
</ListTrustedServiceStatusResponse>
```

JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId" : "7B8A4E7D-6CFF-471D-84DF-195A7A241ECB",
  "PageNumber" : 1,
  "PageSize" : 10,
  "TotalCount" : 2,
  "EnabledServicePrincipals" : [
    "EnabledServicePrincipal" : [ {
      "ServicePrincipal" : "config.aliyuncs.com",
      "EnableTime" : "2019-02-18T15:32:10.473Z"
    }, {
      "ServicePrincipal" : "actiontrail.aliyuncs.com",
      "EnableTime" : "2019-02-16T15:32:10.473Z"
    } ]
  }
}
```

Error codes

HTTP status code	Error code	Error message	Description
404	EntityNotExists.ResourceDirectory	The resource directory for the account is not enabled. We recommend that you first enable the resource directory for the account.	The error message returned because the resource directory for the account is not enabled. Enable the resource directory for the account.
409	InvalidParameter.AdminAccountId	The specified account is not management account or delegated administrator account.	The error message returned because the current account is not an enterprise management account or delegated administrator account.

For a list of error codes, visit the [API Error Center](#).

8.5.2. RegisterDelegatedAdministrator

Specifies a member account in a resource directory as a delegated administrator account of a trusted service.

The delegated administrator account can be used to access the information of the resource directory and view the structure and member accounts of the resource directory. The delegated administrator account can also be used to perform service-related management operations in the trusted service on behalf of the enterprise management account.

Limits:

- Only some trusted services support delegated administrator accounts. For more information, see [Supported trusted services](#).
- Only the enterprise management account of a resource directory or an authorized RAM user or RAM

- role of the enterprise management account can be used to call this operation.
- The number of delegated administrator accounts that are allowed for a trusted service is defined by the trusted service.

In this example, the member account 181761095690**** is specified as a delegated administrator account of Cloud Firewall.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	RegisterDelegatedAdministrator	The operation that you want to perform. Set the value to RegisterDelegatedAdministrator.
AccountId	String	Yes	181761095690*** *	The ID of the member account in the resource directory.
ServicePrincipal	String	Yes	cloudfw.aliyuncs.com	The identification of the trusted service.

For more information about common request parameters, see [Common parameters](#).

Response parameters

Parameter	Type	Example	Description
RequestId	String	0A45FC8F-54D2-4A65-8338-25E5DEBDA304	The ID of the request.

Examples

Sample requests

```
https://resourcemanager.aliyuncs.com/?Action=RegisterDelegatedAdministrator  
&AccountId=181761095690****  
&ServicePrincipal=cloudfw.aliyuncs.com  
&<Common request parameters>
```

Sample success responses

XML format

```
<RegisterDelegatedAdministratorResponse>
    <RequestId>0A45FC8F-54D2-4A65-8338-25E5DEBDA304</RequestId>
</RegisterDelegatedAdministratorResponse>
```

JSON format

```
{
    "RequestId": "0A45FC8F-54D2-4A65-8338-25E5DEBDA304"
}
```

Error codes

HTTP status code	Error code	Error message	Description
409	InvalidParameter.ServicePrincipal	The specified ServicePrincipal is invalid.	The error message returned because the value of the ServicePrincipal parameter is invalid.
409	AccountAlreadyRegistered	The specified account is already a delegated administrator for this service.	The error message returned because the specified member account is already the delegated administrator account of the current trusted service.
409	DelegatedAccountNumberExceeded	The maximum number of delegated administrators for the service principal is exceeded.	The error message returned because the number of specified member accounts has exceeded the maximum number of delegated administrator accounts allowed for the trusted service.
409	CannotRegisterMasterAsDelegatedAdministrator	You attempted to register the enterprise management account as a delegated administrator for the service. You can designate only a member account as a delegated administrator.	The error message returned because you are not allowed to specify the enterprise management account as a delegated administrator account of a trusted service. You can specify only member accounts as delegated administrator accounts.

For a list of error codes, visit the [API Error Center](#).

8.5.3. DeregisterDelegatedAdministrator

Removes a delegated administrator account.

Note If the delegated administrator account that you want to remove has historical management tasks in the related trusted service, the trusted service may be affected after the delegated administrator account is removed. Therefore, proceed with caution.

In this example, the delegated administrator account `181761095690****` is removed for Cloud Firewall.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	DeregisterDelegatedAdministrator	The operation that you want to perform. Set the value to DeregisterDelegatedAdministrator .
AccountId	String	Yes	181761095690*** *	The ID of the member account in the resource directory.
ServicePrincipal	String	Yes	cloudfw.aliyuncs.com	The identification of the trusted service.

For more information about common request parameters, see [Common parameters](#).

Response parameters

Parameter	Type	Example	Description
RequestId	String	DF5D5C52-7BD0-40E7-94C6-23A1505038A2	The ID of the request.

Examples

Sample requests

```
https://resourcemanager.aliyuncs.com/?Action=DeregisterDelegatedAdministrator  
&AccountId=181761095690****  
&ServicePrincipal=cloudfw.aliyuncs.com  
&<Common request parameters>
```

Sample success responses

XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<?xml version="1.0" encoding="UTF-8" ?>
<DeregisterDelegatedAdministratorResponse>
  <RequestId>DF5D5C52-7BD0-40E7-94C6-23A1505038A2</RequestId>
</DeregisterDelegatedAdministratorResponse>
```

JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId" : "DF5D5C52-7BD0-40E7-94C6-23A1505038A2"
}
```

Error codes

HTTP status code	Error code	Error message	Description
409	InvalidParameter.ServicePrincipal	The specified ServicePrincipal is invalid.	The error message returned because the value of the ServicePrincipal parameter is invalid.
409	AccountNotRegistered	The specified account is not a delegated administrator for this service.	The error message returned because the specified member account is not the delegated administrator account of the current trusted service.

For a list of error codes, visit the [API Error Center](#).

8.5.4. ListDelegatedAdministrators

Queries delegated administrator accounts.

In this example, all delegated administrator accounts in a resource directory are queried. The return result shows that two delegated administrator accounts for Cloud Firewall exist in the resource directory.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	ListDelegatedAdministrators	The operation that you want to perform. Set the value to ListDelegatedAdministrators .
ServicePrincipal	String	No	cloudfw.aliyuncs.com	The identification of the trusted service.
PageNumber	Long	No	1	The number of the page to return. Pages start from page 1 Default value: 1.
PageSize	Long	No	10	The number of entries to return on each page. Valid values: 1 to 100. Default value: 10.

For more information about common request parameters, see [Common parameters](#).

Response parameters

Parameter	Type	Example	Description
RequestId	String	009C3A02-7D4B-416C-9CE7-548C91508F1E	The ID of the request.
TotalCount	Long	2	The total number of entries returned.
PageSize	Long	10	The number of entries returned per page.
PageNumber	Long	1	The page number of the returned page.
Accounts	Array of Account		The information of the delegated administrator accounts.
Account			
AccountId	String	138660628348****	The ID of the member account.
DisplayName	String	abc	The name of the member account.

Parameter	Type	Example	Description
JoinMethod	String	created	The way in which the member joins the resource directory. Valid values: <ul style="list-style-type: none">• invited: The member is invited to join the resource directory.• created: The member is directly created in the resource directory.
ServicePrincipal	String	cloudfw.aliyuncs.com	The identification of the trusted service.
DelegationEnabledTime	String	1616652684164	The time when the member was specified as a delegated administrator account.

Examples

Sample requests

```
https://resourcemanager.aliyuncs.com/?Action=ListDelegatedAdministrators
&<Common request parameters>
```

Sample success responses

XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<?xml version="1.0" encoding="UTF-8" ?>
<ListDelegatedAdministratorsResponse>
  <RequestId>009C3A02-7D4B-416C-9CE7-548C91508F1E</RequestId>
  <TotalCount>2</TotalCount>
  <PageSize>10</PageSize>
  <PageNumber>1</PageNumber>
  <Accounts>
    <Account>
      <DelegationEnabledTime>1616652684164</DelegationEnabledTime>
      <JoinMethod>created</JoinMethod>
      <AccountId>138660628348****</AccountId>
      <ServicePrincipal>cloudfw.aliyuncs.com</ServicePrincipal>
      <DisplayName>abc</DisplayName>
    </Account>
    <Account>
      <DelegationEnabledTime>1616489836069</DelegationEnabledTime>
      <JoinMethod>invited</JoinMethod>
      <AccountId>177242285274****</AccountId>
      <ServicePrincipal>cloudfw.aliyuncs.com</ServicePrincipal>
      <DisplayName>test</DisplayName>
    </Account>
  </Accounts>
</ListDelegatedAdministratorsResponse>
```

JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
    "RequestId" : "009C3A02-7D4B-416C-9CE7-548C91508F1E",
    "TotalCount" : 2,
    "PageSize" : 10,
    "PageNumber" : 1,
    "Accounts" : {
        "Account" : [ {
            "DelegationEnabledTime" : "1616652684164",
            "JoinMethod" : "created",
            "AccountId" : "138660628348****",
            "ServicePrincipal" : "cloudfw.aliyuncs.com",
            "DisplayName" : "abc"
        }, {
            "DelegationEnabledTime" : "1616489836069",
            "JoinMethod" : "invited",
            "AccountId" : "177242285274****",
            "ServicePrincipal" : "cloudfw.aliyuncs.com",
            "DisplayName" : "test"
        } ]
    }
}
```

Error codes

For a list of error codes, visit the [API Error Center](#).

8.5.5. ListDelegatedServicesForAccount

Queries the trusted services for which a member account is specified as a delegated administrator account.

In this example, the trusted services for which the member account 138660628348**** is specified as a delegated administrator account are queried. The return result shows that the member account is specified as a delegated administrator account of Cloud Firewall.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	ListDelegatedServicesForAccount	The operation that you want to perform. Set the value to ListDelegatedServicesForAccount.

Parameter	Type	Required	Example	Description
AccountId	String	Yes	138660628348*** *	The ID of the member account in the resource directory.

For more information about common request parameters, see [Common parameters](#).

Response parameters

Parameter	Type	Example	Description
DelegatedServices	Array of DelegatedService		<p>The information of the trusted services.</p> <div style="background-color: #e0f2f1; padding: 10px;"> ? Note If the value of this parameter is empty, the member account is not specified as a delegated administrator account. </div>
DelegatedService			
DelegationEnabledTime	String	1616652684164	The time when the member account was specified as a delegated administrator account.
ServicePrincipal	String	cloudfw.aliyuncs.com	The identification of the trusted service.
RequestId	String	D9C03B94-9396-4794-A74B-13DC437556A6	The ID of the request.

Examples

Sample requests

```
https://resourcemanager.aliyuncs.com/?Action=ListDelegatedServicesForAccount
&AccountId=138660628348****
&<Common request parameters>
```

Sample success responses

XML format

```
<ListDelegatedServicesForAccountResponse>
  <RequestId>D9C03B94-9396-4794-A74B-13DC437556A6</RequestId>
  <DelegatedServices>
    <DelegatedService>
      <DelegationEnabledTime>1616652684164</DelegationEnabledTime>
      <ServicePrincipal>cloudfw.aliyuncs.com</ServicePrincipal>
    </DelegatedService>
  </DelegatedServices>
</ListDelegatedServicesForAccountResponse>
```

JSON format

```
{
  "RequestId": "D9C03B94-9396-4794-A74B-13DC437556A6",
  "DelegatedServices": {
    "DelegatedService": [
      {
        "DelegationEnabledTime": "1616652684164",
        "ServicePrincipal": "cloudfw.aliyuncs.com"
      }
    ]
  }
}
```

Error codes

For a list of error codes, visit the [API Error Center](#).

8.6. Others (not maintained)

8.6.1. InitResourceDirectory

Enables a resource directory. After you enable a resource directory, the system automatically creates a root folder and sets the current account as the enterprise management account of the resource directory. The enterprise management account has all administrative permissions on this resource directory.

② Note

- An account can be used to enable a resource directory only after it passes enterprise real-name verification. An account that only passed individual real-name verification cannot be used to enable a resource directory.
- We recommend that you only use the enterprise management account as the administrator of the resource directory. Do not use the enterprise management account to purchase cloud resources.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	InitResourceDirectory	The operation that you want to perform. Set the value to InitResourceDirectory.

Response parameters

Parameter	Type	Example	Description
RequestId	String	CD76D376-2517-4924-92C5-DBC52262F93A	The ID of the request.
ResourceDirectory	Struct		The information of the resource directory.
CreateTime	String	2019-02-18T15:32:10.473Z	The time when the resource directory was enabled.
MasterAccountId	String	172841235500****	The ID of the enterprise management account.
MasterAccountName	String	aliyun-****	The name of the enterprise management account.
ResourceDirectoryId	String	rd-Ss****	The ID of the resource directory.
RootFolderId	String	r-Zo****	The ID of the root folder.

Examples

Sample requests

```
https://resourcemanager.aliyuncs.com/?Action=InitResourceDirectory
&<Common request parameters>
```

Sample success responses

XML format

```
<InitResourceDirectoryResponse>
  <ResourceDirectory>
    <RootFolderId>r-Zo****</RootFolderId>
    <ResourceDirectoryId>rd-Ss****</ResourceDirectoryId>
    <MasterAccountId>172841235500****</MasterAccountId>
    <MasterAccountName>aliyun-****</MasterAccountName>
    <CreateTime>2019-02-18T15:32:10.473Z</CreateTime>
  </ResourceDirectory>
  <RequestId>CD76D376-2517-4924-92C5-DBC52262F93A</RequestId>
</InitResourceDirectoryResponse>
```

JSON format

```
{
  "ResourceDirectory": {
    "RootFolderId": "r-Zo****",
    "ResourceDirectoryId": "rd-Ss****",
    "MasterAccountId": "172841235500****",
    "MasterAccountName": "aliyun-****",
    "CreateTime": "2019-02-18T15:32:10.473Z"
  },
  "RequestId": "CD76D376-2517-4924-92C5-DBC52262F93A"
}
```

Error codes

HTTP status code	Error code	Error message	Description
409	NotSupport.AccountInAnotherResourceDirectory	The specified account is an Alibaba Cloud account or already exists in another resource directory.	The error message returned because the account is an enterprise management account or has joined another resource directory.
409	EnterpriseRealNameVerificationError	The specified account does not pass enterprise real-name verification. We recommend you first complete enterprise real-name verification for the account.	The error message returned because the account does not pass enterprise real-name verification. Complete enterprise real-name verification first.
409	Invalid.AccountType	The specified profile type of account is invalid.	The error message returned because the account type is invalid. Use an enterprise account.
409	Invalid.EnterpriseName	You must specify the enterprise name.	The error message returned because the enterprise name of the account is not specified. Specify an enterprise name.

HTTP status code	Error code	Error message	Description
409	NotSupport.Account.Site	The caller is not a China site account, which is not supported.	The error message returned because the account is not registered at the China site (aliyun.com). Use an account registered at the China site (aliyun.com).
409	EntityAlreadyExists.ResourceDirectory	The resource directory for the account is already enabled. We recommend that you do not enable the resource directory again.	The error message returned because the resource directory for the account has been enabled. Do not enable the resource directory again.

For a list of error codes, visit the [API Error Center](#).

8.6.2. CreateCloudAccount

Creates a cloud account.

A resource directory supports two types of member accounts: resource accounts and cloud accounts.

- Resource account (recommended): A resource account is only used as a resource container and fully depends on a resource directory. Such member accounts are secure and easy-to-create. For more information about how to create a resource account, see [CreateResourceAccount](#).

 **Note** A resource account can be upgraded to a cloud account. For more information, see [PromoteResourceAccount](#).

- Cloud account: A cloud account has all the features of an Alibaba Cloud account, including root permissions.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	CreateCloudAccount	The operation that you want to perform. Set the value to CreateCloudAccount.

Parameter	Type	Required	Example	Description
DisplayName	String	Yes	admin-****	<p>The display name of the member account.</p> <p>The name must be 2 to 50 characters in length and can contain letters, digits, underscores (_), periods (.), and hyphens (-).</p> <p>The name must be unique in the current resource directory.</p>
Email	String	Yes	someone@example.com	The email address used to log on to the cloud account.
ParentFolderId	String	Yes	fd-bVaRIG****	The ID of the parent folder.
PayerAccountId	String	No	12323344****	The ID of the settlement account. If you do not specify this parameter, the current account is used for settlement.

Response parameters

Parameter	Type	Example	Description
Account	Struct		The information of the member account.
AccountId	String	12323344****	The ID of the member account.
AccountName	String	someone@example.com	The name of the member account.
DisplayName	String	admin-****	The display name of the member account.
FolderId	String	fd-bVaRIG****	The ID of the folder.
JoinMethod	String	created	<p>The way in which the member account joined the resource directory. Valid values:</p> <ul style="list-style-type: none"> invited: The member account is invited to join the resource directory. created: The member account is directly created in the resource directory.

Parameter	Type	Example	Description
ModifyTime	String	2015-01-23T12:33:18Z	The time when the member account was modified.
RecordId	String	06950264-3f0d-4ca9-82dd-6ee7a3d3****	The account record ID.
ResourceDirectoryId	String	rd-k3****	The ID of the resource directory.
Status	String	CreateVerifying	<p>The status of the member account. Valid values:</p> <ul style="list-style-type: none"> • CreateSuccess: The member account is created. • CreateVerifying: The creation of the member account is under confirmation. • CreateFailed: The member account failed to be created. • CreateExpired: The creation of the member account expired. • CreateCancelled: The creation of the member account is canceled. • PromoteVerifying: The upgrade of the member account is under confirmation. • PromoteFailed: The member account failed to be upgraded. • PromoteExpired: The upgrade of the member account expired. • PromoteCancelled: The upgrade of the member account is canceled. • PromoteSuccess: The member account is upgraded. • InviteSuccess: The owner of the member account accepted the invitation. • Removed: The member account is removed from the resource directory.
Type	String	CloudAccount	The type of the member account. The value CloudAccount indicates that the member account is a cloud account.
RequestId	String	9B34724D-54B0-4A51-B34D-4512372FE1BE	The ID of the request.

Examples

Sample requests

```
https://resourcemanager.aliyuncs.com/?Action/CreateCloudAccount
&DisplayName=admin-****
&Email=someone@example.com
&ParentFolderId=fd-bVaRIG****
&<Common request parameters>
```

Sample success responses

XML format

```
<CreateCloudAccountResponse>
    <RequestId>9B34724D-54B0-4A51-B34D-4512372FE1BE</RequestId>
    <Account>
        <ResourceDirectoryId>rd-k3****</ResourceDirectoryId>
        <AccountId>12323344****</AccountId>
        <AccountName>someone@example.com</AccountName>
        <DisplayName>admin-****</DisplayName>
        <FolderId>fd-bVaRIG****</FolderId>
        <JoinMethod>created</JoinMethod>
        <Type>CloudAccount</Type>
        <Status>CreateVerifying</Status>
        <RecordId>06950264-3f0d-4ca9-82dd-6ee7a3d3****</RecordId>
        <ModifyTime>2015-01-23T12:33:18Z</ModifyTime>
    </Account>
</CreateCloudAccountResponse>
```

JSON format

```
{
    "RequestId": "9B34724D-54B0-4A51-B34D-4512372FE1BE",
    "Account": {
        "ResourceDirectoryId": "rd-k3****",
        "AccountId": "12323344****",
        "AccountName": "someone@example.com",
        "DisplayName": "admin-****",
        "FolderId": "fd-bVaRIG****",
        "JoinMethod": "created",
        "Type": "CloudAccount",
        "Status": "CreateVerifying",
        "RecordId": "06950264-3f0d-4ca9-82dd-6ee7a3d3****",
        "ModifyTime": "2015-01-23T12:33:18Z"
    }
}
```

Error codes

HTTP status code	Error code	Error message	Description
400	MissingParameter.Account.DisplayName	You must specify DisplayName.	The error message returned because the DisplayName parameter is not specified. Specify this parameter.
400	InvalidParameter.Account.DisplayName	The DisplayName of account is invalid.	The error message returned because the value of the DisplayName parameter is invalid. The value can contain only letters, digits, underscores (_), periods (.), and hyphens (-).
400	InvalidParameter.Account.DisplayName.Length	The DisplayName of the account exceeds the length limit.	The error message returned because the length of the value specified for the DisplayName parameter has exceeded the upper limit. The value must be 2 to 50 characters in length.
400	InvalidParameter.ParentFolderId	The ParentFolderId is invalid.	The error message returned because the value of the ParentFolderId parameter is invalid. The value must start with r- followed by 6 characters or start with fd- followed by 10 characters. Valid characters are letters and digits.
400	MissingParameter.Email	You must specify Email.	The error message returned because the Email parameter is not specified. Specify this parameter.
400	InvalidParameter.Email	The Email is invalid.	The error message returned because the format of the value specified for the Email parameter is invalid.
409	LimitExceeded.Account	The maximum number of member accounts in a resource directory exceeds the limit.	The error message returned because the maximum number of member accounts in the resource directory has been reached.
409	InvalidParameter.Account.DisplayName.AlreadyUsed	The displayname of account has been used.	The error message returned because the name already exists. Change the name.

HTTP status code	Error code	Error message	Description
409	EntityAlreadyExists.ResourceDirectory.Account	The email address that the system generates when you create a member account already exists. Try again later.	The error message returned because the email address that the system generated already exists. Try again later.
409	InvalidParameter.Email.AlreadyUsed	The email has been used.	The error message returned because the email address is in use. Enter another email address.
404	EntityNotExists.ResourceDirectory	The resource directory for the account is not enabled. We recommend that you first enable the resource directory for the account.	The error message returned because the resource directory for the account is not enabled. Enable the resource directory for the account.
404	EntityNotExists.Folder	The resource directory folder does not exist.	The error message returned because the folder does not exist. Create the folder first.
409	Invalid.PayRelation	Failed to create a member. The specified billing account is unavailable. Please change to another billing account and try again.	The error message returned because the member account has failed to be created. The specified settlement account is unavailable. Specify a valid account and try again.
409	NotSupport.PayerAccountInAnotherResourceDirectory	The specified settlement account does not exist in the resource directory. You must specify a valid settlement account.	The error message returned because the settlement account is not in the resource directory. Specify a valid settlement account.

For a list of error codes, visit the [API Error Center](#).

8.6.3. PromoteResourceAccount

Upgrades a resource account to a cloud account.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
-----------	------	----------	---------	-------------

Parameter	Type	Required	Example	Description
Action	String	Yes	PromoteResourceAccount	The operation that you want to perform. Set the value to PromoteResourceAccount.
AccountId	String	Yes	12323344****	The ID of the resource account you want to upgrade.
Email	String	Yes	someone@example.com	The email address used to log on to the cloud account after the upgrade.

Response parameters

Parameter	Type	Example	Description
Account	Struct		The information of the member account.
AccountId	String	12323344****	The ID of the member account.
AccountName	String	someone@example.com	The name of the member account.
DisplayName	String	admin	The display name of the member account.
FolderId	String	fd-bVaRIG****	The ID of the folder.
JoinMethod	String	created	<p>The way in which the member account joined the resource directory. Valid values:</p> <ul style="list-style-type: none"> invited: The member account is invited to join the resource directory. created: The member account is directly created in the resource directory.
JoinTime	String	2015-01-23T12:33:18Z	The time when the member account joined the resource directory.
ModifyTime	String	2015-01-23T12:33:18Z	The time when the member account was modified.
RecordId	String	06950264-3f0d-4ca9-82dd-6ee7a3d33d6b	The account record ID.

Parameter	Type	Example	Description
ResourceDirectoryId	String	rd-k3****	The ID of the resource directory.
Status	String	PromoteVerifying	<p>The status of the member account. Valid values:</p> <ul style="list-style-type: none"> • CreateSuccess: The member account is created. • CreateVerifying: The creation of the member account is under confirmation. • CreateFailed: The member account failed to be created. • CreateExpired: The creation of the member account expired. • CreateCancelled: The creation of the member account is canceled. • PromoteVerifying: The upgrade of the member account is under confirmation. • PromoteFailed: The member account failed to be upgraded. • PromoteExpired: The upgrade of the member account expired. • PromoteCancelled: The upgrade of the member account is canceled. • PromoteSuccess: The member account is upgraded. • InviteSuccess: The owner of the member account accepted the invitation. • Removed: The member account is removed from the resource directory.
Type	String	ResourceAccount	<p>The type of the member account. Valid values:</p> <ul style="list-style-type: none"> • CloudAccount • ResourceAccount
RequestId	String	9B34724D-54B0-4A51-B34D-4512372FE1BE	The ID of the request.

Examples

Sample requests

```
https://resourcemanager.aliyuncs.com/?Action=PromoteResourceAccount
&AccountId=12323344****
&Email=someone@example.com
&<Common request parameters>
```

Sample success responses

XML format

```
<PromoteResourceAccountResponse>
  <RequestId>9B34724D-54B0-4A51-B34D-4512372FE1BE</RequestId>
  <Account>
    <ResourceDirectoryId>rd-k3****</ResourceDirectoryId>
    <AccountId>12323344****</AccountId>
    <DisplayName>admin</DisplayName>
    <FolderId>fd-bVaRIG****</FolderId>
    <JoinMethod>created</JoinMethod>
    <JoinTime>2015-01-23T12:33:18Z</JoinTime>
    <Type>ResourceAccount</Type>
    <Status>PromoteVerifying</Status>
    <RecordId>06950264-3f0d-4ca9-82dd-6ee7a3d33d6b</RecordId>
    <ModifyTime>2015-01-23T12:33:18Z</ModifyTime>
  </Account>
</PromoteResourceAccountResponse>
```

JSON format

```
{
  "RequestId": "9B34724D-54B0-4A51-B34D-4512372FE1BE",
  "Account": {
    "ResourceDirectoryId": "rd-k3****",
    "AccountId": "12323344****",
    "DisplayName": "admin",
    "FolderId": "fd-bVaRIG****",
    "JoinMethod": "created",
    "JoinTime": "2015-01-23T12:33:18Z",
    "Type": "ResourceAccount",
    "Status": "PromoteVerifying",
    "RecordId": "06950264-3f0d-4ca9-82dd-6ee7a3d33d6b",
    "ModifyTime": "2015-01-23T12:33:18Z"
  }
}
```

Error codes

HTTP status code	Error code	Error message	Description
400	MissingParameter.AccountId	You must specify AccountId.	The error message returned because the AccountId parameter is not specified.
400	InvalidParameter.AccountId	The AccountId is invalid.	The error message returned because the value of the AccountId parameter is invalid. Specify a 16-digit ID.

HTTP status code	Error code	Error message	Description
400	MissingParameter.Email	You must specify Email.	The error message returned because the Email parameter is not specified. Specify this parameter.
400	InvalidParameter.Email	The Email is invalid.	The error message returned because the format of the value specified for the Email parameter is invalid.
404	EntityNotExists.Account	This resource directory account does not exist.	The error message returned because the member account does not exist. Create the member account first.
409	AccountTypeOrStatusMismatch	You cannot perform the action on the member account.	The error message returned because you cannot perform the operation on the member account.
409	InvalidParameter.Email.AlreadyUsed	The email has been used.	The error message returned because the email address is in use. Enter another email address.
404	EntityNotExists.ResourceDirectory	The resource directory for the account is not enabled. We recommend that you first enable the resource directory for the account.	The error message returned because the resource directory for the account is not enabled. Enable the resource directory for the account.

For a list of error codes, visit the [API Error Center](#).

8.6.4. ResendPromoteResourceAccountEmail

Resends an email that is used to confirm the upgrade from a resource account to a cloud account.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description

Parameter	Type	Required	Example	Description
Action	String	Yes	ResendPromoteResourceAccountEmail	The operation that you want to perform. Set the value to ResendPromoteResourceAccountEmail.
RecordId	String	Yes	06950264-3f0d-4ca9-82dd-6ee7a3d33d6b	The account record ID.

Response parameters

Parameter	Type	Example	Description
Account	Struct		The information of the member account.
AccountId	String	12323344****	The ID of the account.
AccountName	String	someone@example.com	The name of the account.
DisplayName	String	admin	The display name of the member account.
FolderId	String	fd-bVaRIG****	The ID of the folder.
JoinMethod	String	created	<p>The way in which the member account joined the resource directory. Valid values:</p> <ul style="list-style-type: none"> invited: The member account is invited to join the resource directory. created: The member account is directly created in the resource directory.
JoinTime	String	2015-01-23T12:33:18Z	The time when the member account joined the resource directory.
ModifyTime	String	2015-01-23T12:33:18Z	The time when the member account was modified.
RecordId	String	16950264-3f0d-4ca9-82dd-6ee7a3d33d6b	The account record ID.
ResourceDirectoryId	String	rd-k3****	The ID of the resource directory.

Parameter	Type	Example	Description
Status	String	PromoteVerifying	<p>The status of the member account. Valid values:</p> <ul style="list-style-type: none"> • CreateSuccess: The member account is created. • CreateVerifying: The creation of the member account is under confirmation. • CreateFailed: The member account failed to be created. • CreateExpired: The creation of the member account expired. • CreateCancelled: The creation of the member account is canceled. • PromoteVerifying: The upgrade of the member account is under confirmation. • PromoteFailed: The member account failed to be upgraded. • PromoteExpired: The upgrade of the member account expired. • PromoteCancelled: The upgrade of the member account is canceled. • PromoteSuccess: The member account is upgraded. • InviteSuccess: The owner of the member account accepted the invitation. • Removed: The member account is removed from the resource directory.
Type	String	ResourceAccount	<p>The type of the member account. Valid values:</p> <ul style="list-style-type: none"> • CloudAccount: cloud account • ResourceAccount: resource account
RequestId	String	9B34724D-54B0-4A51-B34D-4512372FE1BE	The ID of the request.

Examples

Sample requests

```
https://resourcemanager.aliyuncs.com/?Action=ResendPromoteResourceAccountEmail
&RecordId=06950264-3f0d-4ca9-82dd-6ee7a3d33d6b
&<Common request parameters>
```

Sample success responses

XML format

```
<ResendPromoteResourceAccountEmailResponse>
  <RequestId>9B34724D-54B0-4A51-B34D-4512372FE1BE</RequestId>
  <Account>
    <ResourceDirectoryId>rd-k3****</ResourceDirectoryId>
    <AccountId>12323344****</AccountId>
    <DisplayName>admin</DisplayName>
    <FolderId>fd-bVaRIG****</FolderId>
    <JoinMethod>created</JoinMethod>
    <JoinTime>2015-01-23T12:33:18Z</JoinTime>
    <Type>ResourceAccount</Type>
    <Status>PromoteVerifying</Status>
    <RecordId>16950264-3f0d-4ca9-82dd-6ee7a3d33d6b</RecordId>
    <ModifyTime>2015-01-23T12:33:18Z</ModifyTime>
  </Account>
</ResendPromoteResourceAccountEmailResponse>
```

JSON format

```
{
  "RequestId": "9B34724D-54B0-4A51-B34D-4512372FE1BE",
  "Account": {
    "ResourceDirectoryId": "rd-k3****",
    "AccountId": "12323344****",
    "DisplayName": "admin",
    "FolderId": "fd-bVaRIG****",
    "JoinMethod": "created",
    "JoinTime": "2015-01-23T12:33:18Z",
    "Type": "ResourceAccount",
    "Status": "PromoteVerifying",
    "RecordId": "16950264-3f0d-4ca9-82dd-6ee7a3d33d6b",
    "ModifyTime": "2015-01-23T12:33:18Z"
  }
}
```

Error codes

HttpCode	Error code	Error message	Description
409	AccountTypeOrStatusMismatch	You cannot perform the action on the member account.	The error message returned because you cannot perform the operation on the member account.
404	EntityNotExists.ResourceDirectory	The resource directory for the account is not enabled. We recommend that you first enable the resource directory for the account.	The error message returned because the resource directory for the account is not enabled. Enable the resource directory for the account.

HttpCode	Error code	Error message	Description
400	MissingParameter.RecordId	You must specify RecordId.	The error message returned because the RecordId parameter is not specified. Specify this parameter.
404	EntityNotExists.AccountRecord	This resource directory account recordId does not exist.	The error message returned because the account record ID does not exist.
409	LimitExceeded.Frequency	The frequency of request exceeds limit.	The error message returned because the frequency of the request has exceeded the upper limit.

For a list of error codes, visit the [API Error Center](#).

8.6.5. ResendCreateCloudAccountEmail

Resends an email that is used to confirm the creation of a cloud account.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	ResendCreateCloudAccountEmail	The operation that you want to perform. Set the value to ResendCreateCloudAccountEmail.
RecordId	String	Yes	06950264-3f0d-4ca9-82dd-6ee7a3d33d6b	The account record ID.

Response parameters

Parameter	Type	Example	Description
Account	Struct		The information of the member account.
AccountId	String	12323344****	The ID of the account.

Parameter	Type	Example	Description
AccountName	String	someone@example.com	The name of the account.
DisplayName	String	admin	The display name of the member account.
FolderId	String	fd-bVaRIG****	The ID of the folder.
JoinMethod	String	created	<p>The way in which the member account joined the resource directory. Valid values:</p> <ul style="list-style-type: none">invited: The member account is invited to join the resource directory.created: The member account is directly created in the resource directory.
JoinTime	String	2015-01-23T12:33:18Z	The time when the member account joined the resource directory.
ModifyTime	String	2015-01-23T12:33:18Z	The time when the member account was modified.
RecordId	String	16950264-3f0d-4ca9-82dd-6ee7a3d33d6b	The account record ID.
ResourceDirectoryId	String	rd-k3****	The ID of the resource directory.

Parameter	Type	Example	Description
Status	String	CreateVerifying	<p>The status of the member account. Valid values:</p> <ul style="list-style-type: none"> • CreateSuccess: The member account is created. • CreateVerifying: The creation of the member account is under confirmation. • CreateFailed: The member account failed to be created. • CreateExpired: The creation of the member account expired. • CreateCancelled: The creation of the member account is canceled. • PromoteVerifying: The upgrade of the member account is under confirmation. • PromoteFailed: The member account failed to be upgraded. • PromoteExpired: The upgrade of the member account expired. • PromoteCancelled: The upgrade of the member account is canceled. • PromoteSuccess: The member account is upgraded. • InviteSuccess: The owner of the member account accepted the invitation. • Removed: The member account is removed from the resource directory.
Type	String	CloudAccount	The type of the member account. The value CloudAccount indicates that the member account is a cloud account.
RequestId	String	9B34724D-54B0-4A51-B34D-4512372FE1BE	The ID of the request.

Examples

Sample requests

```
https://resourcemanager.aliyuncs.com/?Action=ResendCreateCloudAccountEmail
&RecordId=06950264-3f0d-4ca9-82dd-6ee7a3d33d6b
&<Common request parameters>
```

Sample success responses

XML format

```
<ResendCreateCloudAccountEmailResponse>
    <RequestId>9B34724D-54B0-4A51-B34D-4512372FE1BE</RequestId>
    <Account>
        <ResourceDirectoryId>rd-k3****</ResourceDirectoryId>
        <AccountId>12323344****</AccountId>
        <DisplayName>admin</DisplayName>
        <FolderId>fd-bVaRIG****</FolderId>
        <JoinMethod>created</JoinMethod>
        <JoinTime>2015-01-23T12:33:18Z</JoinTime>
        <Type>CloudAccount</Type>
        <Status>CreateVerifying</Status>
        <RecordId>16950264-3f0d-4ca9-82dd-6ee7a3d33d6b</RecordId>
        <ModifyTime>2015-01-23T12:33:18Z</ModifyTime>
    </Account>
</ResendCreateCloudAccountEmailResponse>
```

JSON format

```
{
    "RequestId": "9B34724D-54B0-4A51-B34D-4512372FE1BE",
    "Account": {
        "ResourceDirectoryId": "rd-k3****",
        "AccountId": "12323344****",
        "DisplayName": "admin",
        "FolderId": "fd-bVARIG****",
        "JoinMethod": "created",
        "JoinTime": "2015-01-23T12:33:18Z",
        "Type": "CloudAccount",
        "Status": "CreateVerifying",
        "RecordId": "16950264-3f0d-4ca9-82dd-6ee7a3d33d6b",
        "ModifyTime": "2015-01-23T12:33:18Z"
    }
}
```

Error codes

HTTP status code	Error code	Error message	Description
409	AccountTypeOrStatusMismatch	You cannot perform the action on the member account.	The error message returned because you cannot perform the operation on the member account.
404	EntityNotExists.ResourceDirectory	The resource directory for the account is not enabled. We recommend that you first enable the resource directory for the account.	The error message returned because the resource directory for the account is not enabled. Enable the resource directory for the account.

HTTP status code	Error code	Error message	Description
400	MissingParameter.RecordId	You must specify RecordId.	The error message returned because the RecordId parameter is not specified. Specify this parameter.
404	EntityNotExists.AccountRecord	This resource directory account recordId does not exist.	The error message returned because the account record ID does not exist.
409	LimitExceeded.Frequency	The frequency of request exceeds limit.	The error message returned because the frequency of the request has exceeded the upper limit.

For a list of error codes, visit the [API Error Center](#).

8.6.6. CancelCreateCloudAccount

Cancels the creation of a cloud account.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	CancelCreateCloudAccount	The operation that you want to perform. Set the value to CancelCreateCloudAccount.
RecordId	String	Yes	06950264-3f0d-4ca9-82dd-6ee7a3d33d6b	The account record ID.

Response parameters

Parameter	Type	Example	Description
RequestId	String	9B34724D-54B0-4A51-B34D-4512372FE1BE	The ID of the request.

Examples

Sample requests

```
https://resourcemanager.aliyuncs.com/?Action=CancelCreateCloudAccount  
&RecordId=06950264-3f0d-4ca9-82dd-6ee7a3d33d6b  
&<Common request parameters>
```

Sample success responses

XML format

```
<CancelCreateCloudAccountResponse>  
    <RequestId>9B34724D-54B0-4A51-B34D-4512372FE1BE</RequestId>  
</CancelCreateCloudAccountResponse>
```

JSON format

```
{  
    "RequestId": "9B34724D-54B0-4A51-B34D-4512372FE1BE"  
}
```

Error codes

HTTP status code	Error code	Error message	Description
400	MissingParameter.RecordId	You must specify RecordId.	The error message returned because the RecordId parameter is not specified. Specify this parameter.
404	EntityNotExists.AccountRecord	This resource directory account recordId does not exist.	The error message returned because the account record ID does not exist.
409	AccountTypeOrStatusMismatch	You cannot perform the action on the member account.	The error message returned because you cannot perform the operation on the member account.
404	EntityNotExists.ResourceDirectory	The resource directory for the account is not enabled. We recommend that you first enable the resource directory for the account.	The error message returned because the resource directory for the account is not enabled. Enable the resource directory for the account.

For a list of error codes, visit the [API Error Center](#).

8.6.7. CancelPromoteResourceAccount

Cancels the upgrade from a resource account to a cloud account.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	CancelPromoteResourceAccount	The operation that you want to perform. Set the value to CancelPromoteResourceAccount.
RecordId	String	Yes	06950264-3f0d-4ca9-82dd-6ee7a3d33d6b	The account record ID.

Response parameters

Parameter	Type	Example	Description
RequestId	String	9B34724D-54B0-4A51-B34D-4512372FE1BE	The ID of the request.

Examples

Sample requests

```
https://resourcemanager.aliyuncs.com/?Action=CancelPromoteResourceAccount
&RecordId=06950264-3f0d-4ca9-82dd-6ee7a3d33d6b
&<Common request parameters>
```

Sample success responses

XML format

```
<CancelPromoteResourceAccountResponse>
  <RequestId>9B34724D-54B0-4A51-B34D-4512372FE1BE</RequestId>
</CancelPromoteResourceAccountResponse>
```

JSON format

```
{ "RequestId": "9B34724D-54B0-4A51-B34D-4512372FE1BE" }
```

Error codes

HTTP status code	Error code	Error message	Description
400	MissingParameter.RecordId	You must specify RecordId.	The error message returned because the RecordId parameter is not specified. Specify this parameter.
404	EntityNotExists.AccountRecord	This resource directory account recordId does not exist.	The error message returned because the account record ID does not exist.
409	AccountTypeOrStatusMismatch	You cannot perform the action on the member account.	The error message returned because you cannot perform the operation on the member account.
404	EntityNotExists.ResourceDirectory	The resource directory for the account is not enabled. We recommend that you first enable the resource directory for the account.	The error message returned because the resource directory for the account is not enabled. Enable the resource directory for the account.

For a list of error codes, visit the [API Error Center](#).

9.API Reference (Resource sharing)

9.1.

EnableSharingWithResourceDirectory

Enables resource sharing for a resource directory.

Usage notes

You can share your resources with all members in your resource directory, all members in a specific folder in your resource directory, or a specific member in your resource directory as a resource owner only after you enable resource sharing.

You can call this API operation only by using the management account of your resource directory or a RAM user or RAM role to which the required permissions are granted within the management account.

Limits

You can call this operation up to 10 times per second per account. This operation is globally limited to 500 times per second across all accounts. If the number of the calls per second exceeds a limit, throttling is triggered. As a result, your business may be affected. We recommend that you take note of the limits when you call this operation.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	EnableSharingWithResourceDirectory	The operation that you want to perform. Set the value to EnableSharingWithResourceDirectory .
RegionId	String	Yes	cn-hangzhou	The region ID. For more information about regions where the Resource Sharing service is available, see DescribeRegions .

For more information about common request parameters, see [Common parameters](#).

Response parameters

Parameter	Type	Example	Description
RequestId	String	2F23CFB6-A721-4E90-AC1E-0E30FA8B45DA	The ID of the request.

Examples

Sample requests

```
https://resourcesharing.aliyuncs.com/?Action=EnableSharingWithResourceDirectory
&RegionId=cn-hangzhou
&<Common request parameters>
```

Sample success responses

XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<EnableSharingWithResourceDirectoryResponse>
  <RequestId>2F23CFB6-A721-4E90-AC1E-0E30FA8B45DA</RequestId>
</EnableSharingWithResourceDirectoryResponse>
```

JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId" : "2F23CFB6-A721-4E90-AC1E-0E30FA8B45DA"
}
```

Error codes

HTTP status code	Error code	Error message	Description
409	ActionNotPermitted	The caller must be the master account for the Resource Directory.	The error message returned because only the management account of a resource directory can be used to call this API operation.
409	AlreadyEnabled	You have already enabled sharing with the Resource Directory.	The error message returned because resource sharing is enabled for the resource directory.

For a list of error codes, visit the [API Error Center](#).

9.2. CreateResourceShare

Creates a resource share.

Usage notes

Resource Sharing allows you to share your resources with one or more members and access the resources shared by other members. To share your resources with other members, you can create resource shares. Then, associate the resources and the members with which you want to share the resources with the resource shares. For more information about Resource Sharing, see [Resource Sharing overview](#).

In this example, a resource share named `test` is created to share the vSwitch `vsw-bp183p93qs667muql****` that resides in the `cn-hangzhou` region to the member `172050525300****`.

Limits

The maximum queries per second (QPS) per user for the API operation is 10, and the maximum QPS for all users for the API operation is 500. If the number of calls to the API operation per second exceeds a related QPS limit, throttling is triggered. As a result, your services may be affected. We recommend that you take note of the limits when you call this operation.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	CreateResourceShare	The operation that you want to perform. Set the value to <code>CreateResourceShare</code> .
ResourceShareName	String	Yes	test	<p>The name of the resource share.</p> <p>The name must be 1 to 50 characters in length.</p> <p>The name can contain letters, digits, periods (.), underscores (_), and hyphens (-).</p>
RegionId	String	Yes	cn-hangzhou	<p>The region ID.</p> <p>For more information about regions where the Resource Sharing service is available, see DescribeRegions.</p>

Parameter	Type	Required	Example	Description
Resources.N.ResourceType	String	No	VSwitch	<p>The type of the shared resource.</p> <p>Valid values of N: 1 to 5. This indicates that a maximum of five shared resources can be specified at a time.</p> <p>For more information about the types of resources that can be shared, see Alibaba Cloud services that support Resource Sharing.</p> <div style="background-color: #e1f5fe; padding: 10px; border-radius: 5px;"><p>? Note</p><p>Resources.N.ResourceId and Resources.N.ResourceType must be used in pairs.</p></div>
Resources.N.ResourceId	String	No	vsw-bp183p93qs667muql****	<p>The ID of the shared resource.</p> <p>Valid values of N: 1 to 5. This indicates that a maximum of five shared resources can be specified at a time.</p> <div style="background-color: #e1f5fe; padding: 10px; border-radius: 5px;"><p>? Note</p><p>Resources.N.ResourceId and Resources.N.ResourceType must be used in pairs.</p></div>

Parameter	Type	Required	Example	Description
Targets.N	String	No	172050525300*** *	<p>The shared target. You can set this parameter to one of the following items:</p> <ul style="list-style-type: none"> • ID of a resource directory: The resource is shared with all members in a resource directory. For more information about how to obtain the ID of a resource directory, see View the basic information of a resource directory. • ID of a folder: The resource is shared with all members in a folder in a resource directory. For more information about how to obtain the ID of a folder, see View the basic information of a folder. • ID of a member: The resource is shared with a specific member in a resource directory. For more information about how to obtain the ID of a member, see View the detailed information of a member. <p>Valid values of N: 1 to 5. This indicates that a maximum of five shared targets can be specified at a time.</p>

For more information about common request parameters, see [Common parameters](#).

Response parameters

Parameter	Type	Example	Description
RequestId	String	2C3FA051-61DC-4F3E-81E9-E4830524DF4B	The ID of the request.
ResourceShare	Object		The information of the resource share.
UpdateTime	String	2020-12-03T08:02:22.413Z	The time when the resource share was updated.
ResourceShareName	String	test	The name of the resource share.
ResourceShareOwner	String	151266687691****	The owner of the resource share.

Parameter	Type	Example	Description
CreateTime	String	2020-12-03T08:02:22.413Z	The time when the resource share was created.
ResourceShareId	String	rs-qSkW1HBY****	The ID of the resource share.
ResourceShareStatus	String	Active	<p>The status of the resource share. Valid values:</p> <ul style="list-style-type: none">• Active: The resource share is enabled.• Deleting: The resource share is being deleted.• Deleted: The resource share is deleted. <p>? Note The system deletes the records of resource shares in the Deleted state within 48 hours to 96 hours after you delete the resource shares.</p>

Examples

Sample requests

```
https://resourcessharing.aliyuncs.com/?Action=CreateResourceShare
&RegionId=cn-hangzhou
&ResourceShareName=test
&Resources.1.ResourceId=vsw-bp183p93qs667muql****
&Resources.1.ResourceType=VSwitch
&Targets.1=172050525300****
&<Common request parameters>
```

Sample success responses

XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<?xml version="1.0" encoding="UTF-8" ?>
<CreateResourceShareResponse>
    <RequestId>2C3FA051-61DC-4F3E-81E9-E4830524DF4B</RequestId>
    <ResourceShare>
        <ResourceShareId>rs-qSkW1HBY****</ResourceShareId>
        <ResourceShareName>test</ResourceShareName>
        <ResourceShareStatus>Active</ResourceShareStatus>
        <CreateTime>2020-12-03T08:02:22.413Z</CreateTime>
        <UpdateTime>2020-12-03T08:02:22.413Z</UpdateTime>
        <ResourceShareOwner>151266687691****</ResourceShareOwner>
    </ResourceShare>
</CreateResourceShareResponse>
```

JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
    "RequestId" : "2C3FA051-61DC-4F3E-81E9-E4830524DF4B",
    "ResourceShare" : {
        "ResourceShareId" : "rs-qSkW1HBY****",
        "ResourceShareName" : "test",
        "ResourceShareStatus" : "Active",
        "CreateTime" : "2020-12-03T08:02:22.413Z",
        "UpdateTime" : "2020-12-03T08:02:22.413Z",
        "ResourceShareOwner" : "151266687691****"
    }
}
```

Error codes

HTTP status code	Error code	Error message	Description
400	InvalidParameter.ResourceShareName	The ResourceShareName is invalid.	The error message returned because the value of the ResourceShareName parameter is invalid.
400	InvalidParameter.ResourceShareName.Length	The maximum length of ResourceShareName exceeds 50 characters.	The error message returned because the length of the value specified for the ResourceShareName parameter has exceeded the upper limit. Specify a value that is up to 50 characters in length.

HTTP status code	Error code	Error message	Description
400	InvalidParameter.Resources	The Resources is invalid.	The error message returned because the specified resource is invalid.
400	InvalidParameter.Resources.Duplicate	The Resources contains duplicate values.	The error message returned because duplicate resources are specified.
400	InvalidParameter.Resources.Length	The maximum number of Resources exceeds 5.	The error message returned because the number of specified resources has exceeded the upper limit. Specify a maximum of five resources.
400	InvalidParameter.Targets	The Targets is invalid.	The error message returned because the value of the Targets.N parameter is invalid.
400	InvalidParameter.Targets.Duplicate	The Targets contains duplicate values.	The error message returned because duplicate shared targets are specified.
400	InvalidParameter.Targets.Length	The maximum number of Targets exceeds 5.	The error message returned because the number of specified shared targets has exceeded the upper limit. Specify a maximum of five shared targets.
400	InvalidTarget	The shared target does not exist in the resource directory.	The error message returned because the specified shared target is not in your resource directory.
400	InvalidParameter	The specified parameter is invalid.	The error message returned because the value of a parameter is invalid.
400	MissingParameter.ResourceShareName	You must specify ResourceShareName.	The error message returned because the ResourceShareName parameter is not specified.
409	NotEnableSharingWithResourceDirectory	You have not enabled sharing with your Resource Directory.	The error message returned because resource sharing is not enabled for the resource directory.
409	AccountNotInResourceDirectory	The account is not a master or a member of a resource directory.	The error message returned because the specified shared target is not in your resource directory.

HTTP status code	Error code	Error message	Description
409	QuotaExceeded.ResourceShare.Count	The maximum number of ResourceShare exceeds the limit.	The error message returned because the number of resource shares has exceeded the upper limit.
409	EntityAlreadyExists.ResourceShare	The specified resource share ID already exists.	The error message returned because the ID of the resource share already exists.
409	QuotaExceeded.SharedResource.Count	The maximum number of shared resources per account exceeds the limit.	The error message returned because the number of resources that can be shared by using a single account has exceeded the upper limit.
409	ShareWithYourself	You cannot share resources with yourself.	The error message returned because you are not allowed to share resources with yourself.

For a list of error codes, visit the [API Error Center](#).

9.3. ListResourceShares

Queries resource shares.

Usage notes

In this example, the resource shares of the current Alibaba Cloud account in the `cn-hangzhou` region are queried. The response shows that the following resource shares are created within the account

`151266687691**** :`

- `rs-hX9wC5jO****`, which is in the `Deleted` state
- `rs-PqysnzIj****`, which is in the `Active` state

QPS limits

The maximum queries per second (QPS) per user for the API operation is 20, and the maximum QPS for all users for the API operation is 500. If the number of calls to the API operation per second exceeds a related QPS limit, throttling is triggered. As a result, your services may be affected. We recommend that you take note of the limits when you call this operation.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	ListResourceShares	The operation that you want to perform. Set the value to ListResourceShares .
ResourceOwner	String	Yes	Self	<p>The owner of the resource shares. Valid values:</p> <ul style="list-style-type: none"> • Self: The resource shares belong to the current account. • OtherAccounts: The resource shares belong to an account other than the current account.
ResourceShareName	String	No	test	The name of the resource share.
ResourceShareStatus	String	No	Active	<p>The status of the resource share. Valid values:</p> <ul style="list-style-type: none"> • Active: The resource share is enabled. • Deleting: The resource share is being deleted. • Deleted: The resource share is deleted. <p>Note The system deletes the records of resource shares in the Deleted state within 48 hours to 96 hours after you delete the resource shares.</p>
MaxResults	Integer	No	20	<p>The maximum number of entries to return for a single request. Valid values: 1 to 100. Default value: 20.</p>
NextToken	String	No	TGlzdFJlc291cm**	The token that is used to initiate the next request. If the response of the current request is truncated, you can use the token to initiate another request and obtain the remaining records.

Parameter	Type	Required	Example	Description
RegionId	String	Yes	cn-hangzhou	The region ID. For more information about regions where the Resource Sharing service is available, see DescribeRegions .
ResourceShareIds.N	String	No	rs-Pqysnzlj****	The ID of the resource share.

For more information about common request parameters, see [Common parameters](#).

Response parameters

Parameter	Type	Example	Description
NextToken	String	TGlzdFJlc291cm****	The token that is used to initiate the next request. If the response of the current request is truncated, you can use the token to initiate another request and obtain the remaining records.
RequestId	String	2F23CFB6-A721-4E90-AC1E-0E30FA8B45DA	The ID of the request.
ResourceShares	Array of ResourceShare		The information of the resource shares.
UpdateTime	String	2020-12-03T08:01:43.638Z	The time when the resource share was updated.
ResourceShareName	String	test	The name of the resource share.
ResourceShareOwner	String	151266687691****	The owner of the resource share.
CreateTime	String	2020-12-03T02:20:31.292Z	The time when the resource share was created.
ResourceShareId	String	rs-Pqysnzlj****	The ID of the resource share.

Parameter	Type	Example	Description
ResourceShareStatus	String	Active	<p>The status of the resource share. Valid values:</p> <ul style="list-style-type: none">• Active: The resource share is enabled.• Deleting: The resource share is being deleted.• Deleted: The resource share is deleted. <p>Note The system deletes the records of resource shares in the Deleted state within 48 hours to 96 hours after you delete the resource shares.</p>

Examples

Sample requests

```
https://resourcesharing.aliyuncs.com/?Action=ListResourceShares
&RegionId=cn-hangzhou
&ResourceOwner=Self
&<Common request parameters>
```

Sample success responses

XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<?xml version="1.0" encoding="UTF-8" ?>
<ListResourceSharesResponse>
    <ResourceShares>
        <ResourceShareId>rs-hX9wC5j0****</ResourceShareId>
        <ResourceShareName>test1</ResourceShareName>
        <ResourceShareStatus>Deleted</ResourceShareStatus>
        <CreateTime>2020-12-03T02:47:14.651Z</CreateTime>
        <UpdateTime>2020-12-03T08:01:56.696Z</UpdateTime>
        <ResourceShareOwner>151266687691****</ResourceShareOwner>
    </ResourceShares>
    <ResourceShares>
        <ResourceShareId>rs-PqysnzIj****</ResourceShareId>
        <ResourceShareName>test</ResourceShareName>
        <ResourceShareStatus>Active</ResourceShareStatus>
        <CreateTime>2020-12-03T02:20:31.292Z</CreateTime>
        <UpdateTime>2020-12-03T08:01:43.638Z</UpdateTime>
        <ResourceShareOwner>151266687691****</ResourceShareOwner>
    </ResourceShares>
    <RequestId>2F23CFB6-A721-4E90-AC1E-0E30FA8B45DA</RequestId>
</ListResourceSharesResponse>
```

JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
    "ResourceShares": [ {
        "ResourceShareId": "rs-hX9wC5j0****",
        "ResourceShareName": "test1",
        "ResourceShareStatus": "Deleted",
        "CreateTime": "2020-12-03T02:47:14.651Z",
        "UpdateTime": "2020-12-03T08:01:56.696Z",
        "ResourceShareOwner": "151266687691****"
    }, {
        "ResourceShareId": "rs-PqysnzIj****",
        "ResourceShareName": "test",
        "ResourceShareStatus": "Active",
        "CreateTime": "2020-12-03T02:20:31.292Z",
        "UpdateTime": "2020-12-03T08:01:43.638Z",
        "ResourceShareOwner": "151266687691****"
    } ],
    "RequestId": "2F23CFB6-A721-4E90-AC1E-0E30FA8B45DA"
}
```

Error codes

HTTP status code	Error code	Error message	Description
400	MissingParameter.ResourceOwner	You must specify ResourceOwner.	The error message returned because the ResourceOwner parameter is not specified.
400	InvalidParameter.ResourceOwner	The ResourceOwner is invalid.	The error message returned because the value of the ResourceOwner parameter is invalid.
400	InvalidParameter.ResourceShareName	The ResourceShareName is invalid.	The error message returned because the value of the ResourceShareName parameter is invalid.
400	InvalidParameter.ResourceShareName.Length	The maximum length of ResourceShareName exceeds 50 characters.	The error message returned because the length of the value specified for the ResourceShareName parameter has exceeded the upper limit. Specify a value that is up to 50 characters in length.

HTTP status code	Error code	Error message	Description
400	InvalidParameter.ResourceShareStatus	The ResourceShareStatus is invalid.	The error message returned because the value of the ResourceShareStatus parameter is invalid.
400	InvalidParameter.MaxResults	The MaxResults is invalid.	The error message returned because the value of the MaxResults parameter is invalid.
400	InvalidParameter.NextToken	The NextToken is invalid.	The error message returned because the value of the NextToken parameter is invalid.
400	InvalidParameter.NextToken.Length	The maximum length of NextToken exceeds 256 characters.	The error message returned because the length of the value specified for the NextToken parameter has exceeded the upper limit. Specify a value that is up to 256 characters in length.
400	InvalidParameter.ResourceShareIds	The ResourceShareIds is invalid.	The error message returned because the value of the ResourceShareIds.N parameter is invalid.
400	InvalidParameter.ResourceShareIds.Duplicate	The ResourceShareIds contains duplicate values.	The error message returned because duplicate resource share IDs are specified for the ResourceShareIds.N parameter.
400	InvalidParameter.ResourceShareIds.Length	The maximum length of ResourceShareIds exceeds 5 characters.	The error message returned because the number of resource share IDs specified by using the ResourceShareIds.N parameter has exceeded the upper limit. Specify a maximum of five resource share IDs.
400	InvalidParameter	The specified parameter is invalid.	The error message returned because the value of a parameter is invalid.

For a list of error codes, visit the [API Error Center](#).

9.4. UpdateResourceShare

Changes the name of a resource share.

In this example, the name of the resource share `rs-qSkW1HBY****` in the `cn-hangzhou` region is changed from `test` to `new`.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	UpdateResourceShare	The operation that you want to perform. Set the value to UpdateResourceShare.
RegionId	String	Yes	cn-hangzhou	The region ID. For more information about regions where the Resource Sharing service is available, see DescribeRegions .
ResourceShareId	String	Yes	rs-qSkW1HBY****	The ID of the resource share.
ResourceShareName	String	Yes	new	The new name of the resource share. The name must be 1 to 50 characters in length. It can contain letters, digits, periods (.), underscores (_), and hyphens (-).

For more information about common parameters, see [Common parameters](#).

Response parameters

Parameter	Type	Example	Description
RequestId	String	2860A3A4-D8C1-4EF4-954E-84A3945E26E5	The ID of the request.
ResourceShare	Struct		The information of the resource share.
CreateTime	String	2020-12-03T08:02:22.413Z	The time when the resource share was created.
ResourceShareId	String	rs-qSkW1HBY****	The ID of the resource share.
ResourceShareName	String	new	The name of the resource share.

Parameter	Type	Example	Description
ResourceShareOwner	String	151266687691****	The owner of the resource share.
ResourceShareStatus	String	Active	<p>The status of the resource share. Valid values:</p> <ul style="list-style-type: none"> • Active: The resource share is enabled. • Deleting: The resource share is being deleted. • Deleted: The resource share is deleted. <div style="background-color: #e0f2ff; padding: 10px;"> ? Note The system automatically deletes the records of resource shares in the Deleted state within 48 hours to 96 hours after you delete the resource shares. </div>
UpdateTime	String	2020-12-04T08:55:25.382Z	The time when the resource share was updated.

Examples

Sample requests

```
https://resourcesharing.aliyuncs.com/?Action=UpdateResourceShare
&RegionId=cn-hangzhou
&ResourceShareId=rs-qSkW1HBY****
&ResourceShareName=new
&<Common request parameters>
```

Sample success responses

XML format

```
<UpdateResourceShareResponse>
    <RequestId>2860A3A4-D8C1-4EF4-954E-84A3945E26E5</RequestId>
    <ResourceShare>
        <ResourceShareId>rs-qSkW1HBY****</ResourceShareId>
        <ResourceShareName>new</ResourceShareName>
        <ResourceShareStatus>Active</ResourceShareStatus>
        <CreateTime>2020-12-03T08:02:22.413Z</CreateTime>
        <UpdateTime>2020-12-04T08:55:25.382Z</UpdateTime>
        <ResourceShareOwner>151266687691****</ResourceShareOwner>
    </ResourceShare>
</UpdateResourceShareResponse>
```

JSON format

```
{  
    "RequestId": "2860A3A4-D8C1-4EF4-954E-84A3945E26E5",  
    "ResourceShare": {  
        "ResourceShareId": "rs-qSkW1HBY****",  
        "ResourceShareName": "new",  
        "ResourceShareStatus": "Active",  
        "CreateTime": "2020-12-03T08:02:22.413Z",  
        "UpdateTime": "2020-12-04T08:55:25.382Z",  
        "ResourceShareOwner": "151266687691****"  
    }  
}
```

Error codes

HTTP status code	Error code	Error message	Description
400	MissingParameter.ResourceShareId	You must specify ResourceShareId.	The error message returned because the ResourceShareId parameter is not specified.
400	InvalidParameter.ResourceShareId	The ResourceShareId is invalid.	The error message returned because the value of the ResourceShareId parameter is invalid.
400	MissingParameter.ResourceShareName	You must specify ResourceShareName.	The error message returned because the ResourceShareName parameter is not specified.
400	InvalidParameter.ResourceShareName	The ResourceShareName is invalid.	The error message returned because the value of the ResourceShareName parameter is invalid.
400	InvalidParameter.ResourceShareName.Length	The maximum length of ResourceShareName exceeds 50 characters.	The error message returned because the length of the value specified for the ResourceShareName parameter has exceeded the upper limit. Specify a value that is up to 50 characters in length.
404	EntityNotExists.ResourceShare	The resource share does not exist in the current account.	The error message returned because the resource share does not belong to your Alibaba Cloud account.

HTTP status code	Error code	Error message	Description
409	ResourceShareStatusMismatchAction	The status of the resource share does not allow the specified operation.	The error message returned because the operation is not supported while the resource share is in the current state.
400	InvalidParameter	The specified parameter is invalid.	The error message returned because a specified parameter is invalid.

For a list of error codes, visit the [API Error Center](#).

9.5. DeleteResourceShare

Deletes a resource share.

After you delete a resource share, all the shared targets associated with it cannot access the related shared resources. However, the shared resources are not deleted with the resource share.

The resource share that is deleted is in the `Deleted` state. The system deletes the record of the resource share within 48 hours to 96 hours.

In this example, the resource share `rs-qSkW1HBY****` in the `cn-hangzhou` region is deleted.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	DeleteResourceShare	The operation that you want to perform. Set the value to <code>DeleteResourceShare</code> .
RegionId	String	Yes	cn-hangzhou	The region ID. For more information about regions where the Resource Sharing service is available, see DescribeRegions .
ResourceShareId	String	Yes	rs-qSkW1HBY****	The ID of the resource share.

For more information about common parameters, see [Common parameters](#).

Response parameters

Parameter	Type	Example	Description
RequestId	String	A627EE2A-223D-4E1F-A954-394686AEA916	The ID of the request.

Examples

Sample requests

```
https://resourcesharing.aliyuncs.com/?Action=DeleteResourceShare
&RegionId=cn-hangzhou
&ResourceShareId=rs-qSkW1HBY****
&<Common request parameters>
```

Sample success responses

XML format

```
<DeleteResourceShareResponse>
    <RequestId>A627EE2A-223D-4E1F-A954-394686AEA916</RequestId>
</DeleteResourceShareResponse>
```

JSON format

```
{
    "RequestId": "A627EE2A-223D-4E1F-A954-394686AEA916"
}
```

Error codes

HTTP status code	Error code	Error message	Description
400	MissingParameter.ResourceShareId	You must specify ResourceShareId.	The error message returned because the ResourceShareId parameter is not specified.
400	InvalidParameter.ResourceShareId	The ResourceShareId is invalid.	The error message returned because the value of the ResourceShareId parameter is invalid.
404	EntityNotExists.ResourceShare	The resource share does not exist in the current account.	The error message returned because the resource share does not belong to your Alibaba Cloud account.

HTTP status code	Error code	Error message	Description
409	ResourceShareStatusMismatchAction	The status of the resource share does not allow the specified operation.	The error message returned because the operation is not supported while the resource share is in the current state.
409	DeleteResourceShareConflict	You cannot delete a resource share while there are unfinished tasks.	The error message returned because the operation is not supported while unfinished tasks exist.
400	InvalidParameter	The specified parameter is invalid.	The error message returned because a specified parameter is invalid.

For a list of error codes, visit the [API Error Center](#).

9.6. AssociateResourceShare

Associates resources or members with a resource share.

Usage notes

This topic provides an example on how to call the API operation to associate the vSwitch `vsw-12345678901234567890` and the member `1720505253001234567890` with the resource share `rs-6GRmdD3X1234567890` in the `cn-hangzhou` region. After the association, the vSwitch is shared with the member.

Limits

You can call this operation up to 10 times per second per account. This operation is globally limited to 500 times per second across all accounts. If the number of the calls per second exceeds a limit, throttling is triggered. As a result, your business may be affected. We recommend that you take note of the limits when you call this operation.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	AssociateResourceShare	The operation that you want to perform. Set the value to <code>AssociateResourceShare</code> .

Parameter	Type	Required	Example	Description
ResourceShareId	String	Yes	rs-6GRmdD3X****	The ID of the resource share.
RegionId	String	Yes	cn-hangzhou	<p>The region ID.</p> <p>For more information about regions where the Resource Sharing service is available, see DescribeRegions.</p>
Resources.N.ResourceType	String	No	VSwitch	<p>The type of the shared resource.</p> <p>Valid values of N: 1 to 5. This indicates that a maximum of five shared resources can be specified at a time.</p> <p>For more information about the types of resources that can be shared, see Services that work with Resource Sharing.</p> <div style="background-color: #e0f2ff; padding: 10px;"> <p>? Note</p> <p>Resources.N.ResourceId and Resources.N.ResourceType must be used in pairs.</p> </div>
Resources.N.ResourceId	String	No	vsw-bp183p93qs667muql****	<p>The ID of the shared resource.</p> <p>Valid values of N: 1 to 5. This indicates that a maximum of five shared resources can be specified at a time.</p> <div style="background-color: #e0f2ff; padding: 10px;"> <p>? Note</p> <p>Resources.N.ResourceId and Resources.N.ResourceType must be used in pairs.</p> </div>

Parameter	Type	Required	Example	Description
Targets.N	String	No	172050525300*** *	<p>The ID of the principal. You can set this parameter to one of the following items:</p> <ul style="list-style-type: none"> • ID of a resource directory: The resource is shared with all members in the resource directory. For more information about how to obtain the ID of a resource directory, see View the basic information of a resource directory. • ID of a folder: The resource is shared with all members in the folder. For more information about how to obtain the ID of a folder, see View the basic information of a folder. • ID of a member: The resource is shared with the member. For more information about how to obtain the ID of a member, see View the detailed information of a member. <p>Valid values of N: 1 to 5. This indicates that a maximum of five principals can be specified at a time.</p>

For more information about common request parameters, see [Common parameters](#).

Response parameters

Parameter	Type	Example	Description
RequestId	String	111FB84A-60A9-403E-9067-E55D7EE95BD1	The ID of the request.
ResourceShare Associations	Array of ResourceShare Association		The information of the entities that are associated with the resource share.

Parameter	Type	Example	Description
UpdateTime	String	2020-12-04T09:40:41.246Z	<p>The time when the association was updated. The value of this parameter depends on the value of the AssociationType parameter:</p> <ul style="list-style-type: none"> If the value of <code>AssociationType</code> is <code>R</code>esource, the value of this parameter is the time when the association of the shared resource was updated. If the value of <code>AssociationType</code> is <code>T</code>arget, the value of this parameter is the time when the association of the principal was updated.
EntityId	String	vSW-bp183p93qs667muq ****	<p>The ID of the entity. The value of this parameter depends on the value of the AssociationType parameter:</p> <ul style="list-style-type: none"> If the value of <code>AssociationType</code> is <code>R</code>esource, the value of this parameter is the ID of the shared resource. If the value of <code>AssociationType</code> is <code>T</code>arget, the value of this parameter is the ID of a resource directory, folder, or member.
ResourceShareName	String	test	The name of the resource share.
CreateTime	String	2020-12-04T09:40:41.246Z	<p>The time when the association was created. The value of this parameter depends on the value of the AssociationType parameter:</p> <ul style="list-style-type: none"> If the value of <code>AssociationType</code> is <code>R</code>esource, the value of this parameter is the time when the shared resource was associated with the resource share. If the value of <code>AssociationType</code> is <code>T</code>arget, the value of this parameter is the time when the principal was associated with the resource share.

Parameter	Type	Example	Description
EntityType	String	VSwitch	<p>The type of the entity. The value of this parameter depends on the value of the AssociationType parameter:</p> <ul style="list-style-type: none"> If the value of AssociationType is Resource, the value of this parameter is the type of the shared resource. For more information about the types of resources that can be shared, see Services that work with Resource Sharing. If the value of AssociationType is Target, the value of this parameter is Account.
ResourceShared	String	rs-6GRmdD3X***	The ID of the resource share.
AssociationStatusMessage	String	The reason for the association failure.	The cause of the association failure.
AssociationType	String	Resource	<p>The association type. Valid values:</p> <ul style="list-style-type: none"> Resource Target
AssociationStatus	String	Associating	<p>The association status. Valid values:</p> <ul style="list-style-type: none"> Associating: The entity is being associated. Associated: The entity is associated. Failed: The entity fails to be associated. Disassociating: The entity is being disassociated. Disassociated: The entity is disassociated. <p>Note The system deletes the records of entities in the Failed or Disassociated state within 48 hours to 96 hours.</p>

Examples

Sample requests

```
https://resourcessharing.aliyuncs.com/?Action=AssociateResourceShare
&RegionId=cn-hangzhou
&ResourceShareId=rs-6GRmdD3X****
&Resources.1.ResourceId=vsw-bp183p93qs667muql****
&Resources.1.ResourceType=VSwitch
&Targets.1=172050525300****
&RegionId=cn-hangzhou
&<Common request parameters>
```

Sample success responses

XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<?xml version="1.0" encoding="UTF-8" ?>
<AssociateResourceShareResponse>
<ResourceShareAssociations>
<ResourceShareId>rs-6GRmdD3X****</ResourceShareId>
<EntityId>vsw-bp183p93qs667muql****</EntityId>
<EntityType>VSwitch</EntityType>
<AssociationStatusMessage></AssociationStatusMessage>
<AssociationType>Resource</AssociationType>
<CreateTime>2020-12-04T09:40:41.246Z</CreateTime>
<UpdateTime>2020-12-04T09:40:41.246Z</UpdateTime>
<ResourceShareName>test</ResourceShareName>
<AssociationStatus>Associating</AssociationStatus>
</ResourceShareAssociations>
<ResourceShareAssociations>
<ResourceShareId>rs-6GRmdD3X****</ResourceShareId>
<EntityId>172050525300****</EntityId>
<EntityType>Account</EntityType>
<AssociationStatusMessage></AssociationStatusMessage>
<AssociationType>Target</AssociationType>
<CreateTime>2020-12-04T09:40:41.250Z</CreateTime>
<UpdateTime>2020-12-04T09:40:41.250Z</UpdateTime>
<ResourceShareName>test1</ResourceShareName>
<AssociationStatus>Associating</AssociationStatus>
</ResourceShareAssociations>
<RequestId>111FB84A-60A9-403E-9067-E55D7EE95BD1</RequestId>
</AssociateResourceShareResponse>
```

JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "ResourceShareAssociations" : [ {
    "ResourceShareId" : "rs-6GRmdD3X****",
    "EntityId" : "vsw-bp183p93qs667muql****",
    "EntityType" : "VSwitch",
    "AssociationStatusMessage" : "",
    "AssociationType" : "Resource",
    "CreateTime" : "2020-12-04T09:40:41.246Z",
    "UpdateTime" : "2020-12-04T09:40:41.246Z",
    "ResourceShareName" : "test",
    "AssociationStatus" : "Associating"
  }, {
    "ResourceShareId" : "rs-6GRmdD3X****",
    "EntityId" : "172050525300****",
    "EntityType" : "Account",
    "AssociationStatusMessage" : "",
    "AssociationType" : "Target",
    "CreateTime" : "2020-12-04T09:40:41.250Z",
    "UpdateTime" : "2020-12-04T09:40:41.250Z",
    "ResourceShareName" : "test1",
    "AssociationStatus" : "Associating"
  } ],
  "RequestId" : "111FB84A-60A9-403E-9067-E55D7EE95BD1"
}
```

Error codes

HTTP status code	Error code	Error message	Description
400	MissingParameter.ResourceShareId	You must specify ResourceShareId.	The error message returned because the ResourceShareId parameter is not configured.
400	InvalidParameter.ResourceShareId	The ResourceShareId is invalid.	The error message returned because the value of the ResourceShareId parameter is invalid.
400	InvalidParameter.Resources	The Resources is invalid.	The error message returned because the specified resource is invalid.
400	InvalidParameter.Resources.Duplicate	The Resources contains duplicate values.	The error message returned because duplicate resources are specified.

HTTP status code	Error code	Error message	Description
400	InvalidParameter.Resources.Length	The maximum number of Resources exceeds 5.	The error message returned because the number of specified resources has exceeded the upper limit. Specify a maximum of five resources.
400	InvalidParameter.Targets	The Targets is invalid.	The error message returned because the value of the Targets.N parameter is invalid.
400	InvalidParameter.Targets.Duplicate	The Targets contains duplicate values.	The error message returned because duplicate principals are specified.
400	InvalidParameter.Targets.Length	The maximum number of Targets exceeds 5.	The error message returned because the number of specified principals has exceeded the upper limit. Specify a maximum of five principals.
400	InvalidTarget	The shared target does not exist in the resource directory.	The error message returned because the specified principal is not in your resource directory.
400	ResourceAndTargetBothEmpty	Either a resource or a shared target must be specified.	The error message returned because no resources or principals are specified.
400	InvalidParameter	The specified parameter is invalid.	The error message returned because the value of a parameter is invalid.
404	EntityNotExists.ResourceShare	The resource share does not exist in the current account.	The error message returned because the resource share does not belong to your Alibaba Cloud account.
409	NotEnableSharingWithResourceDirectory	You have not enabled sharing with your Resource Directory.	The error message returned because resource sharing is not enabled for the resource directory.
409	AccountNotInResourceDirectory	The account is not a master or a member of a resource directory.	The error message returned because the specified principal is not in your resource directory.
409	ResourceShareStatusMismatchAction	The status of the resource share does not allow the specified operation.	The error message returned because the operation is not supported while the resource share is in the current state.

HTTP status code	Error code	Error message	Description
409	QuotaExceeded.SharedResource.Count	The maximum number of shared resources per account exceeds the limit.	The error message returned because the number of shared resources within the account has exceeded the upper limit.
409	ShareWithYourself	You cannot share resources with yourself.	The error message returned because you are not allowed to share resources with yourself.
409	AssociateConflict	You cannot perform the operation while disassociation operation is being performed.	The error message returned because the operation is not supported while a disassociation operation is being performed.
409	NotManagementAccount	Only the management account of the service is allowed to share such resources.	The error message returned because only the management account of a resource directory can be used to share the specified type of resource. If you still want to use the current account to share this type of resource, contact the owner of the management account to specify the current account as a delegated administrator account of the service to which the resource belongs.

For a list of error codes, visit the [API Error Center](#).

9.7. DisassociateResourceShare

Disassociates resources or principals from a resource share.

Usage notes

In this example, the member `172050525300****` is disassociated from the resource share `rs-6GRmdD3X****` that resides in the `cn-hangzhou` region. This indicates that the member cannot share the resources associated with the resource share.

QPS limits

The maximum queries per second (QPS) per user for the API operation is 10, and the maximum QPS for all users for the API operation is 500. If the number of calls to the API operation per second exceeds a related QPS limit, throttling is triggered. As a result, your services may be affected. We recommend that you take note of the limits when you call this operation.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	DisassociateResourceShare	The operation that you want to perform. Set the value to DisassociateResourceShare .
ResourceShareId	String	Yes	rs-6GRmdD3X****	The ID of the resource share.
RegionId	String	Yes	cn-hangzhou	The region ID. For more information about regions where the Resource Sharing service is available, see DescribeRegions .
Resources.N.ResourceType	String	No	VSwitch	The type of the shared resource. Valid values of N: 1 to 5. This indicates that a maximum of five shared resources can be specified at a time. For more information about the types of resources that can be shared, see Alibaba Cloud services that support Resource Sharing . <div style="background-color: #e1f5fe; padding: 10px; border-radius: 5px;"><p>? Note Resources.N.ResourceId and Resources.N.ResourceType must be used in pairs.</p></div>
Resources.N.ResourceId	String	No	vsw-bp183p93qs667muql****	The ID of the shared resource. Valid values of N: 1 to 5. This indicates that a maximum of five shared resources can be specified at a time. <div style="background-color: #e1f5fe; padding: 10px; border-radius: 5px;"><p>? Note Resources.N.ResourceId and Resources.N.ResourceType must be used in pairs.</p></div>

Parameter	Type	Required	Example	Description
Targets.N	String	No	172050525300*** *	<p>The principal. You can set this parameter to one of the following items:</p> <ul style="list-style-type: none"> • ID of a resource directory: The resource is shared with all members in a resource directory. For more information about how to obtain the ID of a resource directory, see View the basic information of a resource directory. • ID of a folder: The resource is shared with all members in a folder in a resource directory. For more information about how to obtain the ID of a folder, see View the basic information of a folder. • ID of a member: The resource is shared with a specific member in a resource directory. For more information about how to obtain the ID of a member, see View the detailed information of a member. <p>Valid values of N: 1 to 5. This indicates that a maximum of five principals can be specified at a time.</p>

For more information about common request parameters, see [Common parameters](#).

Response parameters

Parameter	Type	Example	Description
RequestId	String	95230BC9-A8E8-4493-96BD-4F0C758E37F8	The ID of the request.
ResourceShare Associations	Array of ResourceShare Association		The information of the entities that are associated with the resource share.

Parameter	Type	Example	Description
UpdateTime	String	2020-12-04T09:40:45.556Z	<p>The time when the disassociation was updated. The value of this parameter depends on the value of the AssociationType parameter:</p> <ul style="list-style-type: none"> If the value of <code>AssociationType</code> is <code>R</code>esource, the value of this parameter is the time when the disassociation of the resource was updated. If the value of <code>AssociationType</code> is <code>T</code>arget, the value of this parameter is the time when the disassociation of the principal was updated.
EntityId	String	172050525300****	<p>The ID of the entity. The value of this parameter depends on the value of the AssociationType parameter:</p> <ul style="list-style-type: none"> If the value of <code>AssociationType</code> is <code>R</code>esource, the value of this parameter is the ID of the resource. If the value of <code>AssociationType</code> is <code>T</code>arget, the value of this parameter is the ID of the resource directory, folder, or member.
ResourceShareName	String	test	The name of the resource share.
CreateTime	String	2020-12-04T09:40:41.250Z	<p>The time when the disassociation was performed. The value of this parameter depends on the value of the AssociationType parameter:</p> <ul style="list-style-type: none"> If the value of <code>AssociationType</code> is <code>R</code>esource, the value of this parameter is the time when the resource was disassociated from the resource share. If the value of <code>AssociationType</code> is <code>T</code>arget, the value of this parameter is the time when the principal was disassociated from the resource share.

Parameter	Type	Example	Description
EntityType	String	Account	<p>The type of the entity. The value of this parameter depends on the value of the AssociationType parameter:</p> <ul style="list-style-type: none"> If the value of AssociationType is Resource, the value of this parameter is the type of the resource. For more information about the types of resources that can be shared, see Alibaba Cloud services that support Resource Sharing. If the value of AssociationType is Target, the value of this parameter is Account.
ResourceShareId	String	rs-6GRmdD3X****	The ID of the resource share.
AssociationStatusMessage	String	The Resources is invalid.	The cause of the disassociation failure.
AssociationType	String	Target	<p>The association type. Valid values:</p> <ul style="list-style-type: none"> Resource Target
AssociationStatus	String	Disassociating	<p>The association status. Valid values:</p> <ul style="list-style-type: none"> Associating: The entity is being associated. Associated: The entity is associated. Failed: The entity fails to be associated. Disassociating: The entity is being disassociated. Disassociated: The entity is disassociated. <p>Note The system deletes the records of entities in the Failed or Disassociated state within 48 hours to 96 hours.</p>

Examples

Sample requests

```
https://resourcesharing.aliyuncs.com/?Action=DisassociateResourceShare
&RegionId=cn-hangzhou
&ResourceShareId=rs-6GRmdD3X****
&Targets.1=172050525300****
&<Common request parameters>
```

Sample success responses

XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<?xml version="1.0" encoding="UTF-8" ?>
<DisassociateResourceShareResponse>
<ResourceShareAssociations>
<ResourceShareId>rs-6GRmdD3X****</ResourceShareId>
<EntityId>172050525300****</EntityId>
<EntityType>Account</EntityType>
<AssociationStatusMessage></AssociationStatusMessage>
<AssociationType>Target</AssociationType>
<CreateTime>2020-12-04T09:40:41.250Z</CreateTime>
<UpdateTime>2020-12-04T09:40:45.556Z</UpdateTime>
    <ResourceShareName>test</ResourceShareName>
    <AssociationStatus>Disassociating</AssociationStatus>
</ResourceShareAssociations>
<RequestId>95230BC9-A8E8-4493-96BD-4F0C758E37F8</RequestId>
</DisassociateResourceShareResponse>
```

JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
    "ResourceShareAssociations" : [ {
        "ResourceShareId" : "rs-6GRmdD3X****",
        "EntityId" : "172050525300****",
        "EntityType" : "Account",
        "AssociationStatusMessage" : "",
        "AssociationType" : "Target",
        "CreateTime" : "2020-12-04T09:40:41.250Z",
        "UpdateTime" : "2020-12-04T09:40:45.556Z",
        "ResourceShareName" : "test",
        "AssociationStatus" : "Disassociating"
    } ],
    "RequestId" : "95230BC9-A8E8-4493-96BD-4F0C758E37F8"
}
```

Error codes

HTTP status code	Error code	Error message	Description
400	MissingParameter.ResourceShareId	You must specify ResourceShareId.	The error message returned because the ResourceShareId parameter is not specified.

HTTP status code	Error code	Error message	Description
400	InvalidParameter.ResourceShareId	The ResourceShareId is invalid.	The error message returned because the value of the ResourceShareId parameter is invalid.
400	InvalidParameter.Resources	The Resources is invalid.	The error message returned because the specified resource is invalid.
400	InvalidParameter.Resources.Duplicate	The Resources contains duplicate values.	The error message returned because duplicate resources are specified.
400	InvalidParameter.Resources.Length	The maximum number of Resources exceeds 5.	The error message returned because the number of specified resources has exceeded the upper limit. Specify a maximum of five resources.
400	InvalidParameter.Targets	The Targets is invalid.	The error message returned because the value of the Targets.N parameter is invalid.
400	InvalidParameter.Targets.Duplicate	The Targets contains duplicate values.	The error message returned because duplicate principals are specified.
400	InvalidParameter.Targets.Length	The maximum number of Targets exceeds 5.	The error message returned because the number of specified principals has exceeded the upper limit. Specify a maximum of five principals.
400	ResourceAndTargetBothEmpty	Either a resource or a shared target must be specified.	The error message returned because no resources or principals are specified.
400	DisassociateInvalid	You can not disassociate unassociated resource or target.	The error message returned because the operation is not supported for an entity that is not associated with the resource share.
400	InvalidParameter	The specified parameter is invalid.	The error message returned because the value of a parameter is invalid.
404	EntityNotExists.ResourceShare	The resource share does not exist in the current account.	The error message returned because the resource share does not belong to your Alibaba Cloud account.

HTTP status code	Error code	Error message	Description
409	AccountNotInResourceDirectory	The account is not a master or a member of a resource directory.	The error message returned because the specified principal is not in your resource directory.
409	ResourceShareStatusMismatchAction	The status of the resource share does not allow the specified operation.	The error message returned because the operation is not supported while the resource share is in the current state.
409	DisassociateConflict	You cannot perform the operation while association is already in progress.	The error message returned because the operation is not supported while an association is being performed.

For a list of error codes, visit the [API Error Center](#).

9.8. ListResourceShareAssociations

Queries the association records of resource shares.

Usage notes

In this example, the association records of the resource shares that belong to the current Alibaba Cloud account are queried in the `cn-hangzhou` region. The response shows the following records:

- The resource `vsw-bplupw03qyz8n7us9****` of the `vSwitch` type has been associated with the resource share `rs-6GRmdD3X****`. The resource is in the `Associated` state. This indicates that the resource is being shared.
- The resource `vsw-bp183p93qs667muql****` of the `vSwitch` type has been disassociated from the resource share `rs-6GRmdD3X****`. The resource is in the `Disassociated` state. This indicates that the sharing of the resource is stopped.

QPS limits

The maximum queries per second (QPS) per user for the API operation is 20, and the maximum QPS for all users for the API operation is 500. If the number of calls to the API operation per second exceeds a related QPS limit, throttling is triggered. As a result, your services may be affected. We recommend that you take note of the limits when you call this operation.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	ListResourceShareAssociations	The operation that you want to perform. Set the value to ListResourceShareAssociations .
ResourceId	String	No	vSW-bp183p93qs667muql****	The ID of the resource. ? Note This parameter is unavailable if you set the AssociationType parameter to Target .
Target	String	No	172050525300****	The ID of the principal. ? Note This parameter is unavailable if you set the AssociationType parameter to Resource .
AssociationType	String	Yes	Resource	The association type. Valid values: <ul style="list-style-type: none">• Resource• Target
AssociationStatus	String	No	Associated	The association status. Valid values: <ul style="list-style-type: none">• Associating: The entity is being associated.• Associated: The entity is associated.• Failed: The entity fails to be associated.• Disassociating: The entity is being disassociated.• Disassociated: The entity is disassociated. ? Note The system deletes the records of entities in the Failed or Disassociated state within 48 hours to 96 hours.

Parameter	Type	Required	Example	Description
MaxResults	Integer	No	20	The maximum number of entries to return for a single request. Valid values: 1 to 100. Default value: 20.
NextToken	String	No	TGlzdFJlc291cm***	The token that is used to initiate the next request. If the response of the current request is truncated, you can use the token to initiate another request and obtain the remaining records.
RegionId	String	Yes	cn-hangzhou	The region ID. For more information about regions where the Resource Sharing service is available, see DescribeRegions .
ResourceShareIds.N	String	No	rs-6GRmdD3X***	The IDs of the resource shares.

For more information about common request parameters, see [Common parameters](#).

Response parameters

Parameter	Type	Example	Description
NextToken	String	TGlzdFJlc291cm***	The token that is used to initiate the next request. If the response of the current request is truncated, you can use the token to initiate another request and obtain the remaining records.
RequestId	String	11BA57B5-7301-4E2F-BBA5-2AE4C2F4FCDB	The ID of the request.
ResourceShareAssociations	Array of ResourceShareAssociation		The information of the entities.

Parameter	Type	Example	Description
UpdateTime	String	2020-12-07T07:39:02.920Z	<p>The time when the association was updated. The value of this parameter depends on the value of the AssociationType parameter:</p> <ul style="list-style-type: none"> If the value of <code>AssociationType</code> is <code>R</code>esource, the value of this parameter is the time when the association of the shared resource was updated. If the value of <code>AssociationType</code> is <code>T</code>arget, the value of this parameter is the time when the association of the principal was updated.
EntityId	String	vsw-bp1upw03qyz8n7us9***	<p>The ID of the entity. The value of this parameter depends on the value of the AssociationType parameter:</p> <ul style="list-style-type: none"> If the value of <code>AssociationType</code> is <code>R</code>esource, the value of this parameter is the ID of the shared resource. If the value of <code>AssociationType</code> is <code>T</code>arget, the value of this parameter is the ID of the principal.
ResourceShare Name	String	example	The name of the resource share.
CreateTime	String	2020-12-07T07:39:01.818Z	<p>The time when the association was created. The value of this parameter depends on the value of the AssociationType parameter:</p> <ul style="list-style-type: none"> If the value of <code>AssociationType</code> is <code>R</code>esource, the value of this parameter is the time when the shared resource was associated with or disassociated from the resource share. If the value of <code>AssociationType</code> is <code>T</code>arget, the value of this parameter is the time when the principal was associated with or disassociated from the resource share.

Parameter	Type	Example	Description
EntityType	String	VSwitch	<p>The type of the entity. The value of this parameter depends on the value of the AssociationType parameter:</p> <ul style="list-style-type: none"> If the value of AssociationType is Resource, the value of this parameter is the type of the resource. For more information about the types of resources that can be shared, see Alibaba Cloud services that support Resource Sharing. If the value of AssociationType is Target, the value of this parameter is Account.
ResourceSharedId	String	rs-6GRmdD3X***	The ID of the resource share.
AssociationStatusMessage	String	The reason for the association failure.	The cause of the association failure.
AssociationType	String	Resource	<p>The association type. Valid values:</p> <ul style="list-style-type: none"> Resource Target
AssociationStatus	String	Associated	<p>The association status. Valid values:</p> <ul style="list-style-type: none"> Associating: The entity is being associated. Associated: The entity is associated. Failed: The entity fails to be associated. Disassociating: The entity is being disassociated. Disassociated: The entity is disassociated. <div style="background-color: #e0f2ff; padding: 10px; margin-top: 10px;"> ? Note The system deletes the records of entities in the Failed or Disassociated state within 48 hours to 96 hours. </div>

Examples

Sample requests

```
https://resourcesharing.aliyuncs.com/?Action=ListResourceShareAssociations
&AssociationType=Resource
&RegionId=cn-hangzhou
&<Common request parameters>
```

Sample success responses

XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<?xml version="1.0" encoding="UTF-8" ?>
<ListResourceShareAssociationsResponse>
    <ResourceShareAssociations>
        <ResourceShareId>rs-6GRmdD3X****</ResourceShareId>
        <ResourceShareName>example</ResourceShareName>
        <EntityId>vsw-bp1upw03qyz8n7us9****</EntityId>
        <EntityType>VSwitch</EntityType>
        <AssociationStatusMessage></AssociationStatusMessage>
        <AssociationType>Resource</AssociationType>
        <CreateTime>2020-12-07T07:39:01.818Z</CreateTime>
        <UpdateTime>2020-12-07T07:39:02.920Z</UpdateTime>
        <AssociationStatus>Associated</AssociationStatus>
    </ResourceShareAssociations>
    <ResourceShareAssociations>
        <ResourceShareId>rs-6GRmdD3X****</ResourceShareId>
        <ResourceShareName>example</ResourceShareName>
        <EntityId>vsw-bp183p93qs667muql****</EntityId>
        <EntityType>VSwitch</EntityType>
        <AssociationStatusMessage></AssociationStatusMessage>
        <AssociationType>Resource</AssociationType>
        <CreateTime>2020-12-04T09:40:41.246Z</CreateTime>
        <UpdateTime>2020-12-07T03:17:24.067Z</UpdateTime>
        <AssociationStatus>Disassociated</AssociationStatus>
    </ResourceShareAssociations>
    <RequestId>11BA57B5-7301-4E2F-BBA5-2AE4C2F4FCDB</RequestId>
</ListResourceShareAssociationsResponse>
```

JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "ResourceShareAssociations" : [ {
    "ResourceShareId" : "rs-6GRmdD3X****",
    "ResourceShareName" : "example",
    "EntityId" : "vsw-bplupw03qyz8n7us9****",
    "EntityType" : "VSwitch",
    "AssociationStatusMessage" : "",
    "AssociationType" : "Resource",
    "CreateTime" : "2020-12-07T07:39:01.818Z",
    "UpdateTime" : "2020-12-07T07:39:02.920Z",
    "AssociationStatus" : "Associated"
  }, {
    "ResourceShareId" : "rs-6GRmdD3X****",
    "ResourceShareName" : "example",
    "EntityId" : "vsw-bp183p93qs667muql****",
    "EntityType" : "VSwitch",
    "AssociationStatusMessage" : "",
    "AssociationType" : "Resource",
    "CreateTime" : "2020-12-04T09:40:41.246Z",
    "UpdateTime" : "2020-12-07T03:17:24.067Z",
    "AssociationStatus" : "Disassociated"
  } ],
  "RequestId" : "11BA57B5-7301-4E2F-BBA5-2AE4C2F4FCDB"
}
```

Error codes

HTTP status code	Error code	Error message	Description
400	MissingParameter.AssociationType	You must specify AssociationType.	The error message returned because the AssociationType parameter is not specified.
400	InvalidParameter.AssociationType	The AssociationType is invalid.	The error message returned because the value of the AssociationType parameter is invalid.
400	InvalidParameter.AssociationStatus	The AssociationStatus is invalid.	The error message returned because the value of the AssociationStatus parameter is invalid.
400	InvalidParameter.MaxResults	The MaxResults is invalid.	The error message returned because the value of the MaxResults parameter is invalid.

HTTP status code	Error code	Error message	Description
400	InvalidParameter.NextToken	The NextToken is invalid.	The error message returned because the value of the NextToken parameter is invalid.
400	InvalidParameter.NextToken.Length	The maximum length of NextToken exceeds 256 characters.	The error message returned because the length of the value specified for the NextToken parameter has exceeded the upper limit. Specify a value that is up to 256 characters in length.
400	InvalidParameter.ResourceShareIds	The ResourceShareIds is invalid.	The error message returned because the value of the ResourceShareIds.N parameter is invalid.
400	InvalidParameter.ResourceShareIds.Duplicate	The ResourceShareIds contains duplicate values.	The error message returned because duplicate resource share IDs are specified for the ResourceShareIds.N parameter.
400	InvalidParameter.ResourceShareIds.Length	The maximum length of ResourceShareIds exceeds 5 characters.	The error message returned because the number of resource share IDs specified by using the ResourceShareIds.N parameter has exceeded the upper limit. Specify a maximum of five resource share IDs.
400	InvalidParameter.Target	The Target is invalid.	The error message returned because the value of the Target parameter is invalid.
400	InvalidParameter.ResourceId	The ResourceId is invalid.	The error message returned because the value of the ResourceId parameter is invalid.
400	ConflictedAssociationType	The specified ResourceId or Target conflicts with AssociationType.	The error message returned because the value of the ResourceId or Target parameter conflicts with the value of the AssociationType parameter.
400	InvalidParameter	The specified parameter is invalid.	The error message returned because the value of a parameter is invalid.

For a list of error codes, visit the [API Error Center](#).

9.9. ListSharedResources

Queries the resources you share with other accounts or the resources other accounts share with you.

Usage notes

In this example, the resources that you share with other accounts are queried in the `cn-hangzhou` region. The response shows that in the resource share `rs-6GRmdD3X****`, you share the `vsw-bp1upw03qyz8n7us9***` resource of the `VSwitch` type with other accounts.

QPS limits

The maximum queries per second (QPS) per user for the API operation is 20, and the maximum QPS for all users for the API operation is 500. If the number of calls to the API operation per second exceeds a related QPS limit, throttling is triggered. As a result, your services may be affected. We recommend that you take note of the limits when you call this operation.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	ListSharedResources	The operation that you want to perform. Set the value to <code>ListSharedResources</code> .
ResourceOwner	String	Yes	Self	The owner of the resource share. Valid values: <ul style="list-style-type: none">• Self: your account. If you set the value to <code>Self</code>, the resources you share with other accounts are queried.• OtherAccounts: another account. If you set the value to <code>OtherAccounts</code>, the resources other accounts share with you are queried.
ResourceType	String	No	VSwitch	The type of the shared resources. For more information about the types of resources that can be shared, see Alibaba Cloud services that support Resource Sharing .

Parameter	Type	Required	Example	Description
Target	String	No	172050525300*** *	The shared target. A shared target shares the resources of resource owners. You can share your resources only with the members in your resource directory. A shared target is indicated by its account ID. For more information about how to obtain the ID, see View the basic information of a member .
MaxResults	Integer	No	20	The maximum number of entries to return for a single request. Valid values: 1 to 100. Default value: 20.
NextToken	String	No	TGlzdFJlc291cm** **	The token that is used to initiate the next request. If the response of the current request is truncated, you can use the token to initiate another request and obtain the remaining records.
RegionId	String	Yes	cn-hangzhou	The region ID. For more information about regions where the Resource Sharing service is available, see DescribeRegions .
ResourceShareIds.N	String	No	rs-6GRmdD3X****	The IDs of the resource shares.
ResourceIds.N	String	No	vSW- bp1upw03qyz8n 7us9****	The IDs of the shared resources.

For more information about common request parameters, see [Common parameters](#).

Response parameters

Parameter	Type	Example	Description
NextToken	String	TGlzdFJlc291cm****	The token that is used to initiate the next request. If the response of the current request is truncated, you can use the token to initiate another request and obtain the remaining records.

Parameter	Type	Example	Description
RequestId	String	04677DCA-7C33-464B-8811-1B1DA3C3D197	The ID of the request.
SharedResources	Array of SharedResource		The information of the shared resources.
UpdateTime	String	2020-12-07T07:39:02.921Z	The time when the association of the shared resource was updated.
ResourceType	String	VSwitch	<p>The type of the shared resource.</p> <p>For more information about the types of resources that can be shared, see Alibaba Cloud services that support Resource Sharing.</p>
CreateTime	String	2020-12-07T07:39:02.921Z	The time when the shared resource was associated with the resource share.
ResourceSharedId	String	rs-6GRmdD3X****	The ID of the resource share.
ResourceId	String	vsw-bp1upw03qyz8n7us9****	The ID of the shared resource.
ResourceStatus	String	Available	<p>The status of the shared resource. This parameter is returned only when you query the resources that other accounts share with you.</p> <p>Valid values:</p> <ul style="list-style-type: none"> • Available: The resource is available. • ZonalResourceInaccessible: The resource is unavailable in the current zone. • LimitExceeded: The resource is unavailable because the maximum number of resources that other accounts can share with you exceeds the upper limit. • Unavailable: The resource is unavailable.
ResourceStatusMessage	String	The reason for the association failure.	The cause of the association failure.

Examples

Sample requests

```
https://resourcessharing.aliyuncs.com/?Action=ListSharedResources  
&RegionId=cn-hangzhou  
&ResourceOwner=Self  
&<Common request parameters>
```

Sample success responses

XML format

```
HTTP/1.1 200 OK  
Content-Type:application/xml  
<?xml version="1.0" encoding="UTF-8" ?>  
<ListSharedResourcesResponse>  
  <RequestId>04677DCA-7C33-464B-8811-1B1DA3C3D197</RequestId>  
  <SharedResources>  
    <ResourceShareId>rs-6GRmdD3X****</ResourceShareId>  
    <ResourceId>vsw-bplupw03qyz8n7us9*****</ResourceId>  
    <CreateTime>2020-12-07T07:39:02.921Z</CreateTime>  
    <UpdateTime>2020-12-07T07:39:02.921Z</UpdateTime>  
    <ResourceType>VSwitch</ResourceType>  
  </SharedResources>  
</ListSharedResourcesResponse>
```

JSON format

```
HTTP/1.1 200 OK  
Content-Type:application/json  
{  
  "RequestId" : "04677DCA-7C33-464B-8811-1B1DA3C3D197",  
  "SharedResources" : [ {  
    "ResourceShareId" : "rs-6GRmdD3X****",  
    "ResourceId" : "vsw-bplupw03qyz8n7us9*****",  
    "CreateTime" : "2020-12-07T07:39:02.921Z",  
    "UpdateTime" : "2020-12-07T07:39:02.921Z",  
    "ResourceType" : "VSwitch"  
  } ]  
}
```

Error codes

HTTP status code	Error code	Error message	Description
400	MissingParameter.ResourceOwner	You must specify ResourceOwner.	The error message returned because the ResourceOwner parameter is not specified.
400	InvalidParameter.ResourceOwner	The ResourceOwner is invalid.	The error message returned because the value of the ResourceOwner parameter is invalid.

HTTP status code	Error code	Error message	Description
400	InvalidParameter.ResourceType	The ResourceType is invalid.	The error message returned because the value of the ResourceType parameter is invalid.
400	InvalidParameter.MaxResults	The MaxResults is invalid.	The error message returned because the value of the MaxResults parameter is invalid.
400	InvalidParameter.NextToken	The NextToken is invalid.	The error message returned because the value of the NextToken parameter is invalid.
400	InvalidParameter.NextToken.Length	The maximum length of NextToken exceeds 256 characters.	The error message returned because the length of the value specified for the NextToken parameter has exceeded the upper limit. Specify a value that is up to 256 characters in length.
400	InvalidParameter.ResourceShareIds	The ResourceShareIds is invalid.	The error message returned because the value of the ResourceShareIds.N parameter is invalid.
400	InvalidParameter.ResourceShareIds.Duplicate	The ResourceShareIds contains duplicate values.	The error message returned because duplicate resource share IDs are specified for the ResourceShareIds.N parameter.
400	InvalidParameter.ResourceShareIds.Length	The maximum length of ResourceShareIds exceeds 5 characters.	The error message returned because the number of resource share IDs specified by using the ResourceShareIds.N parameter has exceeded the upper limit. Specify a maximum of five resource share IDs.
400	InvalidParameter.ResourceIds	The ResourceIds is invalid.	The error message returned because the value of the ResourceIds.N parameter is invalid.
400	InvalidParameter.ResourceIds.Duplicate	The specified ResourceId contains duplicate values.	The error message returned because duplicate resource IDs are specified.

HTTP status code	Error code	Error message	Description
400	InvalidParameter.Resources.Length	The maximum number of ResourceIds (5) is exceeded.	The error message returned because the number of specified resource IDs has exceeded the upper limit. Specify a maximum of five resource IDs.
400	InvalidParameter.Target	The Target is invalid.	The error message returned because the value of the Target parameter is invalid.
400	InvalidParameter	The specified parameter is invalid.	The error message returned because the value of a parameter is invalid.

For a list of error codes, visit the [API Error Center](#).

9.10. ListSharedTargets

Queries shared targets.

Usage notes

If you are a resource owner, you can query the shared targets with which you share your resources.

If you are a shared target, you can query the resources that are shared with you.

In this example, the shared targets with which you share your resources are queried in the `cn-hangzhou` region. The response shows that you share your resources with the shared targets `114240524784****` and `172050525300****`.

QPS limits

The maximum queries per second (QPS) per user for the API operation is 20, and the maximum QPS for all users for the API operation is 500. If the number of calls to the API operation per second exceeds a related QPS limit, throttling is triggered. As a result, your services may be affected. We recommend that you take note of the limits when you call this operation.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description

Parameter	Type	Required	Example	Description
Action	String	Yes	ListSharedTargets	The operation that you want to perform. Set the value to ListSharedTargets .
ResourceOwner	String	Yes	Self	<p>The owner of the resource shares. Valid values:</p> <ul style="list-style-type: none"> • Self: your account. If you set the value to Self, the shared targets that are associated with your resource shares are queried. • OtherAccounts: another account. If you set the value to OtherAccounts, the resource shares with which your account is associated are queried.
ResourceType	String	No	VSwitch	<p>The type of the shared resources. For more information about the types of resources that can be shared, see Alibaba Cloud services that support Resource Sharing.</p>
ResourceId	String	No	vsw-bp1upw03qyz8n7us9***	The ID of the shared resource.
MaxResults	Integer	No	20	<p>The maximum number of entries to return for a single request. Valid values: 1 to 100. Default value: 20.</p>
NextToken	String	No	TGlzdFJlc291cm**	The token that is used to initiate the next request. If the response of the current request is truncated, you can use the token to initiate another request and obtain the remaining records.
RegionId	String	Yes	cn-hangzhou	<p>The region ID. For more information about regions where the Resource Sharing service is available, see DescribeRegions.</p>

Parameter	Type	Required	Example	Description
ResourceShareIds.N	String	No	rs-6GRmdD3X****	<p>The ID of the resource share.</p> <p>Valid values of N: 1 to 5. This indicates that a maximum of five resource shares can be specified at a time.</p>
Targets.N	String	No	114240524784*** *	<p>The shared target. You can set this parameter to one of the following items:</p> <ul style="list-style-type: none"> • ID of a resource directory: The resource is shared with all members in a resource directory. For more information about how to obtain the ID of a resource directory, see View the basic information of a resource directory. • ID of a folder: The resource is shared with all members in a folder in a resource directory. For more information about how to obtain the ID of a folder, see View the basic information of a folder. • ID of a member: The resource is shared with a specific member in a resource directory. For more information about how to obtain the ID of a member, see View the detailed information of a member. <p>Valid values of N: 1 to 5. This indicates that a maximum of five shared targets can be specified at a time.</p>

For more information about common request parameters, see [Common parameters](#).

Response parameters

Parameter	Type	Example	Description
NextToken	String	TGlzdFJlc291cm****	The token that is used to initiate the next request. If the response of the current request is truncated, you can use the token to initiate another request and obtain the remaining records.

Parameter	Type	Example	Description
RequestId	String	04677DCA-7C33-464B-8811-1B1DA3C3D197	The ID of the request.
SharedTargets	Array of SharedTarget		The information of the shared targets.
TargetId	String	114240524784****	The ID of the shared target.
UpdateTime	String	2020-12-07T09:16:59.905Z	The time when the association of the shared target was updated.
CreateTime	String	2020-12-07T09:16:59.905Z	The time when the shared target was associated with the resource share.
ResourceShareId	String	rs-6GRmdD3X****	The ID of the resource share.

Examples

Sample requests

```
https://resourcesharing.aliyuncs.com/?Action=ListSharedTargets  
&RegionId=cn-hangzhou  
&ResourceOwner=Self  
&<Common request parameters>
```

Sample success responses

XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<?xml version="1.0" encoding="UTF-8" ?>
<ListSharedTargetsResponse>
    <RequestId>445ECACB-1082-4008-ABD4-8B259EFF4855</RequestId>
    <SharedTargets>
        <ResourceShareId>rs-6GRmdD3X****</ResourceShareId>
        <CreateTime>2020-12-07T09:16:59.905Z</CreateTime>
        <UpdateTime>2020-12-07T09:16:59.905Z</UpdateTime>
        <TargetId>114240524784****</TargetId>
    </SharedTargets>
    <SharedTargets>
        <ResourceShareId>rs-6GRmdD3X****</ResourceShareId>
        <CreateTime>2020-12-07T09:15:26.879Z</CreateTime>
        <UpdateTime>2020-12-07T09:15:26.879Z</UpdateTime>
        <TargetId>172050525300****</TargetId>
    </SharedTargets>
</ListSharedTargetsResponse>
```

JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
    "RequestId" : "445ECACB-1082-4008-ABD4-8B259EFF4855",
    "SharedTargets" : [ {
        "ResourceShareId" : "rs-6GRmdD3X****",
        "CreateTime" : "2020-12-07T09:16:59.905Z",
        "UpdateTime" : "2020-12-07T09:16:59.905Z",
        "TargetId" : "114240524784****"
    }, {
        "ResourceShareId" : "rs-6GRmdD3X****",
        "CreateTime" : "2020-12-07T09:15:26.879Z",
        "UpdateTime" : "2020-12-07T09:15:26.879Z",
        "TargetId" : "172050525300****"
    } ]
}
```

Error codes

HTTP status code	Error code	Error message	Description
400	MissingParameter.ResourceOwner	You must specify ResourceOwner.	The error message returned because the ResourceOwner parameter is not specified.
400	InvalidParameter.ResourceOwner	The ResourceOwner is invalid.	The error message returned because the value of the ResourceOwner parameter is invalid.

HTTP status code	Error code	Error message	Description
400	InvalidParameter.ResourceType	The ResourceType is invalid.	The error message returned because the value of the ResourceType parameter is invalid.
400	InvalidParameter.MaxResults	The MaxResults is invalid.	The error message returned because the value of the MaxResults parameter is invalid.
400	InvalidParameter.NextToken	The NextToken is invalid.	The error message returned because the value of the NextToken parameter is invalid.
400	InvalidParameter.NextToken.Length	The maximum length of NextToken exceeds 256 characters.	The error message returned because the length of the value specified for the NextToken parameter has exceeded the upper limit. Specify a value that is up to 256 characters in length.
400	InvalidParameter.ResourceShareIds	The ResourceShareIds is invalid.	The error message returned because the value of the ResourceShareIds.N parameter is invalid.
400	InvalidParameter.ResourceShareIds.Duplicate	The ResourceShareIds contains duplicate values.	The error message returned because duplicate resource share IDs are specified for the ResourceShareIds.N parameter.
400	InvalidParameter.ResourceShareIds.Length	The maximum length of ResourceShareIds exceeds 5 characters.	The error message returned because the number of resource share IDs specified by using the ResourceShareIds.N parameter has exceeded the upper limit. Specify a maximum of five resource share IDs.
400	InvalidParameter.Targets	The Targets is invalid.	The error message returned because the value of the Targets.N parameter is invalid.
400	InvalidParameter.Targets.Duplicate	The Targets contains duplicate values.	The error message returned because duplicate shared targets are specified.
400	InvalidParameter.Targets.Length	The maximum number of Targets exceeds 5.	The error message returned because the number of specified shared targets has exceeded the upper limit. Specify a maximum of five shared targets.

HTTP status code	Error code	Error message	Description
400	InvalidParameter.ResourceId	The ResourceId is invalid.	The error message returned because the value of the ResourceId parameter is invalid.
400	InvalidParameter	The specified parameter is invalid.	The error message returned because the value of a parameter is invalid.

For a list of error codes, visit the [API Error Center](#).

9.11. DescribeRegions

Queries regions where the Resource Sharing service is available.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	DescribeRegions	The operation that you want to perform. Set the value to DescribeRegions.
RegionId	String	Yes	cn-hangzhou	The region ID. Valid values: <ul style="list-style-type: none">• cn-hangzhou: China (Hangzhou)• cn-shanghai: China (Shanghai)• cn-beijing: China (Beijing)• cn-zhangjiakou: China (Zhangjiakou)• ap-southeast-1: Singapore (Singapore)
AcceptLanguage	String	No	zh-CN	The supported natural language. Valid values: <ul style="list-style-type: none">• zh-CN: Chinese• en-US: English

For more information about common parameters, see [Common parameters](#).

Response parameters

Parameter	Type	Example	Description
Regions	Array of Region		The information of the regions.
LocalName	String	China (Hangzhou)	The region name.
RegionEndpoint	String	resourcesharing.cn-hangzhou.aliyuncs.com	The region endpoint.
RegionId	String	cn-hangzhou	The region ID.
RequestId	String	0D64A198-5842-4570-8E26-5E540CDC84CD	The ID of the request.

Examples

Sample requests

```
https://resourcesharing.aliyuncs.com/?Action=DescribeRegions  
&RegionId=cn-hangzhou  
&<Common request parameters>
```

Sample success responses

XML format

```
<DescribeRegionsResponse>
  <RequestId>0D64A198-5842-4570-8E26-5E540CDC84CD</RequestId>
  <Regions>
    <RegionId>cn-hangzhou</RegionId>
    <RegionEndpoint>resourcesharing.cn-hangzhou.aliyuncs.com</RegionEndpoint>
    <LocalName>China (Hangzhou)</LocalName>
  </Regions>
  <Regions>
    <RegionId>cn-shanghai</RegionId>
    <RegionEndpoint>resourcesharing.cn-shanghai.aliyuncs.com</RegionEndpoint>
    <LocalName>China (Shanghai)</LocalName>
  </Regions>
  <Regions>
    <RegionId>cn-beijing</RegionId>
    <RegionEndpoint>resourcesharing.cn-beijing.aliyuncs.com</RegionEndpoint>
    <LocalName>China (Beijing)</LocalName>
  </Regions>
  <Regions>
    <RegionId>cn-zhangjiakou</RegionId>
    <RegionEndpoint>resourcesharing.cn-zhangjiakou.aliyuncs.com</RegionEndpoint>
    <LocalName>China (Zhangjiakou)</LocalName>
  </Regions>
  <Regions>
    <RegionId>ap-southeast-1</RegionId>
    <RegionEndpoint>resourcesharing.ap-southeast-1.aliyuncs.com</RegionEndpoint>
    <LocalName>Singapore (Singapore)</LocalName>
  </Regions>
</DescribeRegionsResponse>
```

JSON format

```
{  
    "RequestId": "0D64A198-5842-4570-8E26-5E540CDC84CD",  
    "Regions": [  
        {  
            "RegionId": "cn-hangzhou",  
            "RegionEndpoint": "resourcessharing.cn-hangzhou.aliyuncs.com",  
            "LocalName": "China (Hangzhou)"  
        },  
        {  
            "RegionId": "cn-shanghai",  
            "RegionEndpoint": "resourcessharing.cn-shanghai.aliyuncs.com",  
            "LocalName": "China (Shanghai)"  
        },  
        {  
            "RegionId": "cn-beijing",  
            "RegionEndpoint": "resourcessharing.cn-beijing.aliyuncs.com",  
            "LocalName": "China (Beijing)"  
        },  
        {  
            "RegionId": "cn-zhangjiakou",  
            "RegionEndpoint": "resourcessharing.cn-zhangjiakou.aliyuncs.com",  
            "LocalName": "China (Zhangjiakou)"  
        },  
        {  
            "RegionId": "ap-southeast-1",  
            "RegionEndpoint": "resourcessharing.ap-southeast-1.aliyuncs.com",  
            "LocalName": "Singapore (Singapore)"  
        }  
    ]  
}
```

Error codes

For a list of error codes, visit the [API Error Center](#).

10. API Reference (Resource groups)

10.1. CreateResourceGroup

Creates a resource group.

 **Note** A maximum of 30 resource groups can be created within an Alibaba Cloud account.

In this example, a resource group named `my-project` is created.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	CreateResourceGroup	The operation that you want to perform. Set the value to CreateResourceGroup.
Name	String	Yes	my-project	The unique identifier of the resource group. The identifier must be 3 to 50 characters in length and can contain letters, digits, and hyphens (-). The identifier must start with a letter.
DisplayName	String	Yes	my-project	The display name of the resource group. The name must be 1 to 50 characters in length.

For more information about common request parameters, see [Common parameters](#).

Response parameters

Parameter	Type	Example	Description
RequestId	String	04F0F334-1335-436C-A1D7-6C044FE73368	The ID of the request.

Parameter	Type	Example	Description
ResourceGroup	Object		The information of the resource group.
DisplayName	String	my-project	The display name of the resource group.
Status	String	Creating	<p>The status of the resource group. Valid values:</p> <ul style="list-style-type: none"> • Creating: The resource group is being created. • OK: The resource group is created.
RegionStatuses	Array of RegionStatus		The status of the resource group in all regions.
RegionStatus			
Status	String	Creating	<p>The status of the resource group. Valid values:</p> <ul style="list-style-type: none"> • Creating: The resource group is being created. • OK: The resource group is created.
RegionId	String	cn-qingdao	The region ID.
AccountId	String	151266687691****	The ID of the Alibaba Cloud account to which the resource group belongs.
Name	String	my-project	The unique identifier of the resource group.
CreateDate	String	2021-06-05T14:39:13+08:00	The time when the resource group was created. The time is displayed in UTC.
Id	String	rg-9gL0oK****	The ID of the resource group.

Examples

Sample requests

```
https://resourcemanager.aliyuncs.com/?Action=CreateResourceGroup
&Name=my-project
&DisplayName=my-project
&<Common request parameters>
```

Sample success responses

XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<?xml version="1.0" encoding="UTF-8" ?>
<CreateResourceGroupResponse>
<RequestId>04F0F334-1335-436C-A1D7-6C044FE73368</RequestId>
<ResourceGroup>
<Status>Creating</Status>
<RegionStatuses>
<RegionStatus>
<Status>Creating</Status>
<RegionId>ap-northeast-1</RegionId>
</RegionStatus>
<RegionStatus>
<Status>Creating</Status>
<RegionId>ap-south-1</RegionId>
</RegionStatus>
<RegionStatus>
<Status>Creating</Status>
<RegionId>ap-southeast-1</RegionId>
</RegionStatus>
<RegionStatus>
<Status>Creating</Status>
<RegionId>ap-southeast-2</RegionId>
</RegionStatus>
<RegionStatus>
<Status>Creating</Status>
<RegionId>ap-southeast-3</RegionId>
</RegionStatus>
<RegionStatus>
<Status>Creating</Status>
<RegionId>ap-southeast-5</RegionId>
</RegionStatus>
<RegionStatus>
<Status>Creating</Status>
<RegionId>cn-beijing</RegionId>
</RegionStatus>
<RegionStatus>
<Status>Creating</Status>
<RegionId>cn-chengdu</RegionId>
</RegionStatus>
<RegionStatus>
<Status>Creating</Status>
<RegionId>cn-guangzhou</RegionId>
</RegionStatus>
<RegionStatus>
<Status>Creating</Status>
<RegionId>cn-hangzhou</RegionId>
</RegionStatus>
<RegionStatus>
<Status>Creating</Status>
<RegionId>cn-hangzhou-cloudstone</RegionId>
```

```
</RegionStatus>
<RegionStatus>
<Status>Creating</Status>
<RegionId>cn-hangzhou-test-306</RegionId>
</RegionStatus>
<RegionStatus>
<Status>Creating</Status>
<RegionId>cn-heyuan</RegionId>
</RegionStatus>
<RegionStatus>
<Status>Creating</Status>
<RegionId>cn-hongkong</RegionId>
</RegionStatus>
<RegionStatus>
<Status>Creating</Status>
<RegionId>cn-huhehaote</RegionId>
</RegionStatus>
<RegionStatus>
<Status>Creating</Status>
<RegionId>cn-north-2-gov-1</RegionId>
</RegionStatus>
<RegionStatus>
<Status>Creating</Status>
<RegionId>cn-qingdao</RegionId>
</RegionStatus>
<RegionStatus>
<Status>Creating</Status>
<RegionId>cn-shanghai</RegionId>
</RegionStatus>
<RegionStatus>
<Status>Creating</Status>
<RegionId>cn-shanghai-finance-1</RegionId>
</RegionStatus>
<RegionStatus>
<Status>Creating</Status>
<RegionId>cn-shenzhen</RegionId>
</RegionStatus>
<RegionStatus>
<Status>Creating</Status>
<RegionId>cn-shenzhen-finance-1</RegionId>
</RegionStatus>
<RegionStatus>
<Status>Creating</Status>
<RegionId>cn-wulanchabu</RegionId>
</RegionStatus>
<RegionStatus>
<Status>Creating</Status>
<RegionId>cn-zhangjiakou</RegionId>
</RegionStatus>
<RegionStatus>
<Status>Creating</Status>
<RegionId>eu-central-1</RegionId>
</RegionStatus>
<RegionStatus>
```

```
<Status>Creating</Status>
<RegionId>eu-west-1</RegionId>
</RegionStatus>
<RegionStatus>
<Status>Creating</Status>
<RegionId>me-east-1</RegionId>
</RegionStatus>
<RegionStatus>
<Status>Creating</Status>
<RegionId>rus-west-1</RegionId>
</RegionStatus>
<RegionStatus>
<Status>Creating</Status>
<RegionId>us-east-1</RegionId>
</RegionStatus>
<RegionStatus>
<Status>Creating</Status>
<RegionId>us-west-1</RegionId>
</RegionStatus>
</RegionStatuses>
<AccountId>151266687691****</AccountId>
<DisplayName>my-project</DisplayName>
<Id>rg-9gLOoK****</Id>
<CreateDate>2021-06-05T14:39:13+08:00</CreateDate>
<Name>my-project</Name>
</ResourceGroup>
</CreateResourceGroupResponse>
```

JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId" : "04F0F334-1335-436C-A1D7-6C044FE73368",
  "ResourceGroup" : {
    "Status" : "Creating",
    "RegionStatuses" : [
      {
        "RegionStatus" : [ {
          "Status" : "Creating",
          "RegionId" : "ap-northeast-1"
        }, {
          "Status" : "Creating",
          "RegionId" : "ap-south-1"
        }, {
          "Status" : "Creating",
          "RegionId" : "ap-southeast-1"
        }, {
          "Status" : "Creating",
          "RegionId" : "ap-southeast-2"
        }, {
          "Status" : "Creating",
          "RegionId" : "ap-southeast-3"
        }, {
          "Status" : "Creating"
        }
      ]
    ]
  }
}
```

```
    "Status" : "Creating",
    "RegionId" : "ap-southeast-5"
}, {
    "Status" : "Creating",
    "RegionId" : "cn-beijing"
}, {
    "Status" : "Creating",
    "RegionId" : "cn-chengdu"
}, {
    "Status" : "Creating",
    "RegionId" : "cn-guangzhou"
}, {
    "Status" : "Creating",
    "RegionId" : "cn-hangzhou"
}, {
    "Status" : "Creating",
    "RegionId" : "cn-hangzhou-cloudstone"
}, {
    "Status" : "Creating",
    "RegionId" : "cn-hangzhou-test-306"
}, {
    "Status" : "Creating",
    "RegionId" : "cn-heyuan"
}, {
    "Status" : "Creating",
    "RegionId" : "cn-hongkong"
}, {
    "Status" : "Creating",
    "RegionId" : "cn-huhehaote"
}, {
    "Status" : "Creating",
    "RegionId" : "cn-north-2-gov-1"
}, {
    "Status" : "Creating",
    "RegionId" : "cn-qingdao"
}, {
    "Status" : "Creating",
    "RegionId" : "cn-shanghai"
}, {
    "Status" : "Creating",
    "RegionId" : "cn-shanghai-finance-1"
}, {
    "Status" : "Creating",
    "RegionId" : "cn-shenzhen"
}, {
    "Status" : "Creating",
    "RegionId" : "cn-shenzhen-finance-1"
}, {
    "Status" : "Creating",
    "RegionId" : "cn-wulanchabu"
}, {
    "Status" : "Creating",
    "RegionId" : "cn-zhangjiakou"
}, {
    "Status" : "Creating",
```

```
        "RegionId" : "eu-central-1"
    }, {
        "Status" : "Creating",
        "RegionId" : "eu-west-1"
    }, {
        "Status" : "Creating",
        "RegionId" : "me-east-1"
    }, {
        "Status" : "Creating",
        "RegionId" : "rus-west-1"
    }, {
        "Status" : "Creating",
        "RegionId" : "us-east-1"
    }, {
        "Status" : "Creating",
        "RegionId" : "us-west-1"
    }
},
{
    "AccountId" : "151266687691****",
    "DisplayName" : "my-project",
    "Id" : "rg-9gL0oK****",
    "CreateDate" : "2021-06-05T14:39:13+08:00",
    "Name" : "my-project"
}
}
```

Error codes

HTTP status code	Error code	Error message	Description
400	InvalidParameter.Name.InvalidChars	The Name is invalid.	The error message returned because the value of the Name parameter is invalid.
400	InvalidParameter.Name.Length	The maximum length of Name is exceeded.	The error message returned because the length of the value specified for the Name parameter has exceeded the upper limit.
400	InvalidParameter.DisplayName.Length	The maximum length of DisplayName is exceeded.	The error message returned because the length of the value specified for the DisplayName parameter has exceeded the upper limit.
400	MissingParameter.DisplayName	You must specify DisplayName.	The error message returned because the DisplayName parameter is not specified.

HTTP status code	Error code	Error message	Description
400	InvalidParameter.DisplayName	The DisplayName is invalid.	The error message returned because the value of the DisplayName parameter is invalid.
409	LimitExceeded.ResourceGroup	The count of resource groups beyond the current limits.	The error message returned because the number of resource groups has exceeded the upper limit.

For a list of error codes, visit the [API Error Center](#).

10.2. ListResourceGroups

Queries resource groups.

Usage notes

You can call this API operation to query all resource groups within the current account. You can also call this API operation to query a specific resource group based on the status, ID, identifier, or display name of the resource group.

This topic provides an example on how to call the API operation to query the basic information about the resource groups `rg-1hSBH2****` and `rg-9gLOoK***` within the current account.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	ListResourceGroups	The operation that you want to perform. Set the value to ListResourceGroups .
Status	String	No	OK	The status of the resource group. This parameter specifies a filter condition for the query. Valid values: <ul style="list-style-type: none"> Creating: The resource group is being created. OK: The resource group is created. PendingDelete: The resource group is waiting to be deleted.

Parameter	Type	Required	Example	Description
PageNumber	Integer	No	1	The number of the page to return. Pages start from page 1. Default value: 1.
PageSize	Integer	No	10	The number of entries to return on each page. Valid values: 1 to 100. Default value: 10.
ResourceGroupId	String	No	rg-9gL0oK***	<p>The ID of the resource group. This parameter specifies a filter condition for the query.</p> <p>The ID can be a maximum of 18 characters in length and must start with <code>rg-</code>.</p> <div style="background-color: #e0f2ff; padding: 10px;"> <p>? Note This parameter is incorporated into the <code>ResourceGroupIds</code> parameter. If you configure both the <code>ResourceGroupId</code> and <code>ResourceGroupIds</code> parameters, the value of the <code>ResourceGroupIds</code> parameter prevails.</p> </div>
DisplayName	String	No	my-project	<p>The display name of the resource group. This parameter specifies a filter condition for the query. Fuzzy match is supported.</p> <p>The display name can be a maximum of 50 characters in length.</p>
Name	String	No	my-project	<p>The identifier of the resource group. This parameter specifies a filter condition for the query. Fuzzy match is supported.</p> <p>The identifier can be a maximum of 50 characters in length and can contain letters, digits, and hyphens (-).</p>

Parameter	Type	Required	Example	Description
Tag	Array	No		The tag. This parameter specifies a filter condition for the query.
Key	String	No	k1	The tag key.
Value	String	No	v1	The tag value.
IncludeTags	Boolean	No	false	<p>Specifies whether to return the information of tags. Valid values:</p> <ul style="list-style-type: none"> • false (default value) • true <div style="background-color: #e0f2ff; padding: 10px;"> ? Note If you configure the Tag parameter, the system returns the information of tags regardless of the setting of the <code>IncludeTags</code> parameter. </div>
ResourceGroupIds	Array of String	No	{"rg-1hSBH2****", "rg-9gLOoK****"}	<p>The IDs of the resource groups. This parameter specifies a filter condition for the query.</p> <p>You can specify a maximum of 100 resource group IDs.</p> <div style="background-color: #e0f2ff; padding: 10px;"> ? Note If you configure both the <code>ResourceId</code> and <code>ResourceGroupIds</code> parameters, the value of the <code>ResourceGroupIds</code> parameter prevails. </div>

For more information about common request parameters, see [Common parameters](#).

Response parameters

Parameter	Type	Example	Description
TotalCount	Integer	2	The total number of entries returned.

Parameter	Type	Example	Description
RequestId	String	4B450CA1-36E8-4AA2-8461-86B42BF4CC4E	The ID of the request.
PageSize	Integer	10	The number of entries returned per page.
PageNumber	Integer	1	The page number of the returned page.
ResourceGroups	Array of ResourceGroup		The information of the resource groups.
ResourceGroup			
DisplayName	String	my-project	The display name of the resource group.
Status	String	OK	<p>The status of the resource group. Valid values:</p> <ul style="list-style-type: none"> Creating: The resource group is being created. OK: The resource group is created. PendingDelete: The resource group is waiting to be deleted.
AccountId	String	123456789***	The ID of the Alibaba Cloud account to which the resource group belongs.
Name	String	my-project	The identifier of the resource group.
CreateDate	String	2015-01-23T12:33:18Z	The time when the resource group was created. The time is displayed in UTC.
Id	String	rg-9gLOoK***	The ID of the resource group.
Tags	Array of Tag		The tags that are added to the resource group.
Tag			
TagKey	String	k1	The tag key.
TagValue	String	v1	The tag value.

Examples

Sample requests

```
https://resourcemanager.aliyuncs.com/?Action=ListResourceGroups  
&IncludeTags=true  
&ResourceGroupIds.1=rg-1hSBH2****  
&ResourceGroupIds.2=rg-9gLOoK****  
&<Common request parameters>
```

Sample success responses

XML format

```
HTTP/1.1 200 OK  
Content-Type:application/xml  
<ListResourceGroupsResponse>  
    <RequestId>4B450CA1-36E8-4AA2-8461-86B42BF4CC4E</RequestId>  
    <PageNumber>1</PageNumber>  
    <PageSize>10</PageSize>  
    <TotalCount>2</TotalCount>  
    <ResourceGroups>  
        <ResourceGroup>  
            <Id>rg-1hSBH2****</Id>  
            <AccountId>123456789****</AccountId>  
            <Name>default</Name>  
            <DisplayName>Default resource group</DisplayName>  
            <Status>OK</Status>  
            <CreateDate>2015-01-23T12:33:18Z</CreateDate>  
            <Tags>  
                <Tag>  
                    <TagKey>k1</TagKey>  
                    <TagValue>v1</TagValue>  
                </Tag>  
            </Tags>  
        </ResourceGroup>  
        <ResourceGroup>  
            <Id>rg-9gLOoK****</Id>  
            <AccountId>123456789****</AccountId>  
            <Name>my-project</Name>  
            <DisplayName>my-project</DisplayName>  
            <Status>OK</Status>  
            <CreateDate>2015-01-23T12:33:18Z</CreateDate>  
            <Tags>  
                <Tag>  
                    <TagKey>k2</TagKey>  
                    <TagValue>v2</TagValue>  
                </Tag>  
            </Tags>  
        </ResourceGroup>  
    </ResourceGroups>  
</ListResourceGroupsResponse>
```

JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId" : "4B450CA1-36E8-4AA2-8461-86B42BF4CC4E",
  "PageNumber" : 1,
  "PageSize" : 10,
  "TotalCount" : 2,
  "ResourceGroups" : [
    "ResourceGroup" : [ {
      "Id" : "rg-1hSBH2*****",
      "AccountId" : "123456789*****",
      "Name" : "default",
      "DisplayName" : "Default resource group",
      "Status" : "OK",
      "CreateDate" : "2015-01-23T12:33:18Z",
      "Tags" : [
        "Tag" : [ {
          "TagKey" : "k1",
          "TagValue" : "v1"
        } ]
      }
    },
    {
      "Id" : "rg-9gLOoK*****",
      "AccountId" : "123456789*****",
      "Name" : "my-project",
      "DisplayName" : "my-project",
      "Status" : "OK",
      "CreateDate" : "2015-01-23T12:33:18Z",
      "Tags" : [
        "Tag" : [ {
          "TagKey" : "k2",
          "TagValue" : "v2"
        } ]
      }
    }
  ]
}
```

Error codes

For a list of error codes, visit the [API Error Center](#).

10.3. GetResourceGroup

Queries the information of a resource group.

Usage notes

In this example, the information of the resource group whose ID is `rg-9gLOoK*****` is queried.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	GetResourceGroup	The operation that you want to perform. Set the value to GetResourceGroup .
ResourceGroupId	String	Yes	rg-9gLOoK****	The ID of the resource group. You can call the ListResourceGroups operation to obtain the ID of the resource group.
IncludeTags	Boolean	No	true	Specifies whether to return the information of tags. Valid values: <ul style="list-style-type: none">• false (default value)• true

For more information about common request parameters, see [Common parameters](#).

Response parameters

Parameter	Type	Example	Description
RequestId	String	2D69A58F-345C-4FDE-88E4-BF5189484043	The ID of the request.
ResourceGroup	Object		The information of the resource group.
DisplayName	String	my-project	The display name of the resource group.
Status	String	OK	The status of the resource group. Valid values: <ul style="list-style-type: none">• Creating: The resource group is being created.• OK: The resource group is created.• PendingDelete: The resource group is waiting to be deleted.

Parameter	Type	Example	Description
RegionStatuses	Array of RegionStatus		The status of the resource group in all regions.
RegionStatus			
Status	String	OK	<p>The status of the resource group. Valid values:</p> <ul style="list-style-type: none"> • Creating: The resource group is being created. • OK: The resource group is created. • PendingDelete: The resource group is waiting to be deleted. • Deleting: The resource group is being deleted.
RegionId	String	cn-qingdao	The region ID.
AccountId	String	123456789***	The ID of the Alibaba Cloud account to which the resource group belongs.
Name	String	my-project	The identifier of the resource group.
CreateDate	String	2015-01-23T12:33:18Z	The time when the resource group was created. The time is displayed in UTC.
Id	String	rg-9gL0oK***	The ID of the resource group.
Tags	Array of Tag		The tags that are added to the resource group.
Tag			
TagKey	String	k1	The tag key.
TagValue	String	v1	The tag value.

Examples

Sample requests

```
https://resourcemanager.aliyuncs.com/?Action=GetResourceGroup  
&ResourceGroupId=rg-9gLoOoK****  
&IncludeTags=true  
&<Common request parameters>
```

Sample success responses

XML format

```
HTTP/1.1 200 OK  
Content-Type:application/xml  
<GetResourceGroupResponse>  
    <RequestId>2D69A58F-345C-4FDE-88E4-BF5189484043</RequestId>  
    <ResourceGroup>  
        <Id>rg-9gLoOoK****</Id>  
        <AccountId>123456789****</AccountId>  
        <Name>my-project</Name>  
        <DisplayName>my-project</DisplayName>  
        <Status>OK</Status>  
        <RegionStatuses>  
            <RegionStatus>  
                <RegionId>cn-hangzhou</RegionId>  
                <Status>OK</Status>  
            </RegionStatus>  
            <RegionStatus>  
                <RegionId>cn-qingdao</RegionId>  
                <Status>OK</Status>  
            </RegionStatus>  
        </RegionStatuses>  
        <CreateDate>2015-01-23T12:33:18Z</CreateDate>  
        <Tags>  
            <Tag>  
                <TagKey>k1</TagKey>  
                <TagValue>v1</TagValue>  
            </Tag>  
        </Tags>  
    </ResourceGroup>  
</GetResourceGroupResponse>
```

JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId" : "2D69A58F-345C-4FDE-88E4-BF5189484043",
  "ResourceGroup" : {
    "Id" : "rg-9gLooK****",
    "AccountId" : "123456789****",
    "Name" : "my-project",
    "DisplayName" : "my-project",
    "Status" : "OK",
    "RegionStatuses" : {
      "RegionStatus" : [ {
        "RegionId" : "cn-hangzhou",
        "Status" : "OK"
      }, {
        "RegionId" : "cn-qingdao",
        "Status" : "OK"
      } ]
    },
    "CreateDate" : "2015-01-23T12:33:18Z",
    "Tags" : {
      "Tag" : [ {
        "TagKey" : "k1",
        "TagValue" : "v1"
      } ]
    }
  }
}
```

Error codes

HTTP status code	Error code	Error message	Description
400	InvalidParameter.ResourceGroupId	The ResourceGroupId is invalid.	The error message returned because the ID of the resource group is invalid.
403	NoPermission	You are not authorized to perform the operation.	The error message returned because you are not authorized to perform the operation.
404	EntityNotExists.ResourceGroup	The specified resource group does not exist. You must first create a resource group.	The error message returned because the resource group does not exist. Create such a resource group first.

For a list of error codes, visit the [API Error Center](#).

10.4. DeleteResourceGroup

Deletes a resource group.

 **Note** Before you delete a resource group, you must delete all the resources in it.

In this example, the resource group whose ID is `rg-9gL0oK****` is deleted.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	DeleteResourceGroup	The operation that you want to perform. Set the value to <code>DeleteResourceGroup</code> .
ResourceGroupId	String	Yes	rg-9gL0oK****	The ID of the resource group. You can call the ListResourceGroups operation to obtain the ID.

For more information about common request parameters, see [Common parameters](#).

Response parameters

Parameter	Type	Example	Description
RequestId	String	1C488B66-B819-4D14-8711-C4EAAA13AC01	The ID of the request.
ResourceGroup	Object		The information of the resource group.
DisplayName	String	my-project	The display name of the resource group.
Status	String	PendingDelete	The status of the resource group. Valid values: <ul style="list-style-type: none">• Creating: The resource group is being created.• OK: The resource group is created.• PendingDelete: The resource group is waiting to be deleted.

Parameter	Type	Example	Description
RegionStatuses	Array of RegionStatus		The status of the resource group in all regions.
RegionStatus			
Status	String	PendingDelete	<p>The status of the resource group. Valid values:</p> <ul style="list-style-type: none"> Creating: The resource group is being created. OK: The resource group is created. PendingDelete: The resource group is waiting to be deleted. Deleting: The resource group is being deleted.
RegionId	String	cn-qingdao	The region ID.
AccountId	String	123456789***	The ID of the Alibaba Cloud account to which the resource group belongs.
Name	String	my-project	The unique identifier of the resource group.
CreateDate	String	2015-01-23T12:33:18Z	The time when the resource group was created. The time is displayed in UTC.
Id	String	rg-9gL0oK***	The ID of the resource group.

Examples

Sample requests

```
https://resourcemanager.aliyuncs.com/?Action=DeleteResourceGroup
&ResourceGroupId=rg-9gL0oK***
&<Common request parameters>
```

Sample success responses

XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<?xml version="1.0" encoding="UTF-8" ?>
<DeleteResourceGroupResponse>
<RequestId>1C488B66-B819-4D14-8711-C4EAAA13AC01</RequestId>
<ResourceGroup>
<Id>rg-9gLOoK****</Id>
<AccountId>123456789****</AccountId>
<Name>my-project</Name>
<DisplayName>my-project</DisplayName>
<Status>PendingDelete</Status>
<RegionStatuses>
<RegionStatus>
<RegionId>cn-hangzhou</RegionId>
<Status>PendingDelete</Status>
</RegionStatus>
<RegionStatus>
<RegionId>cn-qingdao</RegionId>
<Status>PendingDelete</Status>
</RegionStatus>
</RegionStatuses>
<CreateDate>2015-01-23T12:33:18Z</CreateDate>
</ResourceGroup>
</DeleteResourceGroupResponse>
```

JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId" : "1C488B66-B819-4D14-8711-C4EAAA13AC01",
  "ResourceGroup" : {
    "Id" : "rg-9gLOoK****",
    "AccountId" : "123456789****",
    "Name" : "my-project",
    "DisplayName" : "my-project",
    "Status" : "PendingDelete",
    "RegionStatuses" : {
      "RegionStatus" : [ {
        "RegionId" : "cn-hangzhou",
        "Status" : "PendingDelete"
      }, {
        "RegionId" : "cn-qingdao",
        "Status" : "PendingDelete"
      } ]
    },
    "CreateDate" : "2015-01-23T12:33:18Z"
  }
}
```

Error codes

HTTP status code	Error code	Error message	Description
400	InvalidParameter.ResourceGroupId	The ResourceGroupId is invalid.	The error message returned because the ID of the resource group is invalid.
404	EntityNotExists.ResourceGroup	The specified resource group does not exist. You must first create a resource group.	The error message returned because the resource group does not exist. Create the resource group first.
409	DeleteConflict.ResourceGroup.Resource	Failed to delete the resource group because one or more cloud resources exist in the resource group. Try again later after you release the cloud resources.	The error message returned because the resource group contains cloud resources. Release the resources first.

For a list of error codes, visit the [API Error Center](#).

10.5. UpdateResourceGroup

Updates the basic information of a resource group.

In this example, the display name of the resource group `rg-9gL0oK****` is changed to `project`.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	UpdateResourceGroup	The operation that you want to perform. Set the value to <code>UpdateResourceGroup</code> .
ResourceGroupId	String	Yes	rg-9gL0oK****	The ID of the resource group. You can call the ListResourceGroups operation to obtain the ID.
NewDisplayName	String	Yes	project	The display name of the resource group. The name must be 1 to 50 characters in length.

For more information about common request parameters, see [Common parameters](#).

Response parameters

Parameter	Type	Example	Description
RequestId	String	04F0F334-1335-436C-A1D7-6C044FE73368	The ID of the request.
ResourceGroup	Object		The information of the resource group.
DisplayName	String	project	The display name of the resource group.
AccountId	String	123456789***	The ID of the Alibaba Cloud account to which the resource group belongs.
Name	String	my-project	The unique identifier of the resource group.
CreateDate	String	2015-01-23T12:33:18+08:00	The time when the resource group was created. The time is displayed in UTC.
Id	String	rg-9gL0oK****	The ID of the resource group.

Examples

Sample requests

```
https://resourcemanager.aliyuncs.com/?Action=UpdateResourceGroup
&NewDisplayName=project
&ResourceGroupId=rg-9gL0oK****
&<Common request parameters>
```

Sample success responses

XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<?xml version="1.0" encoding="UTF-8" ?>
<UpdateResourceGroupResponse>
<RequestId>04F0F334-1335-436C-A1D7-6C044FE73368</RequestId>
<ResourceGroup>
<Id>rg-9gLOoK****</Id>
<AccountId>123456789****</AccountId>
<Name>my-project</Name>
<DisplayName>project</DisplayName>
<CreateDate>2015-01-23T12:33:18+08:00</CreateDate>
</ResourceGroup>
</UpdateResourceGroupResponse>
```

JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId" : "04F0F334-1335-436C-A1D7-6C044FE73368",
  "ResourceGroup" : {
    "Id" : "rg-9gLOoK****",
    "AccountId" : "123456789****",
    "Name" : "my-project",
    "DisplayName" : "project",
    "CreateDate" : "2015-01-23T12:33:18+08:00"
  }
}
```

Error codes

HTTP status code	Error code	Error message	Description
400	InvalidParameter.ResourceGroupId	The ResourceGroupId is invalid.	The error message returned because the ID of the resource group is invalid.
400	InvalidParameter.DisplayName	The DisplayName is invalid.	The error message returned because the value of the DisplayName parameter is invalid.
400	MissingParameter.DisplayName	You must specify DisplayName.	The error message returned because the DisplayName parameter is not specified.

HTTP status code	Error code	Error message	Description
400	InvalidParameter.DisplayName.Length	The maximum length of DisplayName is exceeded.	The error message returned because the length of the value specified for the DisplayName parameter has exceeded the upper limit.
404	EntityNotExists.ResourceGroup	The specified resource group does not exist. You must first create a resource group.	The error message returned because the resource group does not exist. Create the resource group first.

For a list of error codes, visit the [API Error Center](#).

10.6. CreatePolicy

Creates a policy.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	CreatePolicy	The operation that you want to perform. Set the value to CreatePolicy.
PolicyDocument	String	Yes	{ "Statement": [{ "Action": ["oss:*"], "Effect": "Allow", "Resource": ["acs:oss:*,*,*"] }, { "Version": "1" }] }	The document of the policy. The document must be 1 to 2,048 characters in length.
PolicyName	String	Yes	OSS-Administrator	The name of the policy. The name must be 1 to 128 characters in length and can contain letters, digits, and hyphens (-).
Description	String	No	OSS administrator	The description of the policy. The description must be 1 to 1,024 characters in length.

Response parameters

Parameter	Type	Example	Description
Policy	Struct		The information of the policy.
CreateDate	String	2015-01-23T12:33:18Z	The time when the policy was created.
DefaultVersion	String	v1	The version number of the policy. Default value: v1.
Description	String	OSS administrator	The description of the policy.
PolicyName	String	OSS-Administrator	The name of the policy.
PolicyType	String	Custom	The type of the policy. Valid values: • Custom: custom policy • System: system policy
RequestId	String	9B34724D-54B0-4A51-B34D-4512372FE1BE	The ID of the request.

Examples

Sample requests

```
https://resourcemanager.aliyuncs.com/?Action=CreatePolicy
&PolicyDocument={ "Statement": [ { "Action": ["oss:*"], "Effect": "Allow", "Resource": ["acs:oss:*:*"] } ], "Version": "1" }
&PolicyName=OSS-Administrator
&<Common request parameters>
```

Sample success responses

XML format

```
<CreatePolicyResponse>
  <RequestId>9B34724D-54B0-4A51-B34D-4512372FE1BE</RequestId>
  <Policy>
    <PolicyName>OSS-Administrator</PolicyName>
    <PolicyType>Custom</PolicyType>
    <Description>OSS administrator</Description>
    <DefaultVersion>v1</DefaultVersion>
    <CreateDate>2015-01-23T12:33:18Z</CreateDate>
  </Policy>
</CreatePolicyResponse>
```

JSON format

```
{  
    "RequestId": "9B34724D-54B0-4A51-B34D-4512372FE1BE",  
    "Policy": {  
        "PolicyName": "OSS-Administrator",  
        "PolicyType": "Custom",  
        "Description": "OSS administrator",  
        "DefaultVersion": "v1",  
        "CreateDate": "2015-01-23T12:33:18Z"  
    }  
}
```

Error codes

HttpCode	Error code	Error message	Description
400	InvalidParameter.PolicyName.InvalidChars	The policy name contains invalid characters. It must only contain upper or lower case letters, numbers, and dash (-).	The error message returned because the policy name contains invalid characters. The policy name can contain only letters, digits, and hyphens (-).
400	InvalidParameter.PolicyName.Length	The length of the policy name is invalid. It must be 1 to 128 characters in length.	The error message returned because the length of the policy name is invalid. The policy name must be 1 to 128 characters in length.
400	InvalidParameter.PolicyDocument.Length	The maximum length of the policy document is exceeded. It must not exceed 2048 characters.	The error message returned because the length of the policy document has exceeded the upper limit. The policy document must be 1 to 2,048 characters in length.
400	InvalidParameter.Description.Length	The maximum length of the description is exceeded. It must not exceed 1024 characters.	The error message returned because the length of the policy description has exceeded the upper limit. The policy description must be 1 to 1,024 characters in length.
409	MalformedPolicyDocument	The policy format is invalid.	The error message returned because the policy format is invalid.
409	EntityAlreadyExists.Policy	The policy already exists.	The error message returned because the policy already exists.
409	LimitExceeded.Policy	The maximum number of policies is exceeded.	The error message returned because the number of policies has exceeded the upper limit.

For a list of error codes, visit the [API Error Center](#).

10.7. ListPolicies

Queries policies.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	ListPolicies	The operation that you want to perform. Set the value to ListPolicies.
PolicyType	String	No	Custom	The type of the policy. If you do not specify this parameter, the system lists all types of policies. Valid values: <ul style="list-style-type: none">• Custom: custom policy• System: system policy
PageNumber	Integer	No	1	The number of the page to return. Pages start from page 1. Default value: 1.
PageSize	Integer	No	10	The number of entries to return on each page. Valid values: 1 to 100. Default value: 10.
Language	String	No	zh-CN	The language that is used to return the description of the system policy. Valid values: <ul style="list-style-type: none">• en: English• zh-CN: Chinese• ja: Japanese

Response parameters

Parameter	Type	Example	Description
-----------	------	---------	-------------

Parameter	Type	Example	Description
PageNumber	Integer	1	The page number of the returned page.
PageSize	Integer	10	The number of entries returned per page.
Policies	Array		The information of the policies.
Policy			
AttachmentCount	Integer	1	The number of times the policy is referenced.
CreateDate	String	2015-01-23T12:33:18Z	The time when the policy was created.
DefaultVersion	String	v1	The default version of the policy.
Description	String	OSS administrator	The description of the policy.
PolicyName	String	OSS-Administrator	The name of the policy.
PolicyType	String	Custom	The type of the policy. Valid values: • Custom: custom policy • System: system policy
UpdateDate	String	2016-02-11T18:39:12Z	The time when the policy was updated.
RequestId	String	7B8A4E7D-6CFF-471D-84DF-195A7A241ECB	The ID of the request.
TotalCount	Integer	2	The total number of returned entries.

Examples

Sample requests

```
https://resourcemanager.aliyuncs.com/?Action=ListPolicies
&<Common request parameters>
```

Sample success responses

XML format

```
<ListPoliciesResponse>
  <RequestId>7B8A4E7D-6CFF-471D-84DF-195A7A241ECB</RequestId>
  <PageNumber>1</PageNumber>
  <PageSize>10</PageSize>
  <TotalCount>2</TotalCount>
  <Policies>
    <Policy>
      <PolicyName>OSS-Administrator</PolicyName>
      <PolicyType>Custom</PolicyType>
      <Description>OSS administrator</Description>
      <DefaultVersion>v1</DefaultVersion>
      <CreateDate>2015-01-23T12:33:18Z</CreateDate>
    </Policy>
    <Policy>
      <PolicyName>ReadOnlyAccess</PolicyName>
      <PolicyType>System</PolicyType>
      <Description>Read-only access</Description>
      <DefaultVersion>v1</DefaultVersion>
      <CreateDate>2015-02-11T18:39:12Z</CreateDate>
    </Policy>
  </Policies>
</ListPoliciesResponse>
```

JSON format

```
{
  "RequestId": "7B8A4E7D-6CFF-471D-84DF-195A7A241ECB",
  "PageNumber": 1,
  "PageSize": 10,
  "TotalCount": 2,
  "Policies": {
    "Policy": [
      {
        "PolicyName": "OSS-Administrator",
        "PolicyType": "Custom",
        "Description": "OSS administrator",
        "DefaultVersion": "v1",
        "CreateDate": "2015-01-23T12:33:18Z"
      },
      {
        "PolicyName": "ReadOnlyAccess",
        "PolicyType": "System",
        "Description": "Read-only access",
        "DefaultVersion": "v1",
        "CreateDate": "2015-02-11T18:39:12Z"
      }
    ]
  }
}
```

Error codes

For a list of error codes, visit the [API Error Center](#).

10.8. GetPolicy

Queries the information of a policy.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	GetPolicy	The operation that you want to perform. Set the value to GetPolicy.
PolicyName	String	Yes	OSS-Administrator	The name of the policy. The name must be 1 to 128 characters in length and can contain letters, digits, and hyphens (-).
PolicyType	String	Yes	Custom	The type of the policy. Valid values: <ul style="list-style-type: none">• Custom: custom policy• System: system policy
Language	String	No	zh-CN	The language that is used to return the description of the system policy. Valid values: <ul style="list-style-type: none">• en: English• zh-CN: Chinese• ja: Japanese

Response parameters

Parameter	Type	Example	Description
Policy	Struct		The information of the policy.
AttachmentCount	Integer	0	The number of times the policy is referenced.
CreateDate	String	2015-01-23T12:33:18Z	The time when the policy was created.

Parameter	Type	Example	Description
DefaultVersion	String	v1	The default version of the policy.
Description	String	OSS administrator	The description of the policy.
PolicyDocument	String	{ "Statement": [{ "Action": ["oss:*"], "Effect": "Allow", "Resource": ["acs:oss:*,*:*"]}], "Version": "1"}	The document of the policy.
PolicyName	String	OSS-Administrator	The name of the policy.
PolicyType	String	Custom	The type of the policy. Valid values: • Custom: custom policy • System: system policy
UpdateDate	String	2016-01-23T12:33:18Z	The time when the policy was updated.
RequestId	String	697852FB-50D7-44D9-9774-530C31EAC572	The ID of the request.

Examples

Sample requests

```
https://resourcemanager.aliyuncs.com/?Action=GetPolicy
&PolicyName=OSS-Administrator
&PolicyType=Custom
&<Common request parameters>
```

Sample success responses

XML format

```
<GetPolicyResponse>
<RequestId>697852FB-50D7-44D9-9774-530C31EAC572</RequestId>
<Policy>
    <PolicyName>OSS-Administrator</PolicyName>
    <PolicyType>Custom</PolicyType>
    <Description>OSS administrator</Description>
    <DefaultVersion>v1</DefaultVersion>
    <PolicyDocument>{ "Statement": [ { "Action": ["oss:*"], "Effect": "Allow", "Resource": ["acs:oss:*:*:*"] } ]}, "Version": "1"</PolicyDocument>
    <CreateDate>2015-01-23T12:33:18Z</CreateDate>
    <UpdateDate>2016-01-23T12:33:18Z</UpdateDate>
    <AttachmentCount>0</AttachmentCount>
</Policy>
</GetPolicyResponse>
```

JSON format

```
{
    "RequestId": "697852FB-50D7-44D9-9774-530C31EAC572",
    "Policy": {
        "PolicyName": "OSS-Administrator",
        "PolicyType": "Custom",
        "Description": "OSS administrator",
        "DefaultVersion": "v1",
        "PolicyDocument": "{ \"Statement\": [ { \"Action\": [\"oss:*\"], \"Effect\": \"Allow\", \"Resource\": [\"acs:oss:*:*:*\"] } ]}, \"Version\": \"1\"",
        "CreateDate": "2015-01-23T12:33:18Z",
        "UpdateDate": "2016-01-23T12:33:18Z",
        "AttachmentCount": 0
    }
}
```

Error codes

HTTP status code	Error code	Error message	Description
400	InvalidParameter.PolicyType	The specified policy type is invalid.	The error message returned because the policy type is invalid.
400	InvalidParameter.PolicyName.InvalidChars	The policy name contains invalid characters. It must only contain upper or lower case letters, numbers, and dash (-).	The error message returned because the policy name contains invalid characters. The policy name can only contain letters, digits, and hyphens (-).

HTTP status code	Error code	Error message	Description
400	InvalidParameter.PolicyName.Length	The length of the policy name is invalid. It must be 1 to 64 characters in length.	The error message returned because the length of the policy name is invalid. The policy name must be 1 to 64 characters in length.
404	EntityNotExist.Policy	The policy does not exist.	The error message returned because the policy does not exist.

For a list of error codes, visit the [API Error Center](#).

10.9. DeletePolicy

Deletes a policy.

Note

- Before you delete a policy, you must delete all non-default versions of the policy. For more information about how to delete a policy version, see [DeletePolicyVersion](#).
- Before you delete a policy, make sure that the policy is not referenced. This means that the policy is not attached to RAM users, RAM user groups, or RAM roles. For more information about how to detach a policy, see [DetachPolicy](#).

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	DeletePolicy	The operation that you want to perform. Set the value to DeletePolicy.
PolicyName	String	Yes	OSS-Administrator	The name of the policy. The name must be 1 to 128 characters in length and can contain letters, digits, and hyphens (-).

Response parameters

Parameter	Type	Example	Description
RequestId	String	898FAB24-7509-43EE-A287-086FE4C44394	The ID of the request.

Examples

Sample requests

```
https://resourcemanager.aliyuncs.com/?Action=DeletePolicy
&PolicyName=OSS-Administrator
&<Common request parameters>
```

Sample success responses

XML format

```
<DeletePolicyResponse>
    <RequestId>898FAB24-7509-43EE-A287-086FE4C44394</RequestId>
</DeletePolicyResponse>
```

JSON format

```
{
    "RequestId": "898FAB24-7509-43EE-A287-086FE4C44394"
}
```

Error codes

HTTP status code	Error code	Error message	Description
400	InvalidParameter.PolicyName.InvalidChars	The policy name contains invalid characters. It must only contain upper or lower case letters, numbers, and dash (-).	The error message returned because the policy name contains invalid characters. The policy name can only contain letters, digits, and hyphens (-).
400	InvalidParameter.PolicyName.Length	The length of the policy name is invalid. It must be 1 to 64 characters in length.	The error message returned because the length of the policy name is invalid. The policy name must be 1 to 64 characters in length.
404	EntityNotExist.Policy	The policy does not exist.	The error message returned because the policy does not exist.

HTTP status code	Error code	Error message	Description
409	DeleteConflict.Policy.User	Before deleting the policy, it may not be attached to any user.	The error message returned because the policy is attached to a RAM user. Detach the policy from the RAM user first.
409	DeleteConflict.Policy.Group	The policy cannot be attached to any group when you delete it.	The error message returned because the policy is attached to a RAM user group. Detach the policy from the RAM user group first.
409	DeleteConflict.Policy.Version	You must delete all non-default versions before you delete the policy.	The error message returned because all non-default versions of the policy are not deleted. Delete the non-default versions first.

For a list of error codes, visit the [API Error Center](#).

10.10. CreatePolicyVersion

Creates a version for a policy.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	CreatePolicyVersion	The operation that you want to perform. Set the value to CreatePolicyVersion.
PolicyDocument	String	Yes	{ "Statement": [{ "Action": ["oss:*"], "Effect": "Allow", "Resource": ["acs:oss:*,*,*"]}], "Version": "1"}	The document of the policy. The document must be 1 to 2,048 characters in length.

Parameter	Type	Required	Example	Description
PolicyName	String	Yes	OSS-Administrator	<p>The name of the policy.</p> <p>The name must be 1 to 128 characters in length and can contain letters, digits, and hyphens (-).</p>
SetAsDefault	Boolean	No	false	<p>Specifies whether to set the policy version as the default version. Valid values:</p> <ul style="list-style-type: none"> • false: The policy version is not set as the default version. • true: The policy version is set as the default version. <p>Default value: false.</p>

Response parameters

Parameter	Type	Example	Description
PolicyVersion	Struct		The information of the policy version.
CreateDate	String	2015-01-23T12:33:18	The time when the policy version was created.
IsDefaultVersion	Boolean	false	Indicates whether the policy version is the default version.
VersionId	String	v3	The ID of the policy version.
RequestId	String	9B34724D-54B0-4A51-B34D-4512372FE1BE	The ID of the request.

Examples

Sample requests

```
https://resourcemanager.aliyuncs.com/?Action=CreatePolicyVersion
&PolicyDocument={ "Statement": [ { "Action": ["oss:*"], "Effect": "Allow", "Resource": ["acs:oss:*:*"] } ], "Version": "1" }
&PolicyName=OSS-Administrator
&<Common request parameters>
```

Sample success responses

XML format

```
<CreatePolicyVersionResponse>
  <RequestId>9B34724D-54B0-4A51-B34D-4512372FE1BE</RequestId>
  <PolicyVersion>
    <VersionId>v3</VersionId>
    <IsDefaultVersion>false</IsDefaultVersion>
    <CreateDate>2015-01-23T12:33:18Z</CreateDate>
  </PolicyVersion>
</CreatePolicyVersionResponse>
```

JSON format

```
{
  "RequestId": "9B34724D-54B0-4A51-B34D-4512372FE1BE",
  "PolicyVersion": {
    "VersionId": "v3",
    "IsDefaultVersion": false,
    "CreateDate": "2015-01-23T12:33:18Z"
  }
}
```

Error codes

HTTP status code	Error code	Error message	Description
400	InvalidParameter.PolicyName.InvalidChars	The policy name contains invalid characters. It must only contain upper or lower case letters, numbers, and dash (-).	The error message returned because the policy name contains invalid characters. The policy name can only contain letters, digits, and hyphens (-).
400	InvalidParameter.PolicyName.Length	The length of the policy name is invalid. It must be 1 to 64 characters in length.	The error message returned because the length of the policy name is invalid. The policy name must be 1 to 64 characters in length.
404	EntityNotExist.Policy	The policy does not exist.	The error message returned because the policy does not exist.
409	LimitExceeded.Policy.Version	The maximum number of policy versions is exceeded.	The error message returned because the maximum number of policy versions has been reached.

For a list of error codes, visit the [API Error Center](#).

10.11. DeletePolicyVersion

Deletes a version of a policy.

 Note The default version of a policy cannot be deleted.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	DeletePolicyVersion	The operation that you want to perform. Set the value to DeletePolicyVersion.
PolicyName	String	Yes	OSS-Administrator	The name of the policy. The name must be 1 to 128 characters in length and can contain letters, digits, and hyphens (-).
VersionId	String	Yes	v3	The ID of the policy version.

Response parameters

Parameter	Type	Example	Description
RequestId	String	9B34724D-54B0-4A51-B34D-4512372FE1BE	The ID of the request.

Examples

Sample requests

```
https://resourcemanager.aliyuncs.com/?Action=DeletePolicyVersion  
&PolicyName=OSS-Administrator  
&VersionId=v3  
&<Common request parameters>
```

Sample success responses

XML format

```
<DeletePolicyVersionResponse>  
    <RequestId>9B34724D-54B0-4A51-B34D-4512372FE1BE</RequestId>  
</DeletePolicyVersionResponse>
```

JSON format

```
{
    "RequestId": "9B34724D-54B0-4A51-B34D-4512372FE1BE"
}
```

Error codes

HTTP status code	Error code	Error message	Description
400	InvalidParameter.PolicyName.InvalidChars	The policy name contains invalid characters. It must only contain upper or lower case letters, numbers, and dash (-).	The error message returned because the policy name contains invalid characters. The policy name can only contain letters, digits, and hyphens (-).
400	InvalidParameter.PolicyName.Length	The length of the policy name is invalid. It must be 1 to 64 characters in length.	The error message returned because the length of the policy name is invalid. The policy name must be 1 to 64 characters in length.
400	InvalidParameter.VersionId.Format	The specified version ID is invalid.	The error message returned because the format of the policy version ID is invalid.
404	EntityNotExist.Policy	The policy does not exist.	The error message returned because the policy does not exist.
404	EntityNotExist.Policy.Version	The policy version does not exist.	The error message returned because the policy version does not exist.
409	DeleteConflict.Policy.Version.Default	You cannot delete the default policy version.	The error message returned because the policy version is the default version and cannot be deleted.

For a list of error codes, visit the [API Error Center](#).

10.12. ListPolicyVersions

Queries the versions of a policy.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	ListPolicyVersions	The operation that you want to perform. Set the value to ListPolicyVersions.
PolicyName	String	Yes	OSS-Administrator	<p>The name of the policy.</p> <p>The name must be 1 to 128 characters in length and can contain letters, digits, and hyphens (-).</p>
PolicyType	String	Yes	Custom	<p>The type of the policy. Valid values:</p> <ul style="list-style-type: none"> • Custom: custom policy • System: system policy

Response parameters

Parameter	Type	Example	Description
PolicyVersions	Array		The information of the policy versions.
PolicyVersion			
CreateDate	String	2015-01-23T12:33:18Z	The time when the policy version was created.
IsDefaultVersion	Boolean	false	Indicates whether the policy version is the default version.
VersionId	String	v3	The ID of the policy version.
RequestId	String	7B8A4E7D-6CFF-471D-84DF-195A7A241ECB	The ID of the request.

Examples

Sample requests

```
https://resourcemanager.aliyuncs.com/?Action=ListPolicyVersions
&PolicyName=OSS-Administrator
&PolicyType=Custom
&<Common request parameters>
```

Sample success responses

XML format

```
<ListPolicyVersionsResponse>
    <RequestId>7B8A4E7D-6CFF-471D-84DF-195A7A241ECB</RequestId>
    <PolicyVersions>
        <PolicyVersion>
            <VersionId>v3</VersionId>
            <IsDefaultVersion>false</IsDefaultVersion>
            <CreateDate>2015-01-23T12:33:18Z</CreateDate>
        </PolicyVersion>
        <PolicyVersion>
            <VersionId>v5</VersionId>
            <IsDefaultVersion>true</IsDefaultVersion>
            <CreateDate>2015-02-26T01:25:52Z</CreateDate>
        </PolicyVersion>
    </PolicyVersions>
</ListPolicyVersionsResponse>
```

JSON format

```
{
    "RequestId": "7B8A4E7D-6CFF-471D-84DF-195A7A241ECB",
    "PolicyVersions": {
        "PolicyVersion": [
            {
                "VersionId": "v3",
                "IsDefaultVersion": false,
                "CreateDate": "2015-01-23T12:33:18Z"
            },
            {
                "VersionId": "v5",
                "IsDefaultVersion": true,
                "CreateDate": "2015-02-26T01:25:52Z"
            }
        ]
    }
}
```

Error codes

HTTP status code	Error code	Error message	Description
400	InvalidParameter.PolicyType	The specified policy type is invalid.	The error message returned because the policy type is invalid.

HTTP status code	Error code	Error message	Description
400	InvalidParameter.PolicyName.InvalidChars	The policy name contains invalid characters. It must only contain upper or lower case letters, numbers, and dash (-).	The error message returned because the policy name contains invalid characters. The policy name can only contain letters, digits, and hyphens (-).
400	InvalidParameter.PolicyName.Length	The length of the policy name is invalid. It must be 1 to 64 characters in length.	The error message returned because the length of the policy name is invalid. The policy name must be 1 to 64 characters in length.
404	EntityNotExist.Policy	The policy does not exist.	The error message returned because the policy does not exist.

For a list of error codes, visit the [API Error Center](#).

10.13. GetPolicyVersion

Queries the information of a specified policy version.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	GetPolicyVersion	The operation that you want to perform. Set the value to GetPolicyVersion.
PolicyName	String	Yes	OSS-Administrator	The name of the policy. The name must be 1 to 128 characters in length and can contain letters, digits, and hyphens (-).
PolicyType	String	Yes	Custom	The type of the policy. Valid values: <ul style="list-style-type: none">• Custom: custom policy• System: system policy

Parameter	Type	Required	Example	Description
VersionId	String	Yes	v3	The ID of the policy version.

Response parameters

Parameter	Type	Example	Description
PolicyVersion	Struct		The information of the policy version.
CreateDate	String	2015-01-23T12:33:18Z	The time when the policy version was created.
IsDefaultVersion	Boolean	false	Indicates whether the policy version is the default version.
PolicyDocument	String	{"Statement": [{"Action": ["oss:*"], "Effect": "Allow", "Resource": ["acs:oss:/*"]}], "Version": "1"}	The document of the policy.
VersionId	String	v3	The ID of the policy version.
RequestId	String	9B34724D-54B0-4A51-B34D-4512372FE1BE	The ID of the request.

Examples

Sample requests

```
https://resourcemanager.aliyuncs.com/?Action=GetPolicyVersion
&PolicyName=OSS-Administrator
&PolicyType=Custom
&VersionId=v3
&<Common request parameters>
```

Sample success responses

XML format

```
<GetPolicyVersionResponse>
  <RequestId>9B34724D-54B0-4A51-B34D-4512372FE1BE</RequestId>
  <PolicyVersion>
    <VersionId>v3</VersionId>
    <IsDefaultVersion>false</IsDefaultVersion>
    <CreateDate>2015-01-23T12:33:18Z</CreateDate>
    <PolicyDocument>{ "Statement": [ { "Action": ["oss:*"], "Effect": "Allow", "Resource": ["acs:oss:*:*:*"] } ], "Version": "1"}</PolicyDocument>
  </PolicyVersion>
</GetPolicyVersionResponse>
```

JSON format

```
{
  "RequestId": "9B34724D-54B0-4A51-B34D-4512372FE1BE",
  "PolicyVersion": {
    "VersionId": "v3",
    "IsDefaultVersion": false,
    "CreateDate": "2015-01-23T12:33:18Z",
    "PolicyDocument": "{ \"Statement\": [ { \"Action\": [\"oss:*\"], \"Effect\": \"Allow\", \"Resource\": [\"acs:oss:*:*:*\"] } ], \"Version\": \"1\"}"
  }
}
```

Error codes

HTTP status code	Error code	Error message	Description
400	InvalidParameter.PolicyType	The specified policy type is invalid.	The error message returned because the policy type is invalid.
400	InvalidParameter.PolicyName.InvalidChars	The policy name contains invalid characters. It must only contain upper or lower case letters, numbers, and dash (-).	The error message returned because the policy name contains invalid characters. The policy name can only contain letters, digits, and hyphens (-).
400	InvalidParameter.PolicyName.Length	The length of the policy name is invalid. It must be 1 to 64 characters in length.	The error message returned because the length of the policy name is invalid. The policy name must be 1 to 64 characters in length.
400	InvalidParameter.VersionId.Format	The specified version ID is invalid.	The error message returned because the format of the policy version ID is invalid.

HTTP status code	Error code	Error message	Description
404	EntityNotExist.Policy	The policy does not exist.	The error message returned because the policy does not exist.
404	EntityNotExist.Policy.Version	The policy version does not exist.	The error message returned because the policy version does not exist.

For a list of error codes, visit the [API Error Center](#).

10.14. SetDefaultPolicyVersion

Sets the default version for a policy.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	SetDefaultPolicyVersion	The operation that you want to perform. Set the value to SetDefaultPolicyVersion.
PolicyName	String	Yes	OSS-Administrator	The name of the policy. The name must be 1 to 128 characters in length and can contain letters, digits, and hyphens (-).
VersionId	String	Yes	v2	The ID of the policy version.

Response parameters

Parameter	Type	Example	Description
RequestId	String	9B34724D-54B0-4A51-B34D-4512372FE1BE	The ID of the request.

Examples

Sample requests

```
https://resourcemanager.aliyuncs.com/?Action=SetDefaultPolicyVersion  
&PolicyName=OSS-Administrator  
&VersionId=v2  
&<Common request parameters>
```

Sample success responses

XML format

```
<SetDefaultPolicyVersionResponse>  
    <RequestId>9B34724D-54B0-4A51-B34D-4512372FE1BE</RequestId>  
</SetDefaultPolicyVersionResponse>
```

JSON format

```
{  
    "RequestId": "9B34724D-54B0-4A51-B34D-4512372FE1BE"  
}
```

Error codes

HTTP status code	Error code	Error message	Description
400	InvalidParameter.PolicyName.InvalidChars	The policy name contains invalid characters. It must only contain upper or lower case letters, numbers, and dash (-).	The error message returned because the policy name contains invalid characters. The policy name can only contain letters, digits, and hyphens (-).
400	InvalidParameter.PolicyName.Length	The length of the policy name is invalid. It must be 1 to 64 characters in length.	The error message returned because the length of the policy name is invalid. The policy name must be 1 to 64 characters in length.
400	InvalidParameter.VersionId.Format	The specified version ID is invalid.	The error message returned because the format of the policy version ID is invalid.
404	EntityNotExist.Policy	The policy does not exist.	The error message returned because the policy does not exist.
404	EntityNotExist.Policy.Version	The policy version does not exist.	The error message returned because the policy version does not exist.

For a list of error codes, visit the [API Error Center](#).

10.15. AttachPolicy

Attaches a policy to an object, which can be a RAM user, RAM user group, or RAM role. After you attach a policy to an object, the object has the operation permissions on the resources in a specific resource group or within a specific Alibaba Cloud account.

Usage notes

In this example, the policy `AdministratorAccess` is attached to the RAM user `alice@demo.onaliyun.com` and takes effect only for resources in the `rg-9gL0oK****` resource group.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	AttachPolicy	The operation that you want to perform. Set the value to AttachPolicy .
ResourceGroupId	String	Yes	rg-9gL0oK****	The effective scope of the policy. You can set this parameter to one of the following items: <ul style="list-style-type: none">• ID of a resource group: indicates that the policy takes effect for the resources in the resource group.• ID of the Alibaba Cloud account to which the authorized object belongs: indicates that the policy takes effect for the resources within the Alibaba Cloud account.
PolicyType	String	Yes	System	The type of the policy. Valid values: <ul style="list-style-type: none">• Custom: custom policy• System: system policy
PolicyName	String	Yes	AdministratorAccess	The name of the policy. The name must be 1 to 128 characters in length and can contain letters, digits, and hyphens (-).

Parameter	Type	Required	Example	Description
PrincipalType	String	Yes	IMSUser	<p>The type of the object to which you want to attach the policy. Valid values:</p> <ul style="list-style-type: none"> • IMSUser: RAM user • IMSGroup: RAM user group • ServiceRole: RAM role
PrincipalName	String	Yes	alice@demo.onaliyun.com	<p>The name of the object to which you want to attach the policy.</p> <ul style="list-style-type: none"> • If you want to attach the policy to a RAM user, specify the name in the <UserName>@<AccountAlias>.onaliyun.com format. <UserName> indicates the name of the RAM user, and <AccountAlias> indicates the alias of the Alibaba Cloud account to which the RAM user belongs. • If you want to attach the policy to a RAM user group, specify the name in the <GroupName>@group.<AccountAlias>.onaliyun.com format. <GroupName> indicates the name of the RAM user group, and <AccountAlias> indicates the alias of the Alibaba Cloud account to which the RAM user group belongs. • If you want to attach the policy to a RAM role, specify the name in the <RoleName>@role.<AccountAlias>.onaliyun.com format. <RoleName> indicates the name of the RAM role, and <AccountAlias> indicates the alias of the Alibaba Cloud account to which the RAM role belongs. <div style="background-color: #e1f5fe; padding: 10px; margin-top: 10px;"> ? Note The alias of an Alibaba Cloud account is a part of the default domain name. You can call the GetDefaultDomain operation to obtain the alias of an Alibaba Cloud account. </div>

For more information about common request parameters, see [Common parameters](#).

Response parameters

Parameter	Type	Example	Description
RequestId	String	697852FB-50D7-44D9-9774-530C31EAC572	The ID of the request.

Examples

Sample requests

```
https://resourcemanager.aliyuncs.com/?Action=AttachPolicy
&PolicyName=AdministratorAccess
&PolicyType=System
&PrincipalName=alice@demo.onaliyun.com
&PrincipalType=IMSUser
&ResourceGroupId=rg-9gLOoK****
&<Common request parameters>
```

Sample success responses

XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<?xml version="1.0" encoding="UTF-8" ?>
<AttachPolicyToUserResponse>
    <RequestId>697852FB-50D7-44D9-9774-530C31EAC572</RequestId>
</AttachPolicyToUserResponse>
```

JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
    "RequestId" : "697852FB-50D7-44D9-9774-530C31EAC572"
}
```

Error codes

HTTP status code	Error code	Error message	Description
400	InvalidParameter.PolicyType	The specified policy type is invalid.	The error message returned because the policy type is invalid.
404	EntityNotExist.Policy	The policy does not exist.	The error message returned because the policy does not exist.

HTTP status code	Error code	Error message	Description
404	EntityNotExists.ResourceGroup	The specified resource group does not exist. You must first create a resource group.	The error message returned because the resource group does not exist. Create such a resource group first.
409	Invalid.ResourceGroup.Status	You cannot perform an operation on a resource group that is being created or deleted.	The error message returned because you cannot perform the operation on a resource group that is being created or deleted.

For a list of error codes, visit the [API Error Center](#).

10.16. DetachPolicy

Detaches a policy from an object. After you detach a policy from an object, the object does not have the operation permissions on the current resource group or the resources under the current account.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	DetachPolicy	The operation that you want to perform. Set the value to DetachPolicy.
PolicyName	String	Yes	OSS-Administrator	The name of the policy. The name must be 1 to 128 characters in length and can contain letters, digits, and hyphens (-).
PolicyType	String	Yes	Custom	The type of the policy. Valid values: <ul style="list-style-type: none"> • Custom: custom policy • System: system policy
PrincipalName	String	Yes	alice@demo.onaliyun.com	The name of the object to which the policy is attached.

Parameter	Type	Required	Example	Description
PrincipalType	String	Yes	IMSUser	<p>The type of the object to which the policy is attached. Valid values:</p> <ul style="list-style-type: none"> • IMSUser: RAM user • IMSGroup: RAM user group • ServiceRole: RAM role
ResourceGroupId	String	Yes	rg-9gL0oK****	<p>The ID of the resource group or the ID of the Alibaba Cloud account to which the resource group belongs.</p> <p>This parameter specifies the resource group or Alibaba Cloud account for which you want to revoke permissions.</p>

Response parameters

Parameter	Type	Example	Description
RequestId	String	697852FB-50D7-44D9-9774-530C31EAC572	The ID of the request.

Examples

Sample requests

```
https://resourcemanager.aliyuncs.com/?Action=DetachPolicy
&PolicyName=OSS-Administrator
&PolicyType=Custom
&PrincipalName=alice@demo.onaliyun.com
&PrincipalType=IMSUser
&ResourceGroupId=rg-9gL0oK****
&<Common request parameters>
```

Sample success responses

XML format

```
<DetachPolicyFromUserResponse>
    <RequestId>697852FB-50D7-44D9-9774-530C31EAC572</RequestId>
</DetachPolicyFromUserResponse>
```

JSON format

```
{
    "RequestId": "697852FB-50D7-44D9-9774-530C31EAC572"
}
```

Error codes

HTTP status code	Error code	Error message	Description
400	InvalidParameter.PolicyType	The specified policy type is invalid.	The error message returned because the policy type is invalid.
404	EntityNotExist.Policy	The policy does not exist.	The error message returned because the policy does not exist.
404	EntityNotExists.ResourceGroup	The specified resource group does not exist. You must first create a resource group.	The error message returned because the resource group does not exist. Create the resource group first.
409	Invalid.ResourceGroup.Status	You cannot perform an operation on a resource group that is being created or deleted.	The error message returned because you cannot perform the operation on a resource group that is being created or deleted.

For a list of error codes, visit the [API Error Center](#).

10.17. ListPolicyAttachments

Queries policy attachment records.

You can view the following information:

- Policy attachment records under an Alibaba Cloud account or a resource group
- Policies attached to RAM users, RAM user groups, or RAM roles
- RAM users, RAM user groups, or RAM roles to which policies are attached under an Alibaba Cloud account or a resource group

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	ListPolicyAttachments	The operation that you want to perform. Set the value to ListPolicyAttachments.

Parameter	Type	Required	Example	Description
ResourceGroupId	String	No	rg-001	The ID of the resource group or the ID of the Alibaba Cloud account to which the resource group belongs. If you do not specify this parameter, the system lists all policy attachment records under the current account.
PolicyType	String	No	System	The type of the policy. If you do not specify this parameter, the system lists all types of policies. Valid values: <ul style="list-style-type: none"> Custom: custom policy System: system policy
PolicyName	String	No	AdministratorAccess	The name of the policy. The name must be 1 to 128 characters in length and can contain letters, digits, and hyphens (-).
PrincipalType	String	No	IMSUser	The type of the object to which the policy is attached. If you do not specify this parameter, the system lists all types of objects. Valid values: <ul style="list-style-type: none"> IMSUser: RAM user IMSGroup: RAM user group ServiceRole: RAM role
PrincipalName	String	No	alice@demo.onaliyun.com	The name of the object to which the policy is attached.
PageNumber	Integer	No	1	The number of the page to return. Pages start from page 1. Default value: 1.
PageSize	Integer	No	10	The number of entries to return on each page. Valid values: 1 to 100. Default value: 10.

Parameter	Type	Required	Example	Description
Language	String	No	zh-CN	<p>The language that is used to return the description of the system policy. Valid values:</p> <ul style="list-style-type: none"> • en: English • zh-CN: Chinese • ja: Japanese

Response parameters

Parameter	Type	Example	Description
PageNumber	Integer	1	The page number of the returned page.
PageSize	Integer	10	The number of entries returned per page.
PolicyAttachments	Array		The policy attachment records.
PolicyAttachment			
AttachDate	String	2015-01-23T12:33:18Z	The time when the policy was attached.
Description	String	Administrator	The description of the policy.
PolicyName	String	AdministratorAccess	The name of the policy.
PolicyType	String	System	<p>The type of the policy. Valid values:</p> <ul style="list-style-type: none"> • Custom: custom policy • System: system policy
PrincipalName	String	alice@demo.onaliyun.com	The name of the object to which the policy is attached.
PrincipalType	String	IMSUser	<p>The type of the object to which the policy is attached. Valid values:</p> <ul style="list-style-type: none"> • IMSUser: RAM user • IMSGroup: RAM user group • ServiceRole: RAM role

Parameter	Type	Example	Description
ResourceGroupId	String	rg-9gL0oK****	The ID of the resource group or the ID of the Alibaba Cloud account to which the resource group belongs.
RequestId	String	7B8A4E7D-6CFF-471D-84DF-195A7A241ECB	The ID of the request.
TotalCount	Integer	2	The total number of returned entries.

Examples

Sample requests

```
https://resourcemanager.aliyuncs.com/?Action=ListPolicyAttachments
&<Common request parameters>
```

Sample success responses

XML format

```
<ListPolicyAttachmentsResponse>
    <RequestId>7B8A4E7D-6CFF-471D-84DF-195A7A241ECB</RequestId>
    <PageNumber>1</PageNumber>
    <PageSize>10</PageSize>
    <TotalCount>2</TotalCount>
    <PolicyAttachments>
        <PolicyAttachment>
            <ResourceGroupId>rg-9gL0oK****</ResourceGroupId>
            <PolicyType>System</PolicyType>
            <PolicyName>AdministratorAccess</PolicyName>
            <PrincipalType>IMSUser</PrincipalType>
            <PrincipalName>alice@demo.onaliyun.com</PrincipalName>
            <AttachDate>2015-01-23T12:33:18Z</AttachDate>
            <Description>Administrator</Description>
        </PolicyAttachment>
        <PolicyAttachment>
            <ResourceGroupId>12983255839348****</ResourceGroupId>
            <PolicyType>Custom</PolicyType>
            <PolicyName>OSS-Bucket1-Access</PolicyName>
            <PrincipalType>ServiceRole</PrincipalType>
            <PrincipalName>image-service@role.demo.onaliyunservice.com</PrincipalName>
        </PolicyAttachment>
    </PolicyAttachments>
</ListPolicyAttachmentsResponse>
```

JSON format

```
{  
    "RequestId" : "7B8A4E7D-6CFF-471D-84DF-195A7A241ECB",  
    "PageNumber": 1,  
    "PageSize": 10,  
    "TotalCount": 2,  
    "PolicyAttachments" : {  
        "PolicyAttachment" : [  
            {  
                "ResourceGroupId": "rg-9gLoK****",  
                "PolicyType": "System",  
                "PolicyName": "AdministratorAccess",  
                "PrincipalType": "IMSUser",  
                "PrincipalName": "alice@demo.onaliyun.com",  
                "AttachDate" : "2015-01-23T12:33:18Z",  
                "Description": "Administrator"  
            },  
            {  
                "ResourceGroupId": "12983255839348****",  
                "PolicyType": "Custom",  
                "PolicyName": "OSS-Bucket1-Access",  
                "PrincipalType": "ServiceRole",  
                "PrincipalName": "image-service@role.demo.onaliyunservice.com",  
                "AttachDate" : "2015-01-23T12:33:18Z",  
                "Description": "Access to OSS bucket 1"  
            }  
        ]  
    }  
}
```

Error codes

HTTP status code	Error code	Error message	Description
400	InvalidParameter.PolicyType	The specified policy type is invalid.	The error message returned because the policy type is invalid.
404	EntityNotExists.ResourceGroup	The specified resource group does not exist. You must first create a resource group.	The error message returned because the resource group does not exist. Create the resource group first.
404	EntityNotExist.Policy	The policy does not exist.	The error message returned because the policy does not exist.

For a list of error codes, visit the [API Error Center](#).

10.18. CreateRole

Creates a RAM role.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	CreateRole	The operation that you want to perform. Set the value to CreateRole.
AssumeRolePolicy Document	String	Yes	{ "Statement": [{ "Action": "sts:AssumeRole", "Effect": "Allow", "Principal": { "RAM": "acs:ram::12345678901234****:root" } }, { "Version": "1" }] }	The document of the policy that specifies one or more trusted entities to assume the RAM role. The trusted entities can be Alibaba Cloud accounts, Alibaba Cloud services, or identity providers (IdPs). Note RAM users cannot assume the RAM roles of trusted Alibaba Cloud services.
RoleName	String	Yes	ECSAdmin	The name of the RAM role. The name must be 1 to 64 characters in length and can contain letters, digits, periods (.), and hyphens (-).
Description	String	No	ECS administrator	The description of the RAM role. The description must be 1 to 1,024 characters in length.
MaxSessionDuration	Long	No	3600	The maximum session duration of the RAM role. Unit: seconds. Valid values: 3600 to 43200. Default value: 3600. If you do not specify this parameter, the default value is used.

Response parameters

Parameter	Type	Example	Description
RequestId	String	04F0F334-1335-436C-A1D7-6C044FE73368	The ID of the request.
Role	Struct		The information of the RAM role.
Arn	String	acs:ram::12345678901234****:role/ECSAdmin	The Alibaba Cloud Resource Name (ARN) of the RAM role.
AssumeRolePolicyDocument	String	{ \"Statement\": [{ \"Action\": \"sts:AssumeRole\", \"Effect\": \"Allow\", \"Principal\": { \"RAM\": \"acs:ram::12345678901234****:root\" } }, { \"Version\": \"1\" }] }	The document of the policy that specifies the trusted entity to assume the RAM role.
CreateDate	String	2015-01-23T12:33:18Z	The time when the RAM role was created.
Description	String	ECS administrator	The description of the RAM role.
MaxSessionDuration	Long	3600	The maximum session duration of the RAM role.
RoleId	String	90123456789****	The ID of the RAM role.
RoleName	String	ECSAdmin	The name of the RAM role.
RolePrincipalName	String	ECSAdmin@role.123456.onaliyunservice.com	The name of the RAM role after authorization.

Examples

Sample requests

```
https://resourcemanager.aliyuncs.com/?Action=CreateRole
&AssumeRolePolicyDocument={ "Statement": [ { "Action": "sts:AssumeRole", "Effect": "Allow",
"Principal": { "RAM": "acs:ram::12345678901234****:root" } } ], "Version": "1" }
&RoleName=ECSAdmin
&<Common request parameters>
```

Sample success responses

XML format

```
<CreateRoleResponse>
    <RequestId>04F0F334-1335-436C-A1D7-6C044FE73368</RequestId>
    <Role>
        <RoleId>90123456789****</RoleId>
        <RoleName>ECSAdmin</RoleName>
        <RolePrincipalName>ECSAdmin@role.123456.onaliyunservice.com</RolePrincipalName>
        <Arn>acs:ram::123456789012****:role/ECSAdmin</Arn>
        <Description>ECS administrator</Description>
        <MaxSessionDuration>3600</MaxSessionDuration>
        <AssumeRolePolicyDocument>{ "Statement": [ { "Action": "sts:AssumeRole", "Effect": "Allow", "Principal": { "RAM": "acs:ram::12345678901234****:root" } } ], "Version": "1" }</AssumeRolePolicyDocument>
        <CreateDate>2015-01-23T12:33:18Z</CreateDate>
    </Role>
</CreateRoleResponse>
```

JSON format

```
{
    "RequestId": "04F0F334-1335-436C-A1D7-6C044FE73368",
    "Role": {
        "RoleId": "90123456789****",
        "RoleName": "ECSAdmin",
        "RolePrincipalName": "ECSAdmin@role.123456.onaliyunservice.com",
        "Arn": "acs:ram::123456789012****:role/ECSAdmin",
        "Description": "ECS administrator",
        "MaxSessionDuration": 3600,
        "AssumeRolePolicyDocument": "{ \"Statement\": [ { \\"Action\\": \\"sts:AssumeRole\\\", \\"Effect\\": \\"Allow\\\", \\"Principal\\": { \\"RAM\\": \\"acs:ram::12345678901234****:root\\\" } } ], \\"Version\\": \\"1\\\" }",
        "CreateDate": "2015-01-23T12:33:18Z"
    }
}
```

Error codes

HTTP status code	Error code	Error message	Description
400	InvalidParameter.RoleName.InvalidChars	The specified role name contains invalid characters.	The error message returned because the RAM role name contains invalid characters.
400	InvalidParameter.RoleName.Length	The maximum length of the role name is exceeded.	The error message returned because the length of the RAM role name has exceeded the upper limit.

HTTP status code	Error code	Error message	Description
400	InvalidParameter.AssumeRolePolicyDocument.Length	The maximum length of the trust policy document of the role is exceeded.	The error message returned because the length of the value specified for the AssumeRolePolicyDocument parameter has exceeded the upper limit.
409	EntityAlreadyExists.Role	The role already exists.	The error message returned because the RAM role already exists.
409	MalformedPolicyDocument	The policy format is invalid.	The error message returned because the format of the policy document is invalid.
409	LimitExceeded.Role	The maximum number of roles is exceeded.	The error message returned because the maximum number of RAM roles has been reached.

For a list of error codes, visit the [API Error Center](#).

10.19. GetRole

Queries the information of a RAM role.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	GetRole	The operation that you want to perform. Set the value to GetRole.
RoleName	String	Yes	ECSAdmin	The name of the RAM role. The name must be 1 to 64 characters in length and can contain letters, digits, periods (.), and hyphens (-).

Parameter	Type	Required	Example	Description
Language	String	No	zh-CN	<p>The language that is used to return the description of the RAM role. Valid values:</p> <ul style="list-style-type: none"> • en: English • zh-CN: Chinese • ja: Japanese

Response parameters

Parameter	Type	Example	Description
RequestId	String	04F0F334-1335-436C-A1D7-6C044FE73368	The ID of the request.
Role	Struct		The information of the RAM role.
Arn	String	acs:ram::12345678901234****:role/ECSAdmin	The Alibaba Cloud Resource Name (ARN) of the RAM role.
AssumeRolePolicyDocument	String	<pre>{ "Statement": [{ "Action": "sts:AssumeRole", "Effect": "Allow", "Principal": "RAM", "Resource": "acs:ram::12345678901234****:root" }], "Version": "1" }</pre>	The document of the policy that specifies the trusted entity to assume the RAM role.
CreateDate	String	2015-01-23T12:33:18Z	The time when the RAM role was created.
Description	String	ECS administrator	The description of the RAM role.
IsServiceLinkedRole	Boolean	true	Indicates whether the RAM role is a service linked role.
LatestDeletionTask	Struct		The information of the most recent deletion task.

Parameter	Type	Example	Description
CreateDate	String	2018-10-23T12:33:18Z	The time when the deletion task was created.
DeletionTaskId	String	ECSAdmin/cc61514b-26eb-4453-ab53-b142eb702a3d	The ID of the deletion task.
MaxSessionDuration	Long	3600	The maximum session duration of the RAM role.
RoleId	String	90123456789****	The ID of the RAM role.
RoleName	String	ECSAdmin	The name of the RAM role.
RolePrincipalName	String	ECSAdmin@role.123456.onaliyunservice.com	The name of the RAM role after authorization.
UpdateDate	String	2016-01-23T12:33:18Z	The time when the RAM role was updated.

Examples

Sample requests

```
https://resourcemanager.aliyuncs.com/?Action=GetRole  
&RoleName=ECSAdmin  
&<Common request parameters>
```

Sample success responses

XML format

```
<GetRoleResponse>
  <RequestId>04F0F334-1335-436C-A1D7-6C044FE73368</RequestId>
  <Role>
    <RoleId>90123456789****</RoleId>
    <RoleName>ECSAdmin</RoleName>
    <RolePrincipalName>ECSAdmin@role.123456.onaliyunservice.com</RolePrincipalName>
    <Arn>acs:ram::123456789012****:role/ECSAdmin</Arn>
    <IsServiceLinkedRole>true</IsServiceLinkedRole>
    <LatestDeletionTask>
      <CreateDate>2018-10-23T12:33:18Z</CreateDate>
      <DeletionTaskId>ECSAdmin/cc61514b-26eb-4453-ab53-b142eb702a3d</DeletionTa
skId>
    </LatestDeletionTask>
    <Description>ECS administrator</Description>
    <MaxSessionDuration>3600</MaxSessionDuration>
    <AssumeRolePolicyDocument>{ "Statement": [ { "Action": "sts:AssumeRole", "Effect": "Allow", "Principal": { "RAM": "acs:ram::12345678901234****:root" } } ], "Version": "1" }</AssumeRolePolicyDocument>
      <CreateDate>2015-01-23T12:33:18Z</CreateDate>
      <UpdateDate>2016-01-23T12:33:18Z</UpdateDate>
    </Role>
  </GetRoleResponse>
```

JSON format

```
{
  "RequestId": "04F0F334-1335-436C-A1D7-6C044FE73368",
  "Role": {
    "RoleId": "90123456789****",
    "RoleName": "ECSAdmin",
    "RolePrincipalName": "ECSAdmin@role.123456.onaliyunservice.com",
    "Arn": "acs:ram::123456789012****:role/ECSAdmin",
    "IsServiceLinkedRole": true,
    "LatestDeletionTask": {
      "CreateDate": "2018-10-23T12:33:18Z",
      "DeletionTaskId": "ECSAdmin/cc61514b-26eb-4453-ab53-b142eb702a3d"
    },
    "Description": "ECS administrator",
    "MaxSessionDuration": 3600,
    "AssumeRolePolicyDocument": "{ \"Statement\": [ { \"Action\": \"sts:AssumeRole\", \"Effect\": \"Allow\", \"Principal\": { \"RAM\": \"acs:ram::12345678901234****:root\" } } ], \"Version\": \"1\" }",
    "CreateDate": "2015-01-23T12:33:18Z",
    "UpdateDate": "2016-01-23T12:33:18Z"
  }
}
```

Error codes

HTTP status code	Error code	Error message	Description
400	InvalidParameter.RoleName.InvalidChars	The specified role name contains invalid characters.	The error message returned because the RAM role name contains invalid characters.
400	InvalidParameter.RoleName.Length	The maximum length of the role name is exceeded.	The error message returned because the length of the RAM role name has exceeded the upper limit.
404	EntityNotExist.Role	The role does not exist.	The error message returned because the RAM role does not exist.

For a list of error codes, visit the [API Error Center](#).

10.20. ListRoles

Queries RAM roles.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	ListRoles	The operation that you want to perform. Set the value to ListRoles.
PageNumber	Integer	No	1	The number of the page to return. Pages start from page 1. Default value: 1.
PageSize	Integer	No	10	The number of entries to return on each page. Valid values: 1 to 100. Default value: 10.

Parameter	Type	Required	Example	Description
Language	String	No	zh-CN	<p>The language that is used to return the descriptions of the RAM roles. Valid values:</p> <ul style="list-style-type: none"> • en: English • zh-CN: Chinese • ja: Japanese

Response parameters

Parameter	Type	Example	Description
PageNumber	Integer	1	The page number of the returned page.
PageSize	Integer	10	The number of entries returned per page.
RequestId	String	7B8A4E7D-6CFF-471D-84DF-195A7A241ECB	The ID of the request.
Roles	Array		The information of the RAM roles.
Role			
Arn	String	acs:ram::123456789012****:role/ECSAdmin	The Alibaba Cloud Resource Name (ARN) of the RAM role.
CreateDate	String	2015-01-23T12:33:18Z	The time when the RAM role was created.
Description	String	ECS administrator	The description of the RAM role.
IsServiceLinkedRole	Boolean	true	Indicates whether the RAM role is a service linked role.
LatestDeletionTask	Struct		The information of the most recent deletion task.
CreateDate	String	2018-10-23T12:33:18Z	The time when the deletion task was created.

Parameter	Type	Example	Description
DeletionTaskid	String	ECSAdmin/cc61514b-26eb-4453-ab53-b142eb70****	The ID of the deletion task.
MaxSessionDuration	Long	3600	The maximum session duration of the RAM role.
RoleId	String	90123456789****	The ID of the RAM role.
RoleName	String	ECSAdmin	The name of the RAM role.
RolePrincipalName	String	ECSAdmin@role.123456.onaliyunservice.com	The name of the RAM role after authorization.
UpdateDate	String	2016-01-23T12:33:18Z	The time when the RAM role was updated.
TotalCount	Integer	2	The total number of RAM roles.

Examples

Sample requests

```
https://resourcemanager.aliyuncs.com/?Action=ListRoles  
&<Common request parameters>
```

Sample success responses

XML format

```
<ListRolesResponse>
  <RequestId>7B8A4E7D-6CFF-471D-84DF-195A7A241ECB</RequestId>
  <PageNumber>1</PageNumber>
  <PageSize>10</PageSize>
  <TotalCount>2</TotalCount>
  <Roles>
    <Role>
      <RoleId>90123456789****</RoleId>
      <RoleName>ECSAdmin</RoleName>
      <RolePrincipalName>ECSAdmin@role.123456.onaliyunservice.com</RolePrincipalName>
      <Arn>acs:ram::123456789012****:role/ECSAdmin</Arn>
      <IsServiceLinkedRole>true</IsServiceLinkedRole>
      <LatestDeletionTask>
        <CreateDate>2018-10-23T12:33:18Z</CreateDate>
        <DeletionTaskId>ECSAdmin/cc61514b-26eb-4453-ab53-b142eb70****</DeletionTaskId>
      </LatestDeletionTask>
      <Description>ECS administrator</Description>
      <MaxSessionDuration>3600</MaxSessionDuration>
      <CreateDate>2015-01-23T12:33:18Z</CreateDate>
      <UpdateDate>2015-01-23T12:33:18Z</UpdateDate>
    </Role>
    <Role>
      <RoleId>90123456789****</RoleId>
      <RoleName>OSSReadonlyAccess</RoleName>
      <RolePrincipalName>OSSReadonlyAccess@role.123456.onaliyunservice.com</RolePrincipalName>
      <Arn>acs:ram::123456789012****:role/OSSReadonlyAccess</Arn>
      <Description>OSS read-only access</Description>
      <MaxSessionDuration>3600</MaxSessionDuration>
      <CreateDate>2015-01-23T12:33:18Z</CreateDate>
      <UpdateDate>2015-01-23T12:33:18Z</UpdateDate>
    </Role>
  </Roles>
</ListRolesResponse>
```

JSON format

```
{  
    "RequestId": "7B8A4E7D-6CFF-471D-84DF-195A7A241ECB",  
    "PageNumber": 1,  
    "PageSize": 10,  
    "TotalCount": 2,  
    "Roles": [  
        "Role": [{  
            "RoleId": "90123456789****",  
            "RoleName": "ECSAdmin",  
            "RolePrincipalName": "ECSAdmin@role.123456.onaliyunservice.com",  
            "Arn": "acs:ram::123456789012****:role/ECSAdmin",  
            "IsServiceLinkedRole": true,  
            "LatestDeletionTask": {  
                "CreateDate": "2018-10-23T12:33:18Z",  
                "DeletionTaskId": "ECSAdmin/cc61514b-26eb-4453-ab53-b142eb70****"  
            },  
            "Description": "ECS administrator",  
            "MaxSessionDuration": 3600,  
            "CreateDate": "2015-01-23T12:33:18Z",  
            "UpdateDate": "2015-01-23T12:33:18Z"  
        },  
        {  
            "RoleId": "90123456789****",  
            "RoleName": "OSSReadonlyAccess",  
            "RolePrincipalName": "OSSReadonlyAccess@role.123456.onaliyunservice.com",  
            "Arn": "acs:ram::123456789012****:role/OSSReadonlyAccess",  
            "Description": "OSS read-only access",  
            "MaxSessionDuration": 3600,  
            "CreateDate": "2015-01-23T12:33:18Z",  
            "UpdateDate": "2015-01-23T12:33:18Z"  
        }  
    ]  
}
```

Error codes

For a list of error codes, visit the [API Error Center](#).

10.21. UpdateRole

Updates the information of a Resource Access Management (RAM) role.

In this example, the description of the RAM role `ECSAdmin` is updated to `ECS administrator`.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	UpdateRole	The operation that you want to perform. Set the value to UpdateRole.
RoleName	String	Yes	ECSAdmin	The name of the RAM role. The name must be 1 to 64 characters in length and can contain letters, digits, periods (.), and hyphens (-).
NewAssumeRolePolicyDocument	String	No	{ "Statement": [{ "Action": "sts:AssumeRole", "Effect": "Allow", "Principal": { "RAM": "acs:ram::12345678901234****:root" } }, { "Version": "1" }] }	The document of the policy that specifies the trusted entity to assume the RAM role.
NewMaxSessionDuration	Long	No	3600	The maximum session duration of the RAM role. Unit: seconds. Valid values: 3600 to 43200. Default value: 3600. If you do not specify this parameter, the default value is used.
NewDescription	String	No	ECS administrator	The description of the RAM role. The description must be 1 to 1,024 characters in length.

For more information about common request parameters, see [Common parameters](#).

Response parameters

Parameter	Type	Example	Description
RequestId	String	04F0F334-1335-436C-A1D7-6C044FE73368	The ID of the request.
Role	Struct		The information of the RAM role.

Parameter	Type	Example	Description
Arn	String	acs:ram::123456789012****:role/ECSAdmin	The Alibaba Cloud Resource Name (ARN) of the RAM role.
AssumeRolePolicyDocument	String	{ \"Statement\": [{ \"Action\": \"sts:AssumeRole\", \"Effect\": \"Allow\", \"Principal\": { \"RAM\": \"acs:ram::12345678901234****:root\" } }, { \"Version\": \"1\" }] }	The document of the policy that specifies the trusted entity to assume the RAM role.
CreateDate	String	2015-01-23T12:33:18Z	The time when the RAM role was created.
Description	String	ECS administrator	The description of the RAM role.
MaxSessionDuration	Long	3600	The maximum session duration of the RAM role.
RoleId	String	90123456789****	The ID of the RAM role.
RoleName	String	ECSAdmin	The name of the RAM role.
RolePrincipalName	String	ECSAdmin@role.123456.onaliyunservice.com	The name of the RAM role after authorization.
UpdateDate	String	2016-01-23T12:33:18Z	The time when the RAM role was updated.

Examples

Sample requests

```
https://resourcemanager.aliyuncs.com/?Action=UpdateRole
&RoleName=ECSAdmin
&NewDescription=ECS administrator
&<Common request parameters>
```

Sample success responses

XML format

```
<UpdateRoleResponse>
  <RequestId>04F0F334-1335-436C-A1D7-6C044FE73368</RequestId>
  <Role>
    <RoleId>90123456789****</RoleId>
    <RoleName>ECSAdmin</RoleName>
    <RolePrincipalName>ECSAdmin@role.123456.onaliyunservice.com</RolePrincipalName>
    <Arn>acs:ram::123456789012****:role/ECSAdmin</Arn>
    <Description>ECS administrator</Description>
      <MaxSessionDuration>3600</MaxSessionDuration>
    <AssumeRolePolicyDocument>{ "Statement": [ { "Action": "sts:AssumeRole", "Effect": "Allow", "Principal": { "RAM": "acs:ram::12345678901234****:root" } } ], "Version": "1" }</AssumeRolePolicyDocument>
    <CreateDate>2015-01-23T12:33:18Z</CreateDate>
    <UpdateDate>2016-01-23T12:33:18Z</UpdateDate>
  </Role>
</UpdateRoleResponse>
```

JSON format

```
{
  "RequestId": "04F0F334-1335-436C-A1D7-6C044FE73368",
  "Role": {
    "RoleId": "90123456789****",
    "RoleName": "ECSAdmin",
    "RolePrincipalName": "ECSAdmin@role.123456.onaliyunservice.com",
    "Arn": "acs:ram::123456789012****:role/ECSAdmin",
    "Description": "ECS administrator",
    "MaxSessionDuration": 3600,
    "AssumeRolePolicyDocument": "{ \"Statement\": [ { \"Action\": \"sts:AssumeRole\", \"Effect\": \"Allow\", \"Principal\": { \"RAM\": \"acs:ram::12345678901234****:root\" } } ], \"Version\": \"1\" }",
    "CreateDate": "2015-01-23T12:33:18Z",
    "UpdateDate": "2016-01-23T12:33:18Z"
  }
}
```

Error codes

HTTP status code	Error code	Error message	Description
400	InvalidParameter.RoleName.InvalidChars	The specified role name contains invalid characters.	The error message returned because the name of the RAM role contains invalid characters.
400	InvalidParameter.RoleName.Length	The maximum length of the role name is exceeded.	The error message returned because the length of the RAM role name has exceeded the upper limit.

HTTP status code	Error code	Error message	Description
400	InvalidParameter.NewAssumeRolePolicyDocument.Length	The maximum length of the new trust policy document of the role is exceeded.	The error message returned because the length of the value specified for the NewAssumeRolePolicyDocument parameter has exceeded the upper limit.
404	EntityNotExist.Role	The role does not exist.	The error message returned because the RAM role does not exist.
409	MalformedPolicyDocument	The policy format is invalid.	The error message returned because the format of the policy document is invalid.

For a list of error codes, visit the [API Error Center](#).

10.22. DeleteRole

Deletes a RAM role.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	DeleteRole	The operation that you want to perform. Set the value to DeleteRole.
RoleName	String	Yes	ECSAdmin	The name of the RAM role. The name must be 1 to 64 characters in length and can contain letters, digits, periods (.), and hyphens (-).

Response parameters

Parameter	Type	Example	Description
RequestId	String	898FAB24-7509-43EE-A287-086FE4C44394	The ID of the request.

Examples

Sample requests

```
https://resourcemanager.aliyuncs.com/?Action=DeleteRole  
&RoleName=ECSAdmin  
&<Common request parameters>
```

Sample success responses

XML format

```
<DeleteRoleResponse>  
    <RequestId type="string">898FAB24-7509-43EE-A287-086FE4C44394</RequestId>  
</DeleteRoleResponse>
```

JSON format

```
{  
    "RequestId": "898FAB24-7509-43EE-A287-086FE4C44394"  
}
```

Error codes

HTTP status code	Error code	Error message	Description
400	InvalidParameter.RoleName.InvalidChars	The specified role name contains invalid characters.	The error message returned because the RAM role name contains invalid characters.
400	InvalidParameter.RoleName.Length	The maximum length of the role name is exceeded.	The error message returned because the length of the RAM role name has exceeded the upper limit.
404	EntityNotExist.Role	The role does not exist.	The error message returned because the RAM role does not exist.
409	DeleteConflict.RolePolicy	The role cannot have any attached policies when you delete it.	The error message returned because the RAM role has attached policies and you cannot delete it. Detach the policies from the RAM role first.

For a list of error codes, visit the [API Error Center](#).

10.23. ListResources

Queries the resources that can be accessed by the current account in resource groups.

 **Note** You can use a RAM role that is not associated with a session policy to call this API operation.

This topic provides an example on how to call the API operation to query the resources that can be accessed by the current account in resource groups. The response shows that the current account can access only the Elastic Compute Service (ECS) instance `i-23v38****` in the resource group `rg-uPJPp****`.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	ListResources	The operation that you want to perform. Set the value to ListResources .
ResourceGroupId	String	No	rg-uPJPp****	The ID of the resource group.
Service	String	No	ecs	The ID of the Alibaba Cloud service. You can obtain the ID from the Service code column in Alibaba Cloud services that support resource groups .
Region	String	No	cn-hangzhou	The region ID.
ResourceType	String	No	instance	The resource type. For more information about the supported resource types, see the Resource type column in Alibaba Cloud services that support resource groups .
ResourceId	String	No	i-23v38****	The ID of the resource.
PageNumber	Integer	No	1	The number of the page to return. Pages start from page 1. Default value: 1.

Parameter	Type	Required	Example	Description
PageSize	Integer	No	10	The number of entries to return on each page. Valid values: 1 to 100. Default value: 10.

For more information about common request parameters, see [Common parameters](#).

Response parameters

Parameter	Type	Example	Description
TotalCount	Integer	1	The total number of entries returned.
RequestId	String	04F0F334-1335-436C-A1D7-6C044FE73368	The ID of the request.
PageSize	Integer	10	The number of entries returned per page.
PageNumber	Integer	1	The page number of the returned page.
Resources	Array of Resource		The information of the resources.
Resource			
Service	String	ecs	The ID of the Alibaba Cloud service.
ResourceType	String	instance	The type of the resource.
ResourceGroupId	String	rg-uPjpp****	The ID of the resource group.
ResourceId	String	i-23v38****	The ID of the resource.
CreateDate	String	2015-01-23T12:33:18Z	The time when the resource was created. The time is displayed in UTC.
RegionId	String	cn-hangzhou	The region ID.

Examples

Sample requests

```
https://resourcemanager.aliyuncs.com/?Action=ListResources  
&<Common request parameters>
```

Sample success responses

XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<?xml version="1.0" encoding="UTF-8" ?>
<ListResourcesResponse>
<RequestID>04F0F334-1335-436C-A1D7-6C044FE73368</RequestID>
<PageNumber>1</PageNumber>
<PageSize>10</PageSize>
<TotalCount>1</TotalCount>
<Resources>
<Resource>
<ResourceGroupId>rg-uPJpP****</ResourceGroupId>
<Service>ecs</Service>
<ResourceType>instance</ResourceType>
<ResourceId>i-23v38****</ResourceId>
<RegionId>cn-hangzhou</RegionId>
<CreateDate>2015-01-23T12:33:18Z</CreateDate>
</Resource>
</Resources>
</ListResourcesResponse>
```

JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId" : "04F0F334-1335-436C-A1D7-6C044FE73368",
  "PageNumber" : 1,
  "PageSize" : 10,
  "TotalCount" : 1,
  "Resources" : {
    "Resource" : [ {
      "ResourceGroupId" : "rg-uPJpP****",
      "Service" : "ecs",
      "ResourceType" : "instance",
      "ResourceId" : "i-23v38****",
      "RegionId" : "cn-hangzhou",
      "CreateDate" : "2015-01-23T12:33:18Z"
    } ]
  }
}
```

Error codes

HTTP status code	Error code	Error message	Description
400	InvalidParameter.ResourcesIds	The ResourcesIds is invalid.	The error message returned because the value of the ResourcesIds parameter is invalid.
400	LimitExceeded.ResourcesIds	The maximum number of ResourceId is exceeded.	The error message returned because the number of specified resource IDs has exceeded the upper limit.

For a list of error codes, visit the [API Error Center](#).

10.24. MoveResources

Moves resources from one resource group to another. You can move multiple resources that reside in different regions, are used by different Alibaba Cloud services, or belong to different resource groups.

For more information about Alibaba Cloud services whose resources can be moved between resource groups, see the **Supported by the API** column in [Alibaba Cloud services that support resource groups](#).

In this example, two virtual private clouds (VPCs) `vpc-bp1sig0mjktx5ewx1****` and `vpc-bp1visxm225pv49dz****` that reside in different regions and belong to different resource groups are moved to the resource group `rg-aekezmeobk5w****`.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	MoveResources	The operation that you want to perform. Set the value to MoveResources .
ResourceGroupId	String	Yes	<code>rg-aekezmeobk5w***</code>	The ID of the resource group to which you want to move the resources.

Parameter	Type	Required	Example	Description
Resources	Array	Yes		<p>The resources that you want to move.</p> <p>Note You can move a maximum of 10 resources at a time. If you want to move more than 10 resources, move them in batches.</p>
ResourceId	String	No	vpc-bp1sig0mjktx5ewx1****	The ID of the resource.
ResourceType	String	No	vpc	The type of the resource.
RegionId	String	No	cn-hangzhou	The region ID of the resource.
Service	String	No	vpc	The ID of the Alibaba Cloud service to which the resource belongs.

Note

- You can call the [List Resources](#) operation to obtain the values of the `Service` , `RegionId` , `ResourceId` , `ResourceGroupId` , and `ResourceType` request parameters.
- For more information about common request parameters, see [Common parameters](#).

Response parameters

Parameter	Type	Example	Description
RequestId	String	C00B89D3-3247-11DE-95D8-A7C01FB0AB4F	The ID of the request.
Responses	Array of response		The returned results.
Service	String	vpc	The ID of the Alibaba Cloud service.
ResourceId	String	vpc-bp1sig0mjktx5ewx1****	The ID of the resource.
ResourceType	String	vpc	The type of the resource.

Parameter	Type	Example	Description
RequestId	String	C00B89D3-3247-11DE-95D8-A7C01FB0AB4F	The ID of the request.
Status	String	FAIL	The status of the move task. Valid values: • SUCCESS • FAIL
ErrorCode	String	NoPermission	The error code returned. Note This parameter is returned if the resource failed to be moved.
ErrorMsg	String	No permissions	The error message returned. Note This parameter is returned if the resource failed to be moved.
RegionId	String	cn-hangzhou	The region ID of the resource.

Examples

Sample requests

```
https://resource-manager.aliyuncs.com/?Action=MoveResources
&ResourceGroupId=rg-aekzmeobk5w****
&Resources.1.ResourceId=vpc-bp1sig0mjktx5ewx1****
&Resources.1.ResourceType=vpc
&Resources.1.RegionId=cn-hangzhou
&Resources.1.Service=vpc
&Resources.2.ResourceId=vpc-bp1visxm225pv49dz****
&Resources.2.ResourceType=vpc
&Resources.2.RegionId=cn-beijing
&Resources.2.Service=vpc
&<Common request parameters>
```

Sample success responses

XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<?xml version="1.0" encoding="UTF-8" ?>
<MoveResourcesResponse>
    <RequestId>C00B89D3-3247-11DE-95D8-A7C01FB0AB4F</RequestId>
    <Responses>
        <Service>vpc</Service>
        <ResourceId>vpc-bp1sig0mjkt5ewx1****</ResourceId>
        <ResourceType>vpc</ResourceType>
        <RequestId>C00B89D3-3247-11DE-95D8-A7C01FB0AB4F</RequestId>
        <Status>SUCCESS</Status>
        <ErrorCode></ErrorCode>
        <ErrorMsg></ErrorMsg>
        <RegionId>cn-hangzhou</RegionId>
    </Responses>
    <Responses>
        <Service>vpc</Service>
        <ResourceId>vpc-bp1visxm225pv49dz****</ResourceId>
        <ResourceType>vpc</ResourceType>
        <RequestId>C00B89D3-3247-11DE-95D8-A7C01FB0AB4F</RequestId>
        <Status>SUCCESS</Status>
        <ErrorCode></ErrorCode>
        <ErrorMsg></ErrorMsg>
        <RegionId>cn-beijing</RegionId>
    </Responses>
</MoveResourcesResponse>
```

JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId" : "C00B89D3-3247-11DE-95D8-A7C01FB0AB4F",
  "Responses" : [ {
    "Service" : "vpc",
    "ResourceId" : "vpc-bplsig0mjktx5ewx1****",
    "ResourceType" : "vpc",
    "RequestId" : "C00B89D3-3247-11DE-95D8-A7C01FB0AB4F",
    "Status" : "SUCCESS",
    "ErrorCode" : "",
    "ErrorMsg" : "",
    "RegionId" : "cn-hangzhou"
  }, {
    "Service" : "vpc",
    "ResourceId" : "vpc-bplvisxm225pv49dz****",
    "ResourceType" : "vpc",
    "RequestId" : "C00B89D3-3247-11DE-95D8-A7C01FB0AB4F",
    "Status" : "SUCCESS",
    "ErrorCode" : "",
    "ErrorMsg" : "",
    "RegionId" : "cn-beijing"
  } ]
}
```

Error codes

For a list of error codes, visit the [API Error Center](#).

10.25. CreateServiceLinkedRole

Creates a service linked role.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	CreateServiceLinkedRole	The operation that you want to perform. Set the value to CreateServiceLinkedRole.

Parameter	Type	Required	Example	Description
ServiceName	String	Yes	polardb.aliyuncs.com	<p>The service name.</p> <p>For more information about the service name, see Cloud services that support service linked roles.</p>
CustomSuffix	String	No	Example	<p>The suffix of the role name.</p> <p>Only a few service linked roles support custom suffixes.</p> <p>The role name (including its suffix) must be 1 to 64 characters in length and can contain letters, digits, periods (.), and hyphens (-).</p> <p>For example, if the suffix is <code>Example</code>, the role name is <code>ServiceLinkedRoleName_Example</code>.</p>
Description	String	No	Service Linked Role for PolarDB. PolarDB will use this role to access your resources in other services.	<p>The description of the service linked role.</p> <p>This parameter must be specified for only the service linked roles that support custom suffixes. Otherwise, the preset value is used and cannot be modified.</p> <p>The description must be 1 to 1,024 characters in length.</p>

Response parameters

Parameter	Type	Example	Description
RequestId	String	FE58D7CF-03BC-432A-B42D-BC3390C8C2E1	The ID of the request.
Role	Struct		The information of the role.
Arn	String	acs:ram::177242285274****:role/aliyunserviceroleforpolardb	The Alibaba Cloud Resource Name (ARN) of the role.

Parameter	Type	Example	Description
AssumeRolePolicyDocument	String	{\"Statement\": [{\"Action\": \"sts:AssumeRole\", \"Effect\": \"Allow\", \"Principal\": {\"Service\": [\"polardb.aliyuncs.com\"]}}, {\"Version\": \"1\"}]}	The trust policy content of the role.
CreateDate	String	2020-06-30T08:14:16Z	The time when the role was created.
Description	String	Service Linked Role for PolarDB. PolarDB will use this role to access your resources in other services.	The description of the role.
IsServiceLinkedRole	Boolean	true	Indicates whether the role is a service linked role.
RoleId	String	32833240981067****	The ID of the role.
RoleName	String	AliyunServiceRoleForPolarDB	The name of the role.
RolePrincipalName	String	AliyunServiceRoleForPolarDB@role.test.onaliyunservice.com	The role name that uses a domain name as the suffix.

Examples

Sample requests

```
https://resourcemanager.aliyuncs.com/?Action=CreateServiceLinkedRole
&ServiceName=polardb.aliyuncs.com
&<Common request parameters>
```

Sample success responses

XML format

```

<CreateServiceLinkedRoleResponse>
  <Role>
    <RoleName>AliyunServiceRoleForPolarDB</RoleName>
    <Description>Service Linked Role for PolarDB. PolarDB will use this role to access your resources in other services. </Description>
    <AssumeRolePolicyDocument>{"Statement":[{"Action":"sts:AssumeRole","Effect":"Allow","Principal":{"Service":["polardb.aliyuncs.com"]}}],"Version":"1"}</AssumeRolePolicyDocument>
    <Arn>acs:ram::177242285274****:role/aliyunsericeroleforpolardb</Arn>
    <IsServiceLinkedRole>true</IsServiceLinkedRole>
    <CreateDate>2020-06-30T08:14:16Z</CreateDate>
    <RoleId>32833240981067****</RoleId>
    <RolePrincipalName>AliyunServiceRoleForPolarDB@role.test.onaliyunservice.com</RolePrincipalName>
  </Role>
  <RequestId>FE58D7CF-03BC-432A-B42D-BC3390C8C2E1</RequestId>
</CreateServiceLinkedRoleResponse>

```

JSON format

```
{
  "Role": {
    "RoleName": "AliyunServiceRoleForPolarDB",
    "Description": "Service Linked Role for PolarDB. PolarDB will use this role to access your resources in other services.",
    "AssumeRolePolicyDocument": "{\"Statement\": [{\"Action\":\"sts:AssumeRole\",\"Effect\":\"Allow\",\"Principal\":{\"Service\": [\"polardb.aliyuncs.com\"]}}], \"Version\":\"1\"}",
    "Arn": "acs:ram::177242285274****:role/aliyunsericeroleforpolardb",
    "IsServiceLinkedRole": true,
    "CreateDate": "2020-06-30T08:14:16Z",
    "RoleId": "32833240981067****",
    "RolePrincipalName": "AliyunServiceRoleForPolarDB@role.test.onaliyunservice.com"
  },
  "RequestId": "FE58D7CF-03BC-432A-B42D-BC3390C8C2E1"
}
```

Error codes

HttpCode	Error code	Error message	Description
400	InvalidParameter.CustomSuffix.NotAllowed	Custom suffix is not allowed for this Service Linked Role.	The error message returned because the service linked role does not support custom suffixes.
400	InvalidParameter.CustomSuffix.InvalidChars	The parameter CustomSuffix contains invalid characters.	The error message returned because the value of the CustomSuffix parameter contains invalid characters.

HttpCode	Error code	Error message	Description
400	InvalidParameter.CustomSuffix.Length	The maximum length of the parameter CustomSuffix is exceeded.	The error message returned because the length of the value specified for the CustomSuffix parameter has exceeded the upper limit.
400	InvalidParameter.Description.Length	The maximum length of the description is exceeded. It must not exceed 1024 characters.	The error message returned because the length of the policy description has exceeded the upper limit. The policy description must be 1 to 1,024 characters in length.
404	EntityNotExist.Service	The service does not exist.	The error message returned because the service does not exist.
409	EntityAlreadyExists.Role	The role already exists.	The error message returned because the role already exists.
409	LimitExceeded.Role	The maximum number of roles is exceeded.	The error message returned because the maximum number of roles has been reached.

For a list of error codes, visit the [API Error Center](#).

10.26. DeleteServiceLinkedRole

Delete a service linked role.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Required	DeleteServiceLinkedRole	The operation that you want to perform. Set the value to DeleteServiceLinkedRole.
RoleName	String	Required	AliyunServiceRoleForPolarDB	The name of the role.

Response parameters

Parameter	Type	Sample response	Description
DeletionTaskId	String	task/acs-service-role/polardb.aliyuncs.com/AliyunServiceRoleForPolarDB/64c4f9cc-fac2-4692-ae1b-804ae4b9****	The ID of the deletion task.
RequestId	String	B595E5 BF-FF5F-4E7F-B95A-B90FE242FEB6	The ID of the request.

Examples

Sample requests

```
https://resourcemanager.aliyuncs.com/? Action=DeleteServiceLinkedRole
&RoleName=AliyunServiceRoleForPolarDB
&<Common request parameters>
```

Sample success responses

XML format

```
<DeleteServiceLinkedRoleResponse>
    <RequestId>B595E5BF-FF5F-4E7F-B95A-B90FE242FEB6</RequestId>
    <DeletionTaskId>task/acs-service-role/polardb.aliyuncs.com/AliyunServiceRoleForPolarDB/64c4f9cc-fac2-4692-ae1b-804ae4b9****</DeletionTaskId>
</DeleteServiceLinkedRoleResponse>
```

JSON format

```
{
    "RequestId": "B595E5BF-FF5F-4E7F-B95A-B90FE242FEB6",
    "DeletionTaskId": "task/acs-service-role/polardb.aliyuncs.com/AliyunServiceRoleForPolarDB/64c4f9cc-fac2-4692-ae1b-804ae4b9****"
}
```

Error code

HTTP status code	Error code	Error message	Description
404	EntityNotExist.Role	The role does not exist.	The error message returned because the role does not exist.
404	EntityNotExist.ServiceLinkedRole	This role exists but is not a Service Linked Role.	The role exists but is not a service linked role.

For a list of error codes, visit the [API Error Center](#).

10.27.

GetServiceLinkedRoleDeletionStatus

Query the status of the deletion task for a service linked role.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Required	GetServiceLinkedRoleDeletionStatus	The operation that you want to perform. Set the value to GetServiceLinkedRoleDeletionStatus.
DeletionTaskId	String	Required	task/acs-service-role/hdr.aliyuncs.com/AliyunServiceRoleForHdr/c4d22c52-247f-4ee1-83a2-6c0460bd****	The ID of the deletion task.

Response parameters

Parameter	Type	Sample response	Description
Reason	Struct		The reason why the deletion task failed.
Message	String	Service-Linked Role acs:ram:::196813227629****:role/aliyun serviceroleforhdr cannot be deleted as it is in use by hdr.aliyuncs.com.	Failure information.
RoleUsages	Array		Use resource information of the service linked role.
RoleUsage			
Region	String	global	The IDs of the regions in which the resources are to be queried.

Parameter	Type	Sample response	Description
Resources	List	acs:hdr::196813227629****:sitepair/s-000h0y6kld0zwk8l**	The returned resources.
RequestId	String	Cost	The ID of the request.
Status	String	FAILED	<p>The status of the task.</p> <ul style="list-style-type: none"> • SUCCEEDED • IN_PROGRESS • FAILED • NOT_STARTED • INTERNAL_ERROR

Examples

Sample requests

```
https://resourcemanager.aliyuncs.com/? Action=GetServiceLinkedRoleDeletionStatus
&DeletionTaskId=task/acs-service-role/hdr.aliyuncs.com/AliyunServiceRoleForHdr/c4d22c52-247
f-4ee1-83a2-6c0460bd****
&<Common request parameters>
```

Sample success responses

XML format

```
<GetServiceLinkedRoleDeletionStatusResponse>
  <Status>FAILED</Status>
  <RequestId>07194EB1-DB50-4513-A51D-99B30D635AEF</RequestId>
  <Reason>
    <Message>Service-Linked Role acs:ram::196813227629****:role/aliyunservice role fo
    rhdr cannot be deleted as it is in use by hdr.aliyuncs.com. </Message>
    <RoleUsages>
      <RoleUsage>
        <Region>global</Region>
        <Resources>
          <Resource>acs:hdr::196813227629****:sitepair/s-000h0y6kld0zwk
          8l****</Resource>
        </Resources>
      </RoleUsage>
    </RoleUsages>
  </Reason>
</GetServiceLinkedRoleDeletionStatusResponse>
```

JSON format

```
{  
    "Status": "FAILED",  
    "RequestId": "07194EB1-DB50-4513-A51D-99B30D635AEF",  
    "Reason": {  
        "Message": "Service-Linked Role acs:ram::196813227629****:role/aliyunservicefor  
        hdr cannot be deleted as it is in use by hdr.aliyuncs.com.",  
        "RoleUsages": {  
            "RoleUsage": [  
                {  
                    "Region": "global",  
                    "Resources": {  
                        "Resource": [  
                            "acs:hdr::196813227629****:sitepair/s-000h0y6kld0zwk8l****"  
                        ]  
                    }  
                }  
            ]  
        }  
    }  
}
```

Error code

HTTP status code	Error code	Error message	Description
400	InvalidParameter.DeletionTaskId	The DeletionTaskId is invalid.	The error message returned because the specified DeletionTaskId parameter is invalid.
400	InvalidParameter.DeletionTaskId.Length	The length of DeletionTaskId must be between 26 and 255 characters.	The length of the DeletionTaskId parameter exceeds the upper limit.
404	EntityNotExist.ServiceLinkedRole.DeletionTask	The deletion task for the given ID does not exist.	The service linked role deletion task does not exist.

For a list of error codes, visit the [API Error Center](#).

10.28. TagResources

Adds tags to resource groups.

Usage notes

You can add one or more tags to resource groups at a time.

In this example, the tag `k1:v1` is added to the resource group whose ID is `rg-aeckz6bre2uq****`.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	TagResources	The operation that you want to perform. Set the value to TagResources.
ResourceId	Array of String	Yes	rg-aekez6bre2uq***	<p>The IDs of the resource groups.</p> <p>You can specify a maximum of 50 resource group IDs.</p>
Tag	Array	Yes		<p>The tags.</p> <p>You can specify a maximum of 20 tags.</p>
Key	String	No	k1	<p>The tag key.</p> <p>It can be a maximum of 128 characters in length. It cannot contain http:// or https:// and cannot start with acs: or aliyun .</p>
Value	String	No	v1	<p>The tag value.</p> <p>It can be a maximum of 128 characters in length. It cannot contain http:// or https:// and cannot start with acs: .</p>

For more information about common request parameters, see [Common parameters](#).

Response parameters

Parameter	Type	Example	Description
RequestId	String	E7747EDF-EDDC-5B38-9B6A-6392B9C92B1C	The ID of the request.

Examples

Sample requests

```
https://resourcemanager.aliyuncs.com/?Action=TagResources
&ResourceId.1=rg-aezkz6bre2uq****
&Tag.1.Key=k1
&Tag.1.Value=v1
&<Common request parameters>
```

Sample success responses

XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<TagResourcesResponse>
  <RequestId>E7747EDF-EDDC-5B38-9B6A-6392B9C92B1C</RequestId>
</TagResourcesResponse>
```

JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId" : "E7747EDF-EDDC-5B38-9B6A-6392B9C92B1C"
}
```

Error codes

For a list of error codes, visit the [API Error Center](#).

10.29. UntagResources

Removes tags from resource groups.

Usage notes

In this example, the tag whose tag key is `k1` is removed from the resource group whose ID is `rg-aezkz6bre2uq****`.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	UntagResources	The operation that you want to perform. Set the value to <code>UntagResources</code> .

Parameter	Type	Required	Example	Description
All	Boolean	No	false	<p>Specifies whether to remove all tags from the specified resource groups. Valid values:</p> <ul style="list-style-type: none"> • false (default value) • true
ResourceId	Array of String	Yes	rg-aeK2dpwyfr****	<p>The IDs of the resource groups. You can specify a maximum of 50 resource group IDs.</p>
TagKey	Array of String	No	k1	<p>The tag keys. You can specify a maximum of 20 tag keys.</p> <p>Note If the value of the All parameter is true, you do not need to configure the TagKey parameter.</p>

For more information about common request parameters, see [Common parameters](#).

Response parameters

Parameter	Type	Example	Description
RequestId	String	E7747EDF-EDDC-5B38-9B6A-6392B9C92B1C	The ID of the request.

Examples

Sample requests

```
https://resourcemanager.aliyuncs.com/?Action=UntagResources
&ResourceId.1=rg-aeK2dpwyfr****
&TagKey.1=k1
&<Common request parameters>
```

Sample success responses

XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<UntagResourcesResponse>
  <RequestId>E7747EDF-EDDC-5B38-9B6A-6392B9C92B1C</RequestId>
</UntagResourcesResponse>
```

JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId" : "E7747EDF-EDDC-5B38-9B6A-6392B9C92B1C"
}
```

Error codes

For a list of error codes, visit the [API Error Center](#).

10.30. ListTagResources

Queries the tags that are added to resource groups.

Usage notes

In this example, the tags that are added to the resource group `rg-aezk6bre2uq****` are queried. The response shows that only the `k1:v1` tag is added to the resource group.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	ListTagResources	The operation that you want to perform. Set the value to <code>ListTagResources</code> .
NextToken	String	No	caeba0bbb2be03 f84eb48b699f0a* ***	The token that is used to start the next query.
MaxResults	Integer	No	10	The number of entries to return on each page. Valid values: 1 to 100. Default value: 10.

Parameter	Type	Required	Example	Description
Tag	Array	No		The tags. This parameter specifies a filter condition for the query. A maximum of 20 tags can be specified.
Key	String	No	k1	The tag key.
Value	String	No	v1	The tag value.
ResourceId	Array of String	No	rg-aelez6bre2uq****	The IDs of the resource groups. This parameter specifies a filter condition for the query.

For more information about common request parameters, see [Common parameters](#).

Response parameters

Parameter	Type	Example	Description
NextToken	String	caeba0bbb2be03f84eb48b699f0a****	Indicates whether the next query is required. <ul style="list-style-type: none"> If the value of this parameter is empty ("NextToken": ""), all results are returned, and the next query is not required. If the value of this parameter is not empty, the next query is required, and the value is the token used to start the next query.
RequestId	String	8054B059-6B36-53BF-AA45-B8C9A0ED05AB	The ID of the request.
TagResources	Array of TagResource		The tags that are added to the resource group.
TagValue	String	k1	The tag value.
ResourceId	String	rg-aelez6bre2uq****	The ID of the resource group.
TagKey	String	k1	The tag key.

Parameter	Type	Example	Description
ResourceType	String	Custom	The type of the tag. Valid values: <ul style="list-style-type: none">• Custom: custom tag• System: system tag

Examples

Sample requests

```
https://resourcemanager.aliyuncs.com/?Action=ListTagResources
&ResourceId.1=rg-aez6bre2uq****
&<Common request parameters>
```

Sample success responses

XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<ListTagResourcesResponse>
    <RequestId>8054B059-6B36-53BF-AA45-B8C9A0ED05AB</RequestId>
    <TagResources>
        <ResourceId>rg-aez6bre2uq****</ResourceId>
        <TagKey>k1</TagKey>
        <ResourceType>resourcegroup</ResourceType>
        <TagValue>v1</TagValue>
    </TagResources>
</ListTagResourcesResponse>
```

JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
    "RequestId" : "8054B059-6B36-53BF-AA45-B8C9A0ED05AB",
    "TagResources" : [ {
        "ResourceId" : "rg-aez6bre2uq****",
        "TagKey" : "k1",
        "ResourceType" : "resourcegroup",
        "TagValue" : "v1"
    } ]
}
```

Error codes

For a list of error codes, visit the [API Error Center](#).

11.API Reference (Resource Meta Center)

11.1. Resource types that support RMC

This topic describes the resource types that support Resource Meta Center (RMC).

Service	Service code	Resource type	Resource type code in RMC	Attribute
Alibaba Cloud DNS (DNS)	alidns	domain: domain name	ACS::Alidns::Domain	Resource ID, resource name, resource group ID, and creation time
Alibaba Cloud CDN (CDN)	cdn	domain: domain name	ACS::CDN::Domain	Resource ID, resource group ID, creation time, tag, and resource status
Elastic Compute Service (ECS), FPGA as a Service (Faas), Elastic GPU Service, and Elastic Block Storage (EBS)	ecs	ddh: dedicated host	ACS::ECS::DedicatedHost	Resource ID, resource name, resource group ID, creation time, tag, resource status, and zone ID
		disk: disk	ACS::ECS::Disk	Resource ID, resource name, resource group ID, creation time, tag, resource status, region ID, and zone ID
		image: image	ACS::ECS::Image	Resource ID, resource name, resource group ID, creation time, tag, resource status, and region ID
		instance: instance	ACS::ECS::Instance	Resource ID, resource name, resource group ID, creation time, tag, resource status, region ID, zone ID, IP address, virtual private cloud (VPC) ID, and vSwitch ID
		keypair: SSH key pair	ACS::ECS::KeyPair	Resource ID, resource name, resource group ID, and tag
		launchtemplate : instance launch template	ACS::ECS::LaunchTemplate	Resource ID, resource name, resource group ID, creation time, and tag

Service	Service code	Resource type	Resource type code in RMC	Attribute
		eni: elastic network interface (ENI)	ACS::ECS::NetworkInterface	Resource ID, resource name, resource group ID, creation time, tag, resource status, zone ID, IP address, VPC ID, and vSwitch ID
		securitygroup: security group	ACS::ECS::SecurityGroup	Resource ID, resource name, resource group ID, creation time, tag, and VPC ID
		snapshot: snapshot	ACS::ECS::Snapshot	Resource ID, resource name, resource group ID, creation time, tag, and resource status
Elastic IP Address (EIP)	eip	eip: EIP	ACS::EIP::EipAddress	Resource ID, resource name, resource group ID, creation time, tag, resource status, and IP address
ApsaraDB RDS for SQL Server, ApsaraDB RDS for PostgreSQL, ApsaraDB RDS for PPAS, and ApsaraDB RDS for MySQL	rds	dbinstance: instance	ACS::RDS::DBInstance	Resource ID, resource name, resource group ID, creation time, tag, resource status, region ID, zone ID, VPC ID, and vSwitch ID
ApsaraDB for Redis	kvstore	instance: instance	ACS::Redis::DBInstance	Resource ID, resource name, resource group ID, creation time, tag, resource status, region ID, zone ID, VPC ID, and vSwitch ID
		certificate: SSL certificate	ACS::SLB::CACertificate	Resource ID, resource name, resource group ID, and creation time
		certificate: server certificate	ACS::SLB::ServerCertificate	Resource ID, resource name, resource group ID, and creation time
Server Load	slb			

Balancer (SLB) Service	Service code	Resource type	Resource type code in RMC	Attribute
		loadbalancer: SLB instance	ACS::SLB::Load Balancer	Resource ID, resource name, resource group ID, creation time, tag, resource status, region ID, zone ID, IP address, VPC ID, and vSwitch ID
		acl: access control list (ACL)	ACS::SLB::AccessControlList	Resource ID, resource name, resource group ID, and tag
VPC	vpc	vpc: VPC	ACS::VPC::VPC	Resource ID, resource name, resource group ID, creation time, tag, resource status, region ID, and VPC ID
Web Application Firewall (WAF)	waf	domain: domain name	ACS::WAF::Domain	Resource ID, resource group ID, and IP address
Enterprise Distributed Application Service (EDAS)	edas	application: application	ACS::EDAS::Application	Resource ID, resource name, resource group ID, and region ID
		cluster: cluster	ACS::EDAS::Cluster	Resource ID, resource name, tag, region ID, and creation time
Application Load Balancer (ALB)	alb	acl: ACL	ACS::ALB::Acl	Resource ID, resource name, resource group ID, tag, resource status, and region ID
		loadbalancer: ALB instance	ACS::ALB::Load Balancer	Resource ID, resource name, resource group ID, creation time, tag, resource status, region ID, zone ID, and VPC ID
		securitypolicy: security policy	ACS::ALB::SecurityPolicy	Resource ID, resource name, resource group ID, tag, resource status, and region ID
		servergroup: server group	ACS::ALB::ServerGroup	Resource ID, resource name, resource group ID, tag, resource status, and region ID
		acl: ACL	ACS::Smartag::Acl	Resource ID, resource name, resource group ID, and region ID

Service	Service code	Resource type	Resource type code in RMC	Attribute
Smart Access Gateway (SAG)	smartag	abwp: bandwidth plan for application acceleration	ACS::Smartag::ApplicationBandwidthPackage	Resource ID, resource name, resource group ID, region ID, and creation time
		flowlog: flow log	ACS::Smartag::FlowLog	Resource ID, resource name, resource group ID, region ID, and resource status
		qos: quality of service (QoS) policy	ACS::Smartag::Qos	Resource ID, resource name, resource group ID, and region ID
		ccn: Cloud Connect Network (CCN) instance	ACS::Smartag::CloudConnectNetwork	Resource ID, resource name, resource group ID, region ID, creation time, and tag
		smartag: SAG instance	ACS::Smartag::SmartAccessGateway	Resource ID, resource name, resource group ID, region ID, creation time, and resource status
Operation Orchestration Service (OOS)	oos	template: template	ACS::OOS::Template	Resource ID, resource name, resource group ID, region ID, and tag
		execution: execution	ACS::OOS::Execution	Resource ID, resource group ID, region ID, tag, creation time, and resource status
ApsaraDB for HBase	multimod	cluster: cluster	ACS::HBase::Cluster	Resource ID, resource name, resource group ID, region ID, tag, creation time, resource status, vSwitch ID, VPC ID, and zone ID
Alibaba Cloud DNS PrivateZone	pvtz	zone: private zone	ACS::PrivateZone::Zone	Resource ID, resource name, resource group ID, tag, creation time, and zone ID
PolarDB	polardb	cluster: cluster	ACS::PolarDB::DBCCluster	Resource ID, resource name, resource group ID, region ID, tag, creation time, resource status, vSwitch ID, VPC ID, and zone ID

Service	Service code	Resource type	Resource type code in RMC	Attribute
Bastionhost	bastionhost	instance: instance	ACS::Bastionhost::Instance	Resource ID, resource group ID, region ID, tag, creation time, resource status, vSwitch ID, and VPC ID
Global Traffic Manager (GTM)	alidnsgtm	gtminstance: GTM instance	<ul style="list-style-type: none"> • ACS::Alidns:: DnsGtmInstance • ACS::Alidns:: GtmiInstance 	Resource ID, resource name, resource group ID, and creation time
Dynamic Route for CDN (DCDN)	dcdn	domain: domain name	ACS::DCDN::Domain	Resource ID, resource name, resource group ID, tag, creation time, and resource status
AnalyticDB for MySQL	adb	cluster: cluster	ACS::ADB::DBCluster	Resource ID, resource name, resource group ID, region ID, tag, creation time, resource status, vSwitch ID, VPC ID, and zone ID
Elasticsearch	elasticsearch	instance: instance	ACS::Elasticsearch::Instance	Resource ID, resource name, resource group ID, tag, creation time, resource status, vSwitch ID, and VPC ID
EIP Bandwidth Plan	bandwidthpackage	bandwidthpackage: EIP bandwidth plan	ACS::CBWP::CommonBandwidthPackage	Resource ID, resource name, resource group ID, creation time, and resource status
ApsaraDB for MongoDB	dds	dbinstance: instance	ACS::MongoDB::DBInstance	Resource ID, resource name, resource group ID, region ID, tag, creation time, resource status, vSwitch ID, VPC ID, and zone ID
Container Service for Kubernetes (ACK)	cs	cluster: cluster	ACS::ACK::Cluster	Resource ID, resource name, resource group ID, region ID, tag, creation time, resource status, vSwitch ID, VPC ID, and zone ID

11.2. SearchResources

Queries the resources that can be accessed within the current account.

Prerequisites

Resource Meta Center (RMC) is enabled. For more information, see [Query resources that belong to different resource groups](#).

Usage notes

For more information about resource types that support RMC, see [Resource types that support RMC](#).

This topic provides an example on how to call the API operation to query the resources that can be accessed within the current account in the China (Hangzhou) region.

QPS limits

You can call this API operation up to 20 times per second per account. Requests that exceed this limit will fail, and you may experience service interruptions. We recommend that you take note of this limit when you call this operation.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	SearchResources	The operation that you want to perform. Set the value to SearchResources .
NextToken	String	No	eyJzZWFFyY2hBZnRlcnMiOlsiTAWmTU2Nzk4MTU1OSJd****	The token that is used to initiate the next request. If the total number of entries returned for the current request exceeds the value of the <code>MaxResults</code> parameter, the entries are truncated. In this case, you can use the token to initiate another request and obtain the remaining entries.
MaxResults	Integer	No	5	The maximum number of entries to return on each page. Valid values: 1 to 100. Default value: 20.
ResourceGroupId	String	No	rg-acfmzawhxxc***	The ID of the resource group.

Parameter	Type	Required	Example	Description
SortCriterion	Object	No		The method that is used to sort the entries.
Key	String	No	CreateTime	<p>The attribute based on which the entries are sorted.</p> <p>The value <code>CreateTime</code> indicates the creation time of resources.</p>
Order	String	No	ASC	<p>The order in which the entries are sorted. Valid values:</p> <ul style="list-style-type: none"> • ASC: The entries are sorted in ascending order. This value is the default value. • DESC: The entries are sorted in descending order.
Filter.N.Key	String	No	RegionId	<p>The key of the filter condition. Valid values:</p> <ul style="list-style-type: none"> • ResourceType: resource type • RegionId: region ID • ResourceId: resource ID • ResourceGroupId: resource group ID • ResourceName: resource name
Filter.N.Value.N	String	No	cn-hangzhou	The value of the filter condition.
Filter.N.MatchType	String	No	Equals	The matching method. Set the value to Equals. This value indicates that resources that match the filter conditions are queried.

For more information about common request parameters, see [Common parameters](#).

Response parameters

Parameter	Type	Example	Description
NextToken	String	eyJzZWFFY2hBZnRlc nMiOlsMTAwMTU2N zk4MTU1OSJd***	The token that is used to initiate the next request.

Parameter	Type	Example	Description
RequestId	String	14B1E620-E24F-5A0E-B130-AB1488F4F9F1	The ID of the request.
MaxResults	Integer	5	The maximum number of entries returned per page.
Filters	Array of Filter		The filter conditions.
Key	String	RegionId	The key of the filter condition.
MatchType	String	Equals	The matching method.
Values	Array of String	cn-hangzhou	The value of the filter condition.
Resources	Array of Resource		The information of the resources.
ResourceType	String	ACS::VPC::RouteTable	The type of the resource.
CreateTime	String	2021-06-30T09:20:08Z	<p>The time when the resource was created.</p> <div style="background-color: #e0f2f1; padding: 5px;"> ? Note Whether this parameter is returned is determined by the Alibaba Cloud service to which the resource belongs. </div>
ResourceGroupId	String	rg-acfmzawhxxc***	The ID of the resource group.
ZoneId	String	cn-hangzhou-k	<p>The zone ID.</p> <div style="background-color: #e0f2f1; padding: 5px;"> ? Note Whether this parameter is returned is determined by the Alibaba Cloud service to which the resource belongs. </div>

Parameter	Type	Example	Description
AccountId	String	151266687691****	The ID of the Alibaba Cloud account.
ResourceId	String	vtb-bp11lbh452fr8940s***	The ID of the resource.
ResourceName	String	group1	The name of the resource.
RegionId	String	cn-hangzhou	The region ID.
Tags	Array of Tag		The tags.
Key	String	k1	The tag key.
Value	String	v1	The tag value.
IpAddresses	Array of String	192.168.1.2	<p>The IP address.</p> <div style="background-color: #e0f2ff; padding: 10px;"> ? Note Whether this parameter is returned is determined by the Alibaba Cloud service to which the resource belongs. </div>

Examples

Sample requests

```
https://rmc.aliyuncs.com/?Action=SearchResources
&MaxResults=5
&Filter.1.Key=RegionId
&Filter.1.Value.1=cn-hangzhou
&Filter.1.MatchType=Equals
&<Common request parameters>
```

Sample success responses

XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<SearchResourcesResponse>
  <Filters>
    <MatchType>Equals</MatchType>
    <Values>cn-hangzhou</Values>
    <Key>RegionId</Key>
```

```
</Filters>
<NextToken>eyJzZWFrY2hBZnRlcnMiOlslMTAwMTU2Nzk4MTU1OSJd****</NextToken>
<RequestId>14B1E620-E24F-5A0E-B130-AB1488F4F9F1</RequestId>
<MaxResults>5</MaxResults>
<Resources>
    <Resource>
        <AccountId>151266687691****</AccountId>
        <ResourceId>cen-ygbkum0jusr8qg****:cenrmap-7tdf6cpi4u5o9x****</ResourceId>
        <ResourceType>ACS::CEN::CenRouteMap</ResourceType>
        <RegionId>cn-hangzhou</RegionId>
    </Resource>
    <Resource>
        <AccountId>151266687691****</AccountId>
        <ResourceGroupId>rg-acfmzawhxxc****</ResourceGroupId>
        <ResourceId>asdft</ResourceId>
        <ResourceName>asdft</ResourceName>
        <ResourceType>ACS::OOS::Template</ResourceType>
        <RegionId>cn-hangzhou</RegionId>
        <Tags>
            <Value>rg-acfmzawhxxc****</Value>
            <Key>acs:rm:rgId</Key>
        </Tags>
    </Resource>
    <Resource>
        <AccountId>151266687691****</AccountId>
        <ResourceGroupId>rg-acfmzawhxxc****</ResourceGroupId>
        <ResourceId>OOSAutoBindTag</ResourceId>
        <ResourceName>OOSAutoBindTag</ResourceName>
        <ResourceType>ACS::OOS::Template</ResourceType>
        <RegionId>cn-hangzhou</RegionId>
        <Tags>
            <Value>rg-acfmzawhxxc****</Value>
            <Key>acs:rm:rgId</Key>
        </Tags>
    </Resource>
    <Resource>
        <AccountId>151266687691****</AccountId>
        <ResourceGroupId>rg-acfmzawhxxc****</ResourceGroupId>
        <ResourceId>AutoTag</ResourceId>
        <ResourceName>AutoTag</ResourceName>
        <ResourceType>ACS::OOS::Template</ResourceType>
        <RegionId>cn-hangzhou</RegionId>
        <Tags>
            <Value>rg-acfmzawhxxc****</Value>
            <Key>acs:rm:rgId</Key>
        </Tags>
    </Resource>
    <Resource>
        <AccountId>151266687691****</AccountId>
        <ResourceGroupId>rg-acfmzawhxxc****</ResourceGroupId>
        <ResourceId>vtb-bp11lbh452fr8940s****</ResourceId>
        <ResourceName>group1</ResourceName>
        <CreateTime>2020-08-17T02:18:21Z</CreateTime>
        <ResourceType>ACS::VPC::RouteTable</ResourceType>
```

```
<RegionId>cn-hangzhou</RegionId>
</Resource>
</Resources>
</SearchResourcesResponse>
```

JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "Filters" : [ {
    "MatchType" : "Equals",
    "Values" : [ "cn-hangzhou" ],
    "Key" : "RegionId"
  }],
  "NextToken" : "eyJzZWFiY2hBZnRlcnMiOlsiMTAwMTU2Nzk4MTU1OSJd****",
  "RequestId" : "14B1E620-E24F-5A0E-B130-AB1488F4F9F1",
  "MaxResults" : 5,
  "Resources" : [ {
    "AccountId" : "151266687691****",
    "ResourceId" : "cen-ygbkum0jusr8qg****:cenrmap-7tdf6cpi4u5o9x****",
    "ResourceType" : "ACS::CEN::CenRouteMap",
    "RegionId" : "cn-hangzhou"
  }, {
    "AccountId" : "151266687691****",
    "ResourceGroupId" : "rg-acfmzawhxxc****",
    "ResourceId" : "asdft",
    "ResourceName" : "asdft",
    "ResourceType" : "ACS::OOS::Template",
    "RegionId" : "cn-hangzhou",
    "Tags" : [ {
      "Value" : "rg-acfmzawhxxc****",
      "Key" : "acs:rm:rgId"
    } ]
  }, {
    "AccountId" : "151266687691****",
    "ResourceGroupId" : "rg-acfmzawhxxc****",
    "ResourceId" : "OOSAutoBindTag",
    "ResourceName" : "OOSAutoBindTag",
    "ResourceType" : "ACS::OOS::Template",
    "RegionId" : "cn-hangzhou",
    "Tags" : [ {
      "Value" : "rg-acfmzawhxxc****",
      "Key" : "acs:rm:rgId"
    } ]
  }, {
    "AccountId" : "151266687691****",
    "ResourceGroupId" : "rg-acfmzawhxxc****",
    "ResourceId" : "AutoTag",
    "ResourceName" : "AutoTag",
    "ResourceType" : "ACS::OOS::Template",
    "RegionId" : "cn-hangzhou",
    "Tags" : [ {
```

```
        "value" : "rg-acfmzawhxxc****",
        "Key" : "acs:rm:rgId"
    } ]
},
{
"AccountId" : "151266687691****",
"ResourceGroupId" : "rg-acfmzawhxxc****",
"ResourceId" : "vtb-bp11lbh452fr8940s****",
"ResourceName" : "group1",
"CreateTime" : "2020-08-17T02:18:21Z",
"ResourceType" : "ACS::VPC::RouteTable",
"RegionId" : "cn-hangzhou",
"Tags" : [ ]
}
}
```

Error codes

For a list of error codes, visit the [API Error Center](#).

11.3. ListResourceRelationships

Queries the resources that are associated with a specified resource.

Prerequisites

Resource Meta Center (RMC) is enabled. For more information, see [Query resources that belong to different resource groups](#).

Usage notes

This section provides the types of resources that can be queried. Two-way queries are supported. For example, you can query the disks (ACS::ECS::Disk) that are associated with a specific Elastic Compute Service (ECS) instance (ACS::ECS::Instance) or query the ECS instance that is associated with a specific disk.

- For ECS instances, the following types of resources can be queried:
 - ACS::ECS::Disk
 - ACS::EIP::EipAddress
 - ACS::VPC::VPC
 - ACS::ECS::KeyPair
 - ACS::ECS::SecurityGroup
 - ACS::ECS::NetworkInterface
 - ACS::ECS::Image
- For virtual private clouds (VPCs), which are indicated by ACS::VPC::VPC, the following types of resources can be queried:
 - ACS::ECS::Instance
 - ACS::RDS::DBInstance
 - ACS::SLB::LoadBalancer
 - ACS::ALB::LoadBalancer

- o ACS::Elasticsearch::Instance
- o ACS::Redis::DBInstance
- o ACS::PolarDB::DBCluster
- o ACS::MongoDB::DBInstance
- o ACS::DRDS::PolarDBXInstance
- o ACS::EDAS::Cluster
- o ACS::ECI::ContainerGroup
- o ACS::ADB::DBCluster
- o ACS::DRDS::DBInstance
- o ACS::HBase::Cluster
- o ACS::EMR::Cluster

This topic provides an example on how to call the API operation to query the resources that are associated with the ECS instance `i-uf6imlgyr1nudhud****` in the China (Shanghai) region.

QPS limits

You can call this API operation up to 20 times per second per account. Requests that exceed this limit will fail, and you may experience service interruptions. We recommend that you take note of this limit when you call this operation.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	ListResourceRelationships	The operation that you want to perform. Set the value to ListResourceRelationships .
NextToken	String	No	eyJzZWFFyY2hBZnRlcnMiOlSiMTAwMTU2Nzk4MTU1OSJd****	The token that is used to initiate the next request. If the total number of entries returned for the current request exceeds the value of the <code>MaxResults</code> parameter, the entries are truncated. In this case, you can use the token to initiate another request and obtain the remaining entries.

Parameter	Type	Required	Example	Description
MaxResults	Integer	No	20	The maximum number of entries to return on each page. Valid values: 1 to 100. Default value: 20.
SourceRegionId	String	Yes	cn-shanghai	The region ID of the resource whose associated resources you want to query.
SourceResourceType	String	Yes	ACS::ECS::Instance	The type of the resource whose associated resources you want to query.
SourceResourceId.N	String	Yes	i-uf6imlgyr1nudhud****	The ID of the resource whose associated resources you want to query. You can specify a maximum of 10 resource IDs.
TargetResourceType.N	String	No	ACS::VPC::VPC	The type of the associated resources that you want to query. You can specify a maximum of 10 resource types.

For more information about common request parameters, see [Common parameters](#).

Response parameters

Parameter	Type	Example	Description
NextToken	String	eyJzZWFnY2hBZnRlc nMiOlsiTAWMTU2N zk4MTU1OSJd****	The token that is used to initiate the next request.
RequestId	String	97765772-7E65- 5D5E-BBB7- 0CAF4D6260AA	The ID of the request.
MaxResults	Integer	20	The maximum number of entries returned per page.

Parameter	Type	Example	Description
ResourceRelationships	Array of ResourceRelationship		The information of the associated resources.
AccountId	String	154035569884****	The ID of the Alibaba Cloud account.
SourceRegionId	String	cn-shanghai	The region ID of the specified resource.
SourceResourceType	String	ACS::ECS::Instance	The type of the specified resource.
SourceResourceId	String	i-uf6imlgyr1nudhud**	The ID of the specified resource.
TargetRegionId	String	cn-shanghai	The region ID of the associated resource.
TargetResourceType	String	ACS::VPC::VPC	The type of the associated resource.
TargetResourceId	String	vpc-uf6gvyids4utxhxe1**	The ID of the associated resource.

Examples

Sample requests

```
https://rmc.aliyuncs.com/?Action=ListResourceRelationships
&SourceRegionId=cn-shanghai
&SourceResourceType=ACS::ECS::Instance
&SourceResourceId.1=i-uf6imlgyr1nudhud****
```

Sample success responses

XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<ListResourceRelationshipsResponse>
    <ResourceRelationships>
        <ResourceRelationship>
            <TargetResourceType>ACS::ECS::NetworkInterface</TargetResourceType>
            <SourceRegionId>cn-shanghai</SourceRegionId>
            <AccountId>154035569884****</AccountId>
            <TargetResourceId>eni-uf68v6tepfiyeia5***</TargetResourceId>
            <SourceResourceId>i-uf6imlgyrlnudhud***</SourceResourceId>
            <TargetRegionId>cn-shanghai</TargetRegionId>
            <SourceResourceType>ACS::ECS::Instance</SourceResourceType>
        </ResourceRelationship>
        <ResourceRelationship>
            <TargetResourceType>ACS::VPC::VPC</TargetResourceType>
            <SourceRegionId>cn-shanghai</SourceRegionId>
            <AccountId>154035569884****</AccountId>
            <TargetResourceId>vpc-uf6gvyids4utxhxel***</TargetResourceId>
            <SourceResourceId>i-uf6imlgyrlnudhud***</SourceResourceId>
            <TargetRegionId>cn-shanghai</TargetRegionId>
            <SourceResourceType>ACS::ECS::Instance</SourceResourceType>
        </ResourceRelationship>
        <ResourceRelationship>
            <TargetResourceType>ACS::ECS::SecurityGroup</TargetResourceType>
            <SourceRegionId>cn-shanghai</SourceRegionId>
            <AccountId>154035569884****</AccountId>
            <TargetResourceId>sg-uf62urehb0clpmvu***</TargetResourceId>
            <SourceResourceId>i-uf6imlgyrlnudhud***</SourceResourceId>
            <TargetRegionId>cn-shanghai</TargetRegionId>
            <SourceResourceType>ACS::ECS::Instance</SourceResourceType>
        </ResourceRelationship>
        <ResourceRelationship>
            <TargetResourceType>ACS::ECS::Disk</TargetResourceType>
            <SourceRegionId>cn-shanghai</SourceRegionId>
            <AccountId>154035569884****</AccountId>
            <TargetResourceId>d-uf624ee9ow9seg01***</TargetResourceId>
            <SourceResourceId>i-uf6imlgyrlnudhud***</SourceResourceId>
            <TargetRegionId>cn-shanghai</TargetRegionId>
            <SourceResourceType>ACS::ECS::Instance</SourceResourceType>
        </ResourceRelationship>
    </ResourceRelationships>
    <RequestId>97765772-7E65-5D5E-BBB7-0CAF4D6260AA</RequestId>
    <MaxResults>20</MaxResults>
</ListResourceRelationshipsResponse>
```

JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "ResourceRelationships" : [ {
    "TargetResourceType" : "ACS::ECS::NetworkInterface",
    "SourceRegionId" : "cn-shanghai",
    "AccountId" : "154035569884****",
    "TargetResourceId" : "eni-uf68v6tepfiyeia5****",
    "SourceResourceId" : "i-uf6imlgylrlnudhud****",
    "TargetRegionId" : "cn-shanghai",
    "SourceResourceType" : "ACS::ECS::Instance"
  }, {
    "TargetResourceType" : "ACS::VPC::VPC",
    "SourceRegionId" : "cn-shanghai",
    "AccountId" : "154035569884****",
    "TargetResourceId" : "vpc-uf6gvyids4utxhxel****",
    "SourceResourceId" : "i-uf6imlgylrlnudhud****",
    "TargetRegionId" : "cn-shanghai",
    "SourceResourceType" : "ACS::ECS::Instance"
  }, {
    "TargetResourceType" : "ACS::ECS::SecurityGroup",
    "SourceRegionId" : "cn-shanghai",
    "AccountId" : "154035569884****",
    "TargetResourceId" : "sg-uf62urehb0clpmvu****",
    "SourceResourceId" : "i-uf6imlgylrlnudhud****",
    "TargetRegionId" : "cn-shanghai",
    "SourceResourceType" : "ACS::ECS::Instance"
  }, {
    "TargetResourceType" : "ACS::ECS::Disk",
    "SourceRegionId" : "cn-shanghai",
    "AccountId" : "154035569884****",
    "TargetResourceId" : "d-uf624ee9ow9seg01****",
    "SourceResourceId" : "i-uf6imlgylrlnudhud****",
    "TargetRegionId" : "cn-shanghai",
    "SourceResourceType" : "ACS::ECS::Instance"
  } ],
  "RequestId" : "97765772-7E65-5D5E-BBB7-0CAF4D6260AA",
  "MaxResults" : 20
}
```

Error codes

For a list of error codes, visit the [API Error Center](#).