

Alibaba Cloud

Resource Access Management API Reference (RAM)

Document Version: 20220428

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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 Access Management (RAM).

 **Note** Alibaba Cloud provides [OpenAPI Explorer](#) to simplify API usage. You can use OpenAPI Explorer to debug API operations and dynamically generate SDK sample code.

User management

Operation	Description
CreateUser	Creates a RAM user.
GetUser	Queries the information about a RAM user.
UpdateUser	Modifies the information about a RAM user.
DeleteUser	Deletes a RAM user.
ListUsers	Queries all RAM users.
CreateLoginProfile	Enables console logon for a RAM user.
GetLoginProfile	Queries the logon configurations of a RAM user.
DeleteLoginProfile	Disables console logon for a RAM user.
UpdateLoginProfile	Modifies the logon configurations of a RAM user.
CreateAccessKey	Creates an AccessKey pair for a RAM user.
UpdateAccessKey	Changes the status of an AccessKey pair that belongs to a RAM user.
DeleteAccessKey	Deletes an AccessKey pair of a RAM user.
ListAccessKeys	Queries AccessKey pairs that belong to an Alibaba Cloud account or a RAM user.
CreateVirtualMFADevice	Creates a multi-factor authentication (MFA) device.
ListVirtualMFADevices	Queries MFA devices.
DeleteVirtualMFADevice	Deletes an MFA device.
BindMFADevice	Binds an MFA device to a RAM user.
UnbindMFADevice	Unbinds an MFA device from a RAM user.
GetUserMFAInfo	Queries the MFA device that is attached to a RAM user.
ChangePassword	Changes the password of a RAM user.

User group management

Operation	Description
CreateGroup	Creates a RAM user group.
GetGroup	Queries the information about a RAM user group.
UpdateGroup	Modifies the information about a RAM user group.
ListGroup	Queries RAM user groups.
DeleteGroup	Deletes a RAM user group.
AddUserToGroup	Adds a RAM user to a RAM user group.
RemoveUserFromGroup	Removes a RAM user from a RAM user group.
ListGroupsForUser	Queries the RAM user groups to which a RAM user belongs.
ListUsersForGroup	Queries RAM users in a RAM user group.

Role management

Operation	Description
CreateRole	Creates a RAM role.
GetRole	Queries the information about a RAM role.
UpdateRole	Modifies the information about a RAM role.
ListRoles	Queries RAM roles.
DeleteRole	Deletes a RAM role.

Policy management

Operation	Description
CreatePolicy	Creates a policy.
GetPolicy	Queries the information about a policy.
DeletePolicy	Deletes a policy.
UpdatePolicyDescription	Modifies the description of a custom policy.
ListPolicies	Queries policies.
CreatePolicyVersion	Creates a version for a policy.
GetPolicyVersion	Queries the information about a policy version.

Operation	Description
DeletePolicyVersion	Deletes a policy version.
ListPolicyVersions	Queries the versions of a policy.
SetDefaultPolicyVersion	Specifies a version for a policy as the default version.
AttachPolicyToUser	Attaches a policy to a RAM user.
DetachPolicyFromUser	Detaches a policy from a RAM user.
AttachPolicyToGroup	Attaches a policy to a RAM user group.
DetachPolicyFromGroup	Detaches a policy from a RAM user group.
AttachPolicyToRole	Attaches a policy to a RAM role.
DetachPolicyFromRole	Detaches a policy from a RAM role.
ListEntitiesForPolicy	Queries the entities to which a policy is attached.
ListPoliciesForUser	Queries the policies that are attached to a RAM user.
ListPoliciesForGroup	Queries the policies that are attached to a RAM user group.
ListPoliciesForRole	Queries the policies that are attached to a RAM role.

Security control

Operation	Description
SetAccountAlias	Configures an alias for an Alibaba Cloud account.
GetAccountAlias	Queries the alias of an Alibaba Cloud account.
ClearAccountAlias	Deletes the alias of an Alibaba Cloud account.
SetPasswordPolicy	Configures the password policy for RAM users, including the password strength.
GetPasswordPolicy	Queries the password policy of RAM users, including the password strength.
SetSecurityPreference	Configures the security preferences.

2. Calling methods

2.1. Request structure

This topic describes the details about the request structure, including the endpoints of Resource Access Management (RAM), communications protocols, HTTPS request methods, and request parameters.

Endpoints

The RAM endpoint is `https://ram.aliyuncs.com`.

Protocols

To ensure communication security, RAM allows you to send requests only over HTTPS.

Methods

RAM allows you to send HTTPS GET and POST requests.

 **Note** The size of each HTTPS GET request cannot exceed 4 KB. The size of each HTTPS POST request cannot exceed 10 MB.

Parameters

You must configure the following parameters for each API request:

- The Action parameter. This parameter specifies the operation that you want to call.
- The common request parameters. For more information, see [Common parameters](#).
- The request parameters that are specific to the API operation.

Encoding

Requests and responses are encoded in UTF-8.

2.2. Common parameters

This topic describes the parameters that are common to all API requests and responses.

Common request parameters

Parameter	Type	Required	Description
Format	String	No	The response format. Valid values: <ul style="list-style-type: none"> • JSON • XML (default)

Parameter	Type	Required	Description
Version	String	Yes	The version number of the API. Specify the version number in the YYYY-MM-DD format. Set the value to 2015-05-01.
Signature	String	Yes	The signature string of the current request. For more information, see Request signatures .
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.
AccessKeyId	String	Yes	The AccessKey ID provided to you by Alibaba Cloud.
Timestamp	String	Yes	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. For example, use 2013-01-10T12:00:00Z to indicate January 10, 2013, 20:00:00 (UTC+8).

Sample requests

```
https://sts.aliyuncs.com?Action=CreateUser
&Format=xml
&Version=2015-05-01
&Signature=Pc5WB8gokVn0xfeu%2FZV%2BiNMldg****
&SignatureMethod=HMAC-SHA1
&SignatureNonce=1521552885****
&SignatureVersion=1.0
&AccessKeyId=LTAI4GENiH2u8MVj7Khh****
&Timestamp=2015-06-01T12:00:00Z
```

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` status code indicates a successful call.
- A `4xx` or `5xx` 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*/
}
```

2.3. Request signatures

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
sc6v8YG0juE%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 %XY format. XY represents the ASCII code of the characters in hexadecimal notation. For example, double quotation marks (") are encoded as %22 .
Extended UTF-8 characters	These characters are encoded in %XY%ZA... format.
Space characters	<p>Spaces must be encoded as %20 . Do not encode spaces as plus signs (+).</p> <p>This encoding method is different from the application/x-www-form-urlencoded MIME encoding algorithm (such as the java.net.URLEncoder class provided by the Java standard library). However, you can apply the encoding algorithm and replace the plus sign (+) in the encoded string with %20 , the asterisk (*) with %2A , and %7E with the tilde (~). To do this, you can use the following percentEncode method:</p> <pre>private static final String ENCODING = "UTF-8"; private static String percentEncode(String value) throws UnsupportedOperationException { 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 example

The section uses the `CreateUser` API operation as an example to introduce the signature method.

Request URL before the request is signed:

```
https://ram.aliyuncs.com/?UserName=test&SignatureVersion=1.0&Format=JSON&Timestamp=2015-08-18T03%3A15%3A45Z&AccessKeyId=testid&SignatureMethod=HMAC-SHA1&Version=2015-05-01&Action=CreateUser&SignatureNonce=6a6e0ca6-4557-11e5-86a2-b8e8563dc8d2
```

The `StringToSign` :

```
GET&%2F&AccessKeyId%3Dtestid%26Action%3DCreateUser%26Format%3DJSON%26SignatureMethod%3DHMAC-SHA1%26SignatureNonce%3D6a6e0ca6-4557-11e5-86a2-b8e8563dc8d2%26SignatureVersion%3D1.0%26Timestamp%3D2015-08-18T03%253A15%253A45Z%26UserName%3Dtest%26Version%3D2015-05-01
```

Assume that the AccessKey ID is `testid` and the AccessKey secret is `testsecret`. The key that is used to calculate the HMAC value of the string-to-sign is `testsecret&`.

The calculated signature string is `kRA2cnpJVacIhDMzXnoNZG9tDCI=`.

Request URL after the request is signed:

```
https://ram.aliyuncs.com/?UserName=test&SignatureVersion=1.0&Format=JSON&Timestamp=2015-08-18T03%3A15%3A45Z&AccessKeyId=testid&SignatureMethod=HMAC-SHA1&Version=2015-05-01&Signature=kRA2cnpJVacIhDMzXnoNZG9tDCI%3D&Action=CreateUser&SignatureNonce=6a6e0ca6-4557-11e5-86a2-b8e8563dc8d2
```

2.4. Responses

After RAM API operations are called, data is returned in a unified format. The returned data is in either the XML or JSON format, and the XML format is the default option. Sample responses in API documents are formatted in a way that is easier for you to read. The actual responses are not formatted with line breaks or indentation.

Sample success responses

A `2xx` status code indicates that the API operation is successful.

- 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*/
}
```

Sample error responses

A `4xx` or `5xx` status code indicates that the API operation fails and no result data is returned. The returned message body contains the specific error code, error message, the `RequestId` parameter, and the `HostId` parameter. The `RequestId` parameter indicates the globally unique ID of the API request. The `HostId` parameter indicates the ID of the host to which the API request is sent. You can use error codes to locate the errors. For more information, see [Error codes](#).

- XML format

```
<?xml version="1.0" encoding="UTF-8"?>
<Error>
  <RequestId>8906582E-6722-409A-A6C4-0E7863B733A5</RequestId>
  <HostId>ram.aliyuncs.com</HostId>
  <Code>InvalidParameter</Code>
  <Message>The specified parameter "Action or Version" is not valid.</Message>
</Error>
```

- JSON format

```
{
  "RequestId": "7463B73D-35CC-4D19-A010-6B8D65D242EF",
  "HostId": "ram.aliyuncs.com",
  "Code": "InvalidParameter",
  "Message": "The specified parameter \"Action or Version\" is not valid."
}
```

3. 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

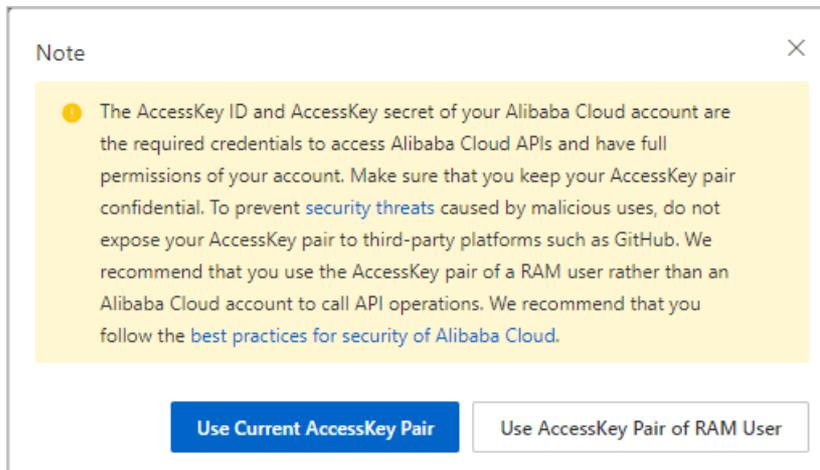
An AccessKey pair consists of an AccessKey ID and an AccessKey secret.

- 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.

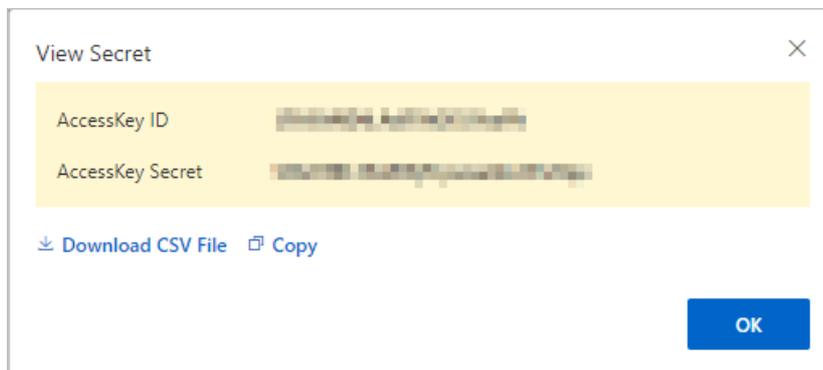
Procedure

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**.



- o 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.

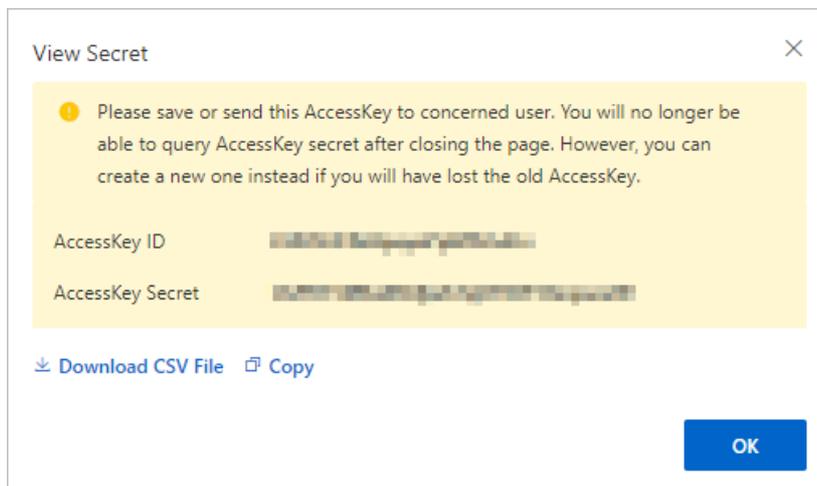


- o Obtain the AccessKey pair of a RAM user
 - a. Click **Use AccessKey Pair of RAM User**. Then, you are redirected to the RAM console.
 - b. On the **Users** page of the **RAM console**, find the RAM user whose AccessKey pair you want to obtain.

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.

4. RAM authorization

Before a Resource Access Management (RAM) user calls the API operations of RAM 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 account ID of an Alibaba Cloud account
- `<user-name>`: the username of a RAM user
- `<role-name>`: the name of a RAM role

 **Note** The name of a RAM role must be in lowercase letters in a policy.

- `<group-name>`: the name of a RAM user group
- `<policy-name>`: the name of a policy
- `<serial-number>`: the serial number of a virtual multi-factor authentication (MFA) device

The following table lists the RAM API operations that you can specify in the Action element and the ARN format that is used in the Resource element.

Action	Resource
ram:CreateUser	<code>acs:ram:*:<account-id>:user/*</code>
ram:GetUser	<code>acs:ram:*:<account-id>:user/<user-name></code>
ram:UpdateUser	<code>acs:ram:*:<account-id>:user/<user-name></code>
ram>DeleteUser	<code>acs:ram:*:<account-id>:user/<user-name></code>
ram:ListUsers	<code>acs:ram:*:<account-id>:user/*</code>
ram:CreateLoginProfile	<code>acs:ram:*:<account-id>:user/<user-name></code>
ram:GetLoginProfile	<code>acs:ram:*:<account-id>:user/<user-name></code>
ram>DeleteLoginProfile	<code>acs:ram:*:<account-id>:user/<user-name></code>
ram:UpdateLoginProfile	<code>acs:ram:*:<account-id>:user/<user-name></code>
ram:CreateAccessKey	<code>acs:ram:*:<account-id>:user/<user-name></code>
ram:UpdateAccessKey	<code>acs:ram:*:<account-id>:user/<user-name></code>
ram>DeleteAccessKey	<code>acs:ram:*:<account-id>:user/<user-name></code>
ram:ListAccessKeys	<code>acs:ram:*:<account-id>:user/<user-name></code>

Action	Resource
ram:CreateVirtualMFADevice	acs:ram:*:<account-id>:mfa/*
ram:ListVirtualMFADevices	acs:ram:*:<account-id>:mfa/*
ram>DeleteVirtualMFADevice	acs:ram:*:<account-id>:mfa/<serial-number>
ram:BindMFADevice	acs:ram:*:<account-id>:user/<user-name>
ram:UnbindMFADevice	acs:ram:*:<account-id>:user/<user-name>
ram:GetUserMFAInfo	acs:ram:*:<account-id>:user/<user-name>
ram:ChangePassword	acs:ram:*:<account-id>:user/<user-name>
ram:CreateGroup	acs:ram:*:<account-id>:group/*
ram:GetGroup	acs:ram:*:<account-id>:group/<group-name>
ram:UpdateGroup	acs:ram:*:<account-id>:group/<group-name>
ram:ListGroups	acs:ram:*:<account-id>:group/*
ram>DeleteGroup	acs:ram:*:<account-id>:group/<group-name>
ram:AddUserToGroup	acs:ram:*:<account-id>:user/<user-name>
	acs:ram:*:<account-id>:group/<group-name>
ram:RemoveUserFromGroup	acs:ram:*:<account-id>:user/<user-name>
	acs:ram:*:<account-id>:group/<group-name>
ram:ListGroupsForUser	acs:ram:*:<account-id>:user/<user-name>
ram:ListUsersForGroup	acs:ram:*:<account-id>:group/<group-name>
ram:CreateRole	acs:ram:*:<account-id>:role/<role-name>
ram:GetRole	acs:ram:*:<account-id>:role/<role-name>
ram:UpdateRole	acs:ram:*:<account-id>:role/<role-name>
ram:ListRoles	acs:ram:*:<account-id>:role/*

Action	Resource
ram:DeleteRole	<code>acs:ram:*:<account-id>:role/<role-name></code>
ram:CreatePolicy	<code>acs:ram:*:<account-id>:policy/*</code>
ram:GetPolicy	<ul style="list-style-type: none"> System policy: <code>acs:ram*:system:policy/<policy-name></code> Custom policy: <code>acs:ram:*:<account-id>:policy/<policy-name></code>
ram>DeletePolicy	<code>acs:ram:*:<account-id>:policy/<policy-name></code>
ram:UpdatePolicyDescription	<code>acs:ram:*:<account-id>:policy/<policy-name></code>
ram:ListPolicies	<code>acs:ram:*:<account-id>:policy/*</code>
ram:CreatePolicyVersion	<code>acs:ram:*:<account-id>:policy/<policy-name></code>
ram:GetPolicyVersion	<ul style="list-style-type: none"> System policy: <code>acs:ram*:system:policy/<policy-name></code> Custom policy: <code>acs:ram:*:<account-id>:policy/<policy-name></code>
ram>DeletePolicyVersion	<code>acs:ram:*:<account-id>:policy/<policy-name></code>
ram:ListPolicyVersions	<ul style="list-style-type: none"> System policy: <code>acs:ram*:system:policy/<policy-name></code> Custom policy: <code>acs:ram:*:<account-id>:policy/<policy-name></code>
ram:SetDefaultPolicyVersion	<code>acs:ram:*:<account-id>:policy/<policy-name></code>
ram:AttachPolicyToUser	<ul style="list-style-type: none"> <code>acs:ram:*:<account-id>:user/<user-name></code> System policy: <code>acs:ram*:system:policy/<policy-name></code> Custom policy: <code>acs:ram:*:<account-id>:policy/<policy-name></code>
	<code>acs:ram:*:<account-id>:user/<user-name></code>

Action	Resource
ram:DetachPolicyFromUser	<ul style="list-style-type: none"> • System policy: <code>acs:ram::system:policy/<policy-name></code> • Custom policy: <code>acs:ram:*:<account-id>:policy/<policy-name></code>
ram:AttachPolicyToGroup	<p><code>acs:ram:*:<account-id>:group/<group-name></code></p> <ul style="list-style-type: none"> • System policy: <code>acs:ram::system:policy/<policy-name></code> • Custom policy: <code>acs:ram:*:<account-id>:policy/<policy-name></code>
ram:DetachPolicyFromGroup	<p><code>acs:ram:*:<account-id>:group/<group-name></code></p> <ul style="list-style-type: none"> • System policy: <code>acs:ram::system:policy/<policy-name></code> • Custom policy: <code>acs:ram:*:<account-id>:policy/<policy-name></code>
ram:AttachPolicyToRole	<p><code>acs:ram:*:<account-id>:role/<role-name></code></p> <ul style="list-style-type: none"> • System policy: <code>acs:ram::system:policy/<policy-name></code> • Custom policy: <code>acs:ram:*:<account-id>:policy/<policy-name></code>
ram:DetachPolicyFromRole	<p><code>acs:ram:*:<account-id>:role/<role-name></code></p> <ul style="list-style-type: none"> • System policy: <code>acs:ram::system:policy/<policy-name></code> • Custom policy: <code>acs:ram:*:<account-id>:policy/<policy-name></code>
ram:ListPoliciesForUser	<code>acs:ram:*:<account-id>:user/<user-name></code>
ram:ListPoliciesForGroup	<code>acs:ram:*:<account-id>:group/<group-name></code>
ram:ListPoliciesForRole	<code>acs:ram:*:<account-id>:role/<role-name></code>

Action	Resource
ram:ListEntitiesForPolicy	<ul style="list-style-type: none"> • System policy: <code>acs:ram::system:policy/<policy-name></code> • Custom policy: <code>acs:ram:*:<account-id>:policy/<policy-name></code>
ram:SetAccountAlias	<code>acs:ram:*:<account-id>:*</code>
ram:GetAccountAlias	<code>acs:ram:*:<account-id>:*</code>
ram:ClearAccountAlias	<code>acs:ram:*:<account-id>:*</code>
ram:SetPasswordPolicy	<code>acs:ram:*:<account-id>:*</code>
ram:GetPasswordPolicy	<code>acs:ram:*:<account-id>:*</code>
ram:SetSecurityPreference	<code>acs:ram:*:<account-id>:*</code>

5. User management APIs

5.1. CreateUser

Creates a Resource Access Management (RAM) user.

This topic provides an example on how to create a RAM user named `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	CreateUser	The operation that you want to perform. Set the value to CreateUser .
UserName	String	Yes	alice	The username of the RAM user. The username must be 1 to 64 characters in length, and can contain letters, digits, periods (.), hyphens (-), and underscores (_).
DisplayName	String	No	alice	The display name of the RAM user. The display name must be 1 to 128 characters in length.
MobilePhone	String	No	86-1868888****	The mobile phone number of the RAM user. Format: Country code-Mobile phone number. <div style="border: 1px solid #ccc; background-color: #e0f2f1; padding: 5px; margin-top: 10px;">? Note This parameter applies only to the China site (aliyun.com).</div>

Parameter	Type	Required	Example	Description
Email	String	No	alice@example.com	The email address of the RAM user. Note This parameter applies only to the China site (aliyun.com).
Comments	String	No	This is a cloud computing engineer.	The description of the RAM user. The description must be 1 to 128 characters in length.

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

Response parameters

Parameter	Type	Example	Description
User	Object		The information about the RAM user.
DisplayName	String	alice	The display name of the RAM user.
Email	String	alice@example.com	The email address of the RAM user. Note This parameter can be returned only on the China site (aliyun.com).
MobilePhone	String	86-186888****	The mobile phone number of the RAM user. Note This parameter can be returned only on the China site (aliyun.com).
UserId	String	122748924538****	The ID of the RAM user.
Comments	String	This is a cloud computing engineer.	The description of the RAM user.
CreateDate	String	2015-01-23T12:33:18Z	The point in time when the RAM user was created. The time is displayed in UTC.

Parameter	Type	Example	Description
UserName	String	alice	The username of the RAM user.
RequestId	String	04F0F334-1335-436C-A1D7-6C044FE73368	The ID of the request.

Examples

Sample requests

```
https://ram.aliyuncs.com/?Action=CreateUser
&UserName=alice
&DisplayName=alice
&MobilePhone=86-1868888****
&Email=alice@example.com
&Comments=This is a cloud computing engineer.
&<Common request parameters>
```

Sample success responses

XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<CreateUserResponse>
  <RequestId>04F0F334-1335-436C-A1D7-6C044FE73368</RequestId>
  <User>
    <UserId>122748924538****</UserId>
    <UserName>alice</UserName>
    <DisplayName>alice</DisplayName>
    <MobilePhone>86-1868888****</MobilePhone>
    <Email>alice@example.com</Email>
    <Comments>This is a cloud computing engineer.</Comments>
    <CreateDate>2015-01-23T12:33:18Z</CreateDate>
  </User>
</CreateUserResponse>
```

JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId" : "04F0F334-1335-436C-A1D7-6C044FE73368",
  "User" : {
    "UserId" : "122748924538****",
    "UserName" : "alice",
    "DisplayName" : "alice",
    "MobilePhone" : "86-1868888****",
    "Email" : "alice@example.com",
    "Comments" : "This is a cloud computing engineer.",
    "CreateDate" : "2015-01-23T12:33:18Z"
  }
}
```

Error codes

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

After a RAM user is created, you can perform the following operations:

- Call the `CreateLoginProfile` operation to allow the RAM user to log on to the Alibaba Cloud Management Console. You can also configure settings such as logon passwords for the RAM user. For more information, see [CreateLoginProfile](#).
- Call the `CreateAccessKey` operation to create an AccessKey pair for the RAM user. For more information, see [CreateAccessKey](#).

5.2. GetUser

Queries the information about a RAM user.

This topic provides an example on how to query the information about the RAM user `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	GetUser	The operation that you want to perform. Set the value to <code>GetUser</code> .

Parameter	Type	Required	Example	Description
UserName	String	Yes	alice	The username of the RAM user. The username must be 1 to 64 characters in length, and can contain letters, digits, periods (.), hyphens (-), and underscores (_).

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

Response parameters

Parameter	Type	Example	Description
User	Object		The information about the RAM user.
DisplayName	String	alice	The display name of the RAM user.
Email	String	alice@example.com	The email address of the RAM user. Note This parameter can be returned only on the China site (aliyun.com).
UpdateDate	String	2015-02-11T03:15:21Z	The point in time when the information about the RAM user was last modified. The time is displayed in UTC.
MobilePhone	String	86-1860000****	The mobile phone number of the RAM user. Note This parameter can be returned only on the China site (aliyun.com).
UserId	String	222748924538****	The ID of the RAM user.
Comments	String	This is a cloud computing engineer.	The description of the RAM user.
LastLoginDate	String	2015-01-23T12:33:18Z	The point in time when the RAM user last logged on to the Alibaba Cloud Management Console by using the password. The time is displayed in UTC.

Parameter	Type	Example	Description
CreateDate	String	2015-01-23T12:33:18Z	The point in time when the RAM user was created. The time is displayed in UTC.
UserName	String	alice	The username of the RAM user.
RequestId	String	2D69A58F-345C-4FDE-88E4-BF5189484043	The ID of the request.

Examples

Sample requests

```
https://ram.aliyuncs.com/?Action=GetUser
&UserName=alice
&<Common Request Parameters>
```

Sample success responses

XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<GetUserResponse>
  <RequestId>2D69A58F-345C-4FDE-88E4-BF5189484043</RequestId>
  <User>
    <UserId>222748924538****</UserId>
    <UserName>alice</UserName>
    <DisplayName>alice</DisplayName>
    <MobilePhone>86-1860000****</MobilePhone>
    <Email>alice@example.com</Email>
    <Comments>This is a cloud computing engineer.</Comments>
    <CreateDate>2015-01-23T12:33:18Z</CreateDate>
    <UpdateDate>2015-02-11T03:15:21Z</UpdateDate>
    <LastLoginDate>2015-01-23T12:33:18Z</LastLoginDate>
  </User>
</GetUserResponse>
```

JSON format

```

HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId" : "2D69A58F-345C-4FDE-88E4-BF5189484043",
  "User" : {
    "UserId" : "222748924538****",
    "UserName" : "alice",
    "DisplayName" : "alice",
    "MobilePhone" : "86-1860000****",
    "Email" : "alice@example.com",
    "Comments" : "This is a cloud computing engineer.",
    "CreateDate" : "2015-01-23T12:33:18Z",
    "UpdateDate" : "2015-02-11T03:15:21Z",
    "LastLoginDate" : "2015-01-23T12:33:18Z"
  }
}

```

Error codes

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

5.3. UpdateUser

Modifies the information about a RAM user.

This topic provides an example on how to change the name of a RAM user from `zhangq****` to `xiaoq****`.

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	UpdateUser	The operation that you want to perform. Set the value to UpdateUser .
UserName	String	Yes	zhangq****	The username of the RAM user.
NewUserName	String	Yes	xiaoq****	The new username of the RAM user. The username must be 1 to 64 characters in length, and can contain letters, digits, periods (.), hyphens (-), and underscores (_).

Parameter	Type	Required	Example	Description
NewDisplayName	String	No	xiaoq****	The new display name of the RAM user. The name must be 1 to 128 characters in length.
NewMobilePhone	String	No	86-186000****	The new mobile phone number of the RAM user. Format: <Country code>-<Mobile phone number>. <div style="border: 1px solid #add8e6; padding: 5px; margin-top: 10px;"> <p> Note This parameter can be returned only on the China site (aliyun.com).</p> </div>
NewEmail	String	No	xiaoq****@example.com	The new email address of the RAM user. <div style="border: 1px solid #add8e6; padding: 5px; margin-top: 10px;"> <p> Note This parameter can be returned only on the China site (aliyun.com).</p> </div>
NewComments	String	No	This is a cloud computing engineer.	The new description of the RAM user. The description must be 1 to 128 characters in length.

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

Response parameters

Parameter	Type	Example	Description
User	Object		The information about the RAM user.
DisplayName	String	xiaoq****	The display name of the RAM user.
Email	String	xiaoq****@example.com	The email address of the RAM user. <div style="border: 1px solid #add8e6; padding: 5px; margin-top: 10px;"> <p> Note This parameter can be returned only on the China site (aliyun.com).</p> </div>

Parameter	Type	Example	Description
UpdateDate	String	2015-02-11T03:15:21Z	The point in time when the information about the RAM user was last modified. The time is displayed in UTC.
MobilePhone	String	86-1860000****	The mobile phone number of the RAM user. <div style="background-color: #e0f2f1; padding: 5px;"><p> Note This parameter can be returned only on the China site (aliyun.com).</p></div>
UserId	String	122748924538****	The ID of the RAM user.
Comments	String	This is a cloud computing engineer.	The description of the RAM user.
CreateDate	String	2015-01-23T12:33:18Z	The point in time when the RAM user was created. The time is displayed in UTC.
UserName	String	xiaoq****	The username of the RAM user.
RequestId	String	04F0F334-1335-436C-A1D7-6C044FE73368	The ID of the request.

Examples

Sample requests

```
https://ram.aliyuncs.com/?Action=UpdateUser
&UserName=zhangq****
&NewUserName=xiaoq****
&<Common request parameters>
```

Sample success responses

`XML` format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<UpdateUserResponse>
  <RequestId>04F0F334-1335-436C-A1D7-6C044FE73368</RequestId>
  <User>
    <UserId>122748924538****</UserId>
    <UserName>xiaoq****</UserName>
    <DisplayName>xiaoq****</DisplayName>
    <MobilePhone>86-1860000****</MobilePhone>
    <Email>xiaoq****@example.com</Email>
    <Comments>This is a cloud computing engineer.</Comments>
    <CreateDate>2015-01-23T12:33:18Z</CreateDate>
    <UpdateDate>2015-02-11T03:15:21Z</UpdateDate>
  </User>
</UpdateUserResponse>
```

JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId" : "04F0F334-1335-436C-A1D7-6C044FE73368",
  "User" : {
    "UserId" : "122748924538****",
    "UserName" : "xiaoq****",
    "DisplayName" : "xiaoq****",
    "MobilePhone" : "86-1860000****",
    "Email" : "xiaoq****@example.com",
    "Comments" : "This is a cloud computing engineer.",
    "CreateDate" : "2015-01-23T12:33:18Z",
    "UpdateDate" : "2015-02-11T03:15:21Z"
  }
}
```

Error codes

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

5.4. DeleteUser

You can call this operation to delete a RAM user.

Before you delete a RAM user, make sure that no policies are attached to the RAM user and that the RAM user does not belong to any groups.

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	DeleteUser	The operation that you want to perform. Set the value to DeleteUser.
UserName	String	Yes	zhangq****	The name of the RAM user. The name must be 1 to 64 characters in length, and can contain letters, digits, periods (.), hyphens (-), and underscores (_).

Response parameters

Parameter	Type	Example	Description
RequestId	String	1C488B66-B819-4D14-8711-C4EAAA13AC01	The ID of the request.

Examples

Sample requests

```
https://ram.aliyuncs.com/?Action=DeleteUser
&UserName=zhangq****
&<Common request parameters>
```

Sample success responses

XML format

```
1C488B66-B819-4D14-8711-C4EAAA13AC01
```

JSON format

```
{
  "RequestId": "1C488B66-B819-4D14-8711-C4EAAA13AC01"
}
```

Error codes

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

5.5. ListUsers

Queries the list of all RAM users.

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	ListUsers	The operation that you want to perform. Set the value to ListUsers.
Marker	String	No	EXAMPLE	The <code>marker</code> . If part of a previous response is truncated, you can use this parameter to obtain the truncated part.
MaxItems	Integer	No	100	The number of entries to return. If a response is truncated because it reaches the value of MaxItems, the value of <code>IsTruncated</code> will be <code>true</code> . Valid values: 1 to 100. Default value: 100.

Response parameters

Parameter	Type	Example	Description
IsTruncated	Boolean	true	Indicates whether the response is truncated.
Marker	String	EXAMPLE	The <code>marker</code> . This parameter is returned only if the value of <code>IsTruncated</code> is <code>true</code> . If the parameter is returned, you can call this operation again and set the <code>Marker</code> parameter to obtain the truncated part.
RequestId	String	4B450CA1-36E8-4AA2-8461-86B42BF4CC4E	The ID of the request.
Users	Array		The list of RAM users.
User			
Comments	String	Cloud computing engineer	The description of the RAM user.

Parameter	Type	Example	Description
CreateDate	String	2015-01-23T12:33:18Z	The time when the RAM user was created.
DisplayName	String	Zhangq****	The display name of the RAM user.
Email	String	zhangq****@example.com	The email address of the RAM user. Note This parameter is not available.
MobilePhone	String	86-1860000****	The mobile phone number of the RAM user. Note This parameter is not available.
UpdateDate	String	2015-01-23T12:33:18Z	The time when the RAM user was modified.
UserId	String	122748924538****	The unique ID of the RAM user.
UserName	String	zhangq****	The username of the RAM user.

Examples

Sample requests

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

Sample success responses

XML format

```
<ListUsersResponse>
  <RequestId>4B450CA1-36E8-4AA2-8461-86B42BF4CC4E</RequestId>
  <IsTruncated>true</IsTruncated>
  <Marker>EXAMPLE</Marker>
  <Users>
    <User>
      <UserId>122748924538****</UserId>
      <UserName>zhangq****</UserName>
      <DisplayName>Zhangq****</DisplayName>
      <Comments>Cloud computing engineer</Comments>
      <CreateDate>2015-01-23T12:33:18Z</CreateDate>
      <UpdateDate>2015-01-23T12:33:18Z</UpdateDate>
    </User>
    <User>
      <UserId>140649822472****</UserId>
      <UserName>li****</UserName>
      <DisplayName>Li****</DisplayName>
      <Comments>Permission manager</Comments>
      <CreateDate>2015-02-18T17:22:08Z</CreateDate>
      <UpdateDate>2015-02-18T17:22:08Z</UpdateDate>
    </User>
  </Users>
</ListUsersResponse>
```

JSON format

```
{
  "RequestId": "4B450CA1-36E8-4AA2-8461-86B42BF4CC4E",
  "IsTruncated": true,
  "Marker": "EXAMPLE",
  "Users": {
    "User": [
      {
        "UserId": "122748924538****",
        "UserName": "zhangq****",
        "DisplayName": "Zhangq****",
        "Comments": "Cloud computing engineer",
        "CreateDate": "2015-01-23T12:33:18Z",
        "UpdateDate": "2015-01-23T12:33:18Z"
      },
      {
        "UserId": "140649822472****",
        "UserName": "li****",
        "DisplayName": "Li****",
        "Comments": "Permission manager",
        "CreateDate": "2015-02-18T17:22:08Z",
        "UpdateDate": "2015-02-18T17:22:08Z"
      }
    ]
  }
}
```

Error codes

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

5.6. CreateLoginProfile

Enables console logon for a RAM user.

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	CreateLoginProfile	The operation that you want to perform. Set the value to CreateLoginProfile.
UserName	String	Yes	zhangq****	The name of the RAM user.
Password	String	Yes	mypassword	The logon password of the RAM user. The password must meet the password strength requirements. For more information, see GetPasswordPolicy .
PasswordResetRequired	Boolean	No	false	Specifies whether the RAM user must change the password upon logon. Default value: <code>false</code> .
MFABindRequired	Boolean	No	false	Specifies whether an MFA device must be attached to the RAM user upon logon. Default value: <code>false</code> .

Response parameters

Parameter	Type	Example	Description
LoginProfile			The logon configurations of the RAM user.
CreateDate	String	2015-01-23T12:33:18Z	The time when the logon configurations were created.

Parameter	Type	Example	Description
MFABindRequired	Boolean	false	Indicates whether an MFA device must be attached to the RAM user upon logon.
PasswordResetRequired	Boolean	false	Indicates whether the RAM user must change the password upon logon.
UserName	String	zhangq****	The name of the RAM user.
RequestId	String	04F0F334-1335-436C-A1D7-6C044FE73368	The ID of the request.

Examples

Sample requests

```
https://ram.aliyuncs.com/?Action=CreateLoginProfile
&UserName=zhangq****
&Password=mypassword
&PasswordResetRequired=false
&<Common request parameters>
```

Sample success responses

XML format

```
<RequestId>04F0F334-1335-436C-A1D7-6C044FE73368</RequestId>
<LoginProfile>
  <UserName>zhangq****</UserName>
  <PasswordResetRequired>>true</PasswordResetRequired>
  <MFABindRequired>>true</MFABindRequired>
  <CreateDate>2015-01-23T12:33:18Z</CreateDate>
</LoginProfile>
```

JSON format

```
{
  "RequestId": "04F0F334-1335-436C-A1D7-6C044FE73368",
  "LoginProfile": {
    "PasswordResetRequired": true,
    "MFABindRequired": true,
    "UserName": "zhangq****",
    "CreateDate": "2015-01-23T12:33:18Z"
  }
}
```

Error codes

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

5.7. GetLoginProfile

Queries the logon configurations of a RAM user.

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	GetLoginProfile	The operation that you want to perform. Set the value to GetLoginProfile.
UserName	String	Yes	zhangq****	The name of the RAM user.

Response parameters

Parameter	Type	Example	Description
LoginProfile			The logon configurations of the RAM user.
CreateDate	String	2015-01-23T12:33:18Z	The time when the logon configurations were created.
MFABindRequired	Boolean	true	Indicates whether an MFA device must be attached to the RAM user upon logon.
PasswordResetRequired	Boolean	true	Indicates whether the RAM user must change the password upon logon.
UserName	String	zhangq****	The name of the RAM user.
RequestId	String	04F0F334-1335-436C-A1D7-6C044FE73368	The ID of the request.

Examples

Sample requests

```
https://ram.aliyuncs.com/?Action=GetLoginProfile
&UserName=zhangq****
&<Common request parameters>
```

Sample success responses

XML format

```
<RequestId>04F0F334-1335-436C-A1D7-6C044FE73368</RequestId>
<LoginProfile>
  <UserName>zhangq****</UserName>
  <PasswordResetRequired>>true</PasswordResetRequired>
  <MFABindRequired>>true</MFABindRequired>
  <CreateDate>2015-01-23T12:33:18Z</CreateDate>
</LoginProfile>
```

JSON format

```
{
  "RequestId": "04F0F334-1335-436C-A1D7-6C044FE73368",
  "LoginProfile": {
    "PasswordResetRequired": true,
    "MFABindRequired": true,
    "UserName": "zhangq****",
    "CreateDate": "2015-01-23T12:33:18Z"
  }
}
```

Error codes

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

5.8. DeleteLoginProfile

Disables console logon for a RAM user.

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	DeleteLoginProfile	The operation that you want to perform. Set the value to DeleteLoginProfile.

Parameter	Type	Required	Example	Description
UserName	String	Yes	zhangq****	The name of the RAM user.

Response parameters

Parameter	Type	Example	Description
RequestId	String	1C488B66-B819-4D14-8711-C4EAAA13AC01	The ID of the request.

Examples

Sample requests

```
https://ram.aliyuncs.com/?Action=DeleteLoginProfile
&UserName=zhangq****
&<Common request parameters>
```

Sample success responses

XML format

```
1C488B66-B819-4D14-8711-C4EAAA13AC01
```

JSON format

```
{
  "RequestId": "1C488B66-B819-4D14-8711-C4EAAA13AC01"
}
```

Error codes

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

5.9. UpdateLoginProfile

Modifies the logon configurations of a RAM user.

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	UpdateLoginProfile	The operation that you want to perform. Set the value to UpdateLoginProfile.
UserName	String	Yes	zhangq****	The name of the RAM user.
MFABindRequired	Boolean	No	true	Specifies whether an MFA device must be attached to the RAM user upon logon.
Password	String	No	mypassword	The logon password of the RAM user. The password must meet the password strength requirements.
PasswordResetRequired	Boolean	No	true	Specifies whether the RAM user must change the password upon logon.

Response parameters

Parameter	Type	Example	Description
RequestId	String	04F0F334-1335-436C-A1D7-6C044FE73368	The ID of the request.

Examples

Sample requests

```
https://ram.aliyuncs.com/?Action=UpdateLoginProfile
&UserName=zhangq****
&Password=mypassword
&PasswordResetRequired=true
&<Common request parameters>
```

Sample success responses

XML format

```
04F0F334-1335-436C-A1D7-6C044FE73368
```

JSON format

```
{
  "RequestId": "04F0F334-1335-436C-A1D7-6C044FE73368"
}
```

Error codes

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

5.10. CreateAccessKey

Creates an AccessKey pair for a RAM user.

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	CreateAccessKey	The operation that you want to perform. Set the value to CreateAccessKey.
UserName	String	No	zhangq****	The name of the RAM user. If a RAM user calls this operation and does not specify this parameter, an AccessKey pair is created for the RAM user.

Response parameters

Parameter	Type	Example	Description
AccessKey			The information of the AccessKey pair.
AccessKeyId	String	0wNEpMMLzy7s****	The AccessKey ID.
AccessKeySecret	String	PupkTg8jdm1cXxYacgE736PJ****	The AccessKey secret.
CreateDate	String	2015-01-23T12:33:18Z	The time when the AccessKey pair was created.
Status	String	Active	The status of the AccessKey pair. Valid values: Active and Inactive.

Parameter	Type	Example	Description
RequestId	String	04F0F334-1335-436C-A1D7-6C044FE73368	The ID of the request.

Examples

Sample requests

```
https://ram.aliyuncs.com/?Action=CreateAccessKey
&UserName=zhangq****
&<Common request parameters>
```

Sample success responses

XML format

```
<RequestId>04F0F334-1335-436C-A1D7-6C044FE73368</RequestId>
<AccessKey>
  <AccessKeyId>0wNEpMMLzy7s****</AccessKeyId>
  <AccessKeySecret>PupkTg8jdmaulcXxYacgE736PJ****</AccessKeySecret>
  <Status>Active</Status>
  <CreateDate>2015-01-23T12:33:18Z</CreateDate>
</AccessKey>
```

JSON format

```
{
  "AccessKey": {
    "Status": "Active",
    "AccessKeySecret": "PupkTg8jdmaulcXxYacgE736PJ****",
    "AccessKeyId": "0wNEpMMLzy7s****",
    "CreateDate": "2015-01-23T12:33:18Z"
  },
  "RequestId": "04F0F334-1335-436C-A1D7-6C044FE73368"
}
```

Error codes

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

5.11. UpdateAccessKey

Changes the status of an AccessKey that belongs to a RAM user.

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
UserAccessKeyId	String	Yes	0wNEpMMLzy7s**	The AccessKey ID in the AccessKey pair whose status you want to change.
Status	String	Yes	Inactive	The status of the AccessKey pair. Valid values: <code>Active</code> and <code>Inactive</code> .
Action	String	Yes	UpdateAccessKey	The operation that you want to perform. Set the value to <code>UpdateAccessKey</code> .
UserName	String	No	zhangq****	The name of the RAM user.

Response parameters

Parameter	Type	Example	Description
RequestId	String	04F0F334-1335-436C-A1D7-6C044FE73368	The ID of the request.

Examples

Sample requests

```
https://ram.aliyuncs.com/?Action=UpdateAccessKey
&UserName=zhangq****
&UserAccessKeyId=0wNEpMMLzy7s****
&Status=Inactive
&<Common request parameters>
```

Sample success responses

`XML` format

```
04F0F334-1335-436C-A1D7-6C044FE73368
```

`JSON` format

```
{
  "RequestId": "04F0F334-1335-436C-A1D7-6C044FE73368"
}
```

Error codes

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

5.12. DeleteAccessKey

Deletes an AccessKey pair of a RAM user.

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	DeleteAccessKey	The operation that you want to perform. Set the value to DeleteAccessKey.
UserAccessKeyId	String	Yes	0wNEpMMLzy7s**	The AccessKey ID in the AccessKey pair that you want to delete.
UserName	String	No	zhangq****	The name of the RAM user.

Response parameters

Parameter	Type	Example	Description
RequestId	String	04F0F334-1335-436C-A1D7-6C044FE73368	The ID of the request.

Examples

Sample requests

```
https://ram.aliyuncs.com/?Action=DeleteAccessKey
&UserName=zhangq****
&UserAccessKeyId=0wNEpMMLzy7s****
&<Common request parameters>
```

Sample success responses

XML format

```
04F0F334-1335-436C-A1D7-6C044FE73368
```

JSON format

```
{
  "RequestId": "04F0F334-1335-436C-A1D7-6C044FE73368"
}
```

Error codes

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

5.13. ListAccessKeys

Queries the list of all AccessKey pairs that belong to a RAM user.

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	ListAccessKeys	The operation that you want to perform. Set the value to ListAccessKeys.
UserName	String	No	zhangq****	The name of the RAM user. If a RAM user calls this operation and does not specify this parameter, the AccessKey pairs of the RAM user are returned.

Response parameters

Parameter	Type	Example	Description
AccessKeys	Array		The list of AccessKey pairs that belong to the RAM user.
AccessKey			The information of an AccessKey pair.
AccessKeyId	String	0wNEpMMLzy7s****	The AccessKey ID.
CreateDate	String	2015-01-23T12:33:18Z	The time when the AccessKey pair was created.

Parameter	Type	Example	Description
Status	String	Active	The status of the AccessKey pair. Valid values: Active and Inactive.
RequestId	String	4B450CA1-36E8-4AA2-8461-86B42BF4CC4E	The ID of the request.

Examples

Sample requests

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

Sample success responses

XML format

```
<RequestId>4B450CA1-36E8-4AA2-8461-86B42BF4CC4E</RequestId>
<AccessKeys>
  <AccessKey>
    <AccessKeyId>0wNEpMMLzy7s****</AccessKeyId>
    <Status>Active</Status>
    <CreateDate>2015-01-23T12:33:18Z</CreateDate>
  </AccessKey>
  <AccessKey>
    <AccessKeyId>WnIWUruvfDT****</AccessKeyId>
    <Status>Inactive</Status>
    <CreateDate>2015-03-24T21:12:21Z</CreateDate>
  </AccessKey>
</AccessKeys>
```

JSON format

```

{
  "RequestId": "4B450CA1-36E8-4AA2-8461-86B42BF4CC4E",
  "AccessKeys": {
    "AccessKey": [
      {
        "Status": "Active",
        "AccessKeyId": "0wNEpMMLzy7s****",
        "CreateDate": "2015-01-23T12:33:18Z"
      },
      {
        "Status": "Inactive",
        "AccessKeyId": "WnIWUruvfaDT****",
        "CreateDate": "2015-03-24T21:12:21Z"
      }
    ]
  }
}

```

Error codes

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

5.14. CreateVirtualMFADevice

Creates a multi-factor authentication (MFA) device.

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	CreateVirtualMFADevice	The operation that you want to perform. Set the value to CreateVirtualMFADevice.
VirtualMFADeviceName	String	Yes	device001	The name of the MFA device. The name must be 1 to 64 characters in length and can contain letters, digits, periods (.), and hyphens (-).

Response parameters

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

Parameter	Type	Example	Description
RequestId	String	04F0F334-1335-436C-A1D7-6C044FE73368	The ID of the request.
VirtualMFADevice	Struct		The information of the MFA device.
Base32StringSeed	String	DSF98HAD982KJA9SDFNAS9D8FU839B8ADHBGS****	The key of the MFA device.
QRCodePNG	String	YXNkZmFzZDlmeW5hc2Q5OGZoODd4bXJmcThhaGU5aSBmYXNkZiBzYWVmIGFGIDRxd2VjIGEdHEz****	The Base64-encoded QR code, in the PNG format.
SerialNumber	String	acs:ram::123456789012****:mfa/device001	The serial number of the MFA device.

Examples

Sample requests

```
https://ram.aliyuncs.com/?Action=CreateVirtualMFADevice
&VirtualMFADeviceName=device001
&<Common request parameters>
```

Sample success responses

XML format

```
<CreateVirtualMFADeviceResponse>
  <RequestId>04F0F334-1335-436C-A1D7-6C044FE73368</RequestId>
  <VirtualMFADevice>
    <SerialNumber>acs:ram::123456789012****:mfa/device001</SerialNumber>
    <Base32StringSeed>DSF98HAD982KJA9SDFNAS9D8FU839B8ADHBGS****</Base32StringSeed>
    <QRCodePNG>YXNkZmFzZDlmeW5hc2Q5OGZoODd4bXJmcThhaGU5aSBmYXNkZiBzYWVmIGFGIDRxd2VjIGEdHEz****</QRCodePNG>
  </VirtualMFADevice>
</CreateVirtualMFADeviceResponse>
```

JSON format

```
{
  "RequestId": "04F0F334-1335-436C-A1D7-6C044FE73368",
  "VirtualMFADevice": {
    "SerialNumber": "acs:ram::123456789012****:mfa/device001",
    "Base32StringSeed": "DSF98HAD982KJA9SDFNAS9D8FU839B8ADHBGS****",
    "QRCodePNG": "YXNkZmFzZDlmeW5hc2Q5OGZoODd4bXJmcThhaGU5aSbWYXNkZiBzYWVmIGFGIDRxd2VjIGEgdHEz****"
  }
}
```

Error codes

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

5.15. ListVirtualMFADevices

Queries the list of all multi-factor authentication (MFA) devices.

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	ListVirtualMFADevices	The operation that you want to perform. Set the value to ListVirtualMFADevices.

Response parameters

Parameter	Type	Example	Description
RequestId	String	04F0F334-1335-436C-A1D7-6C044FE73368	The ID of the request.
VirtualMFADevices	Array		The list of MFA devices.
VirtualMFADevice			The information of an MFA device.
ActivateDate	String	2015-02-18T17:22:08Z	The time when the MFA device was enabled.

Parameter	Type	Example	Description
SerialNumber	String	acs:ram::123456789012****:mfa/device002	The serial number of the MFA device.
User			The basic information of the RAM user to which the MFA device is attached.
DisplayName	String	Zhang*	The display name of the RAM user.
UserId	String	122748924538****	The unique ID of the RAM user.
UserName	String	zhangq****	The name of the RAM user.

Examples

Sample requests

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

Sample success responses

XML format

```
<RequestId>04F0F334-1335-436C-A1D7-6C044FE73368</RequestId>
<VirtualMFADevices>
  <VirtualMFADevice>
    <SerialNumber>acs:ram::123456789012****:mfa/device001</SerialNumber>
  </VirtualMFADevice>
  <VirtualMFADevice>
    <SerialNumber>acs:ram::123456789012****:mfa/device002</SerialNumber>
    <ActivateDate>2015-02-18T17:22:08Z</ActivateDate>
    <User>
      <UserId>122748924538****</UserId>
      <UserName>zhangq****</UserName>
      <DisplayName>Zhang*</DisplayName>
    </User>
  </VirtualMFADevice>
</VirtualMFADevices>
```

JSON format

```
{
  "RequestId": "04F0F334-1335-436C-A1D7-6C044FE73368",
  "VirtualMFADevices": {
    "VirtualMFADevice": [
      {
        "SerialNumber": "acs:ram::123456789012****:mfa/device001"
      },
      {
        "User": {
          "UserName": "zhangq****",
          "UserId": "122748924538****",
          "DisplayName": "Zhang*"
        },
        "SerialNumber": "acs:ram::123456789012****:mfa/device002",
        "ActivateDate": "2015-02-18T17:22:08Z"
      }
    ]
  }
}
```

Error codes

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

5.16. DeleteVirtualMFADevice

Deletes a multi-factor authentication (MFA) device.

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	DeleteVirtualMFADevice	The operation that you want to perform. Set the value to DeleteVirtualMFADevice.
SerialNumber	String	Yes	acs:ram::123456789012****:mfa/device002	The serial number of the MFA device.

Response parameters

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

Parameter	Type	Example	Description
RequestId	String	04F0F334-1335-436C-A1D7-6C044FE73368	The ID of the request.

Examples

Sample requests

```
https://ram.aliyuncs.com/?Action=DeleteVirtualMFADevice
&SerialNumber=acs:ram::123456789012****:mfa/device002
&<Common request parameters>
```

Sample success responses

XML format

```
04F0F334-1335-436C-A1D7-6C044FE73368
```

JSON format

```
{
  "RequestId": "04F0F334-1335-436C-A1D7-6C044FE73368"
}
```

Error codes

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

5.17. BindMFADevice

Attaches a multi-factor authentication (MFA) device to a RAM user.

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	BindMFADevice	The operation that you want to perform. Set the value to BindMFADevice.
UserName	String	Yes	zhangq****	The name of the RAM user.

Parameter	Type	Required	Example	Description
SerialNumber	String	Yes	acs:ram::123456789012****:mfa/device002	The serial number of the MFA device.
AuthenticationCode1	String	Yes	11****	The first authentication code.
AuthenticationCode2	String	Yes	33****	The second authentication code.

Response parameters

Parameter	Type	Example	Description
RequestId	String	04F0F334-1335-436C-A1D7-6C044FE73368	The ID of the request.

Examples

Sample requests

```
https://ram.aliyuncs.com/?Action=BindMFADevice
&SerialNumber=acs:ram::123456789012****:mfa/device002
&UserName=zhangq****
&AuthenticationCode1=11****
&AuthenticationCode2=33****
&<Common request parameters>
```

Sample success responses

XML format

```
04F0F334-1335-436C-A1D7-6C044FE73368
```

JSON format

```
{
  "RequestId": "04F0F334-1335-436C-A1D7-6C044FE73368"
}
```

Error codes

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

5.18. UnbindMFADevice

Detaches a multi-factor authentication (MFA) device from a RAM user.

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	UnbindMFADevice	The operation that you want to perform. Set the value to UnbindMFADevice.
UserName	String	Yes	zhangq****	The name of the RAM user.

Response parameters

Parameter	Type	Example	Description
MFADevice			The information of the MFA device.
SerialNumber	String	acs:ram::123456789012****:mfa/device002	The serial number of the MFA device.
RequestId	String	04F0F334-1335-436C-A1D7-6C044FE73368	The ID of the request.

Examples

Sample requests

```
https://ram.aliyuncs.com/?Action=UnbindMFADevice
&UserName=zhangq****
&<Common request parameters>
```

Sample success responses

XML format

```
<RequestId>04F0F334-1335-436C-A1D7-6C044FE73368</RequestId>
<MFADevice>
  <SerialNumber>acs:ram::123456789012****:mfa/device002</SerialNumber>
</MFADevice>
```

JSON format

```
{
  "RequestId": "04F0F334-1335-436C-A1D7-6C044FE73368",
  "MFADevice": {
    "SerialNumber": "acs:ram::123456789012****:mfa/device002"
  }
}
```

Error codes

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

5.19. GetUserMFAInfo

Queries the multi-factor authentication (MFA) device that is attached to a Resource Access Management (RAM) user.

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	GetUserMFAInfo	The operation that you want to perform. Set the value to GetUserMFAInfo.
UserName	String	Yes	test	The username of the RAM user.

Response parameters

Parameter	Type	Example	Description
MFADevice	Struct		The information about the MFA device that is attached to the RAM user.
SerialNumber	String	acs:ram::177242285274****:mfa/test	The serial number of the MFA device.
Type	String	VMFA	The type of the MFA device. Valid values: <ul style="list-style-type: none"> VMFA: virtual MFA device U2F: Universal 2nd Factor (U2F) security key

Parameter	Type	Example	Description
RequestId	String	04F0F334-1335-436C-A1D7-6C044FE73368	The ID of the request.

Examples

Sample requests

```
https://ram.aliyuncs.com/?Action=GetUserMFAInfo
&UserName=test
&<Common Request Parameters>
```

Sample success responses

XML format

```
<GetUserMFAInfoResponse>
  <RequestId>04F0F334-1335-436C-A1D7-6C044FE73368</RequestId>
  <MFADevice>
    <SerialNumber>acs:ram::177242285274****:mfa/test</SerialNumber>
    <Type>VMFA</Type>
  </MFADevice>
</GetUserMFAInfoResponse>
```

JSON format

```
{
  "RequestId": "04F0F334-1335-436C-A1D7-6C044FE73368",
  "MFADevice": {
    "SerialNumber": "acs:ram::177242285274****:mfa/test",
    "Type": "VMFA"
  }
}
```

Error codes

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

5.20. ChangePassword

Changes the password that is used to log on to the Alibaba Cloud Management Console.

Note This operation is available only for RAM users. Before you call this operation, make sure that `AllowUserToChangePassword` in `SetSecurityPreference` is set to `True`. The value `True` indicates that RAM users can change their passwords.

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	ChangePassword	The operation that you want to perform. Set the value to ChangePassword .
OldPassword	String	Yes	12****	The old password that is used to log on to the Alibaba Cloud Management Console.
NewPassword	String	Yes	aw\$2****	The new password that is used to log on to the Alibaba Cloud Management Console. The password must meet the complexity requirements. For more information, see SetPasswordPolicy .

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.

Examples

Sample requests

```
https://ram.aliyuncs.com/?Action=ChangePassword
&OldPassword=12****
&NewPassword=aw$2****
&<Common request parameters>
```

Sample success responses

`XML` format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<ChangePassword>
  <RequestId>04F0F334-1335-436C-A1D7-6C044FE73368</RequestId>
</ChangePassword>
```

JSON **format**

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId" : "04F0F334-1335-436C-A1D7-6C044FE73368"
}
```

Error codes

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

6. Group management APIs

6.1. CreateGroup

Creates a RAM user 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	CreateGroup	The operation that you want to perform. Set the value to CreateGroup.
GroupName	String	Yes	Dev-Team	The name of the RAM user group. The name must be 1 to 64 characters in length and can contain letters, digits, periods (.), hyphens (-), and underscores (_).
Comments	String	No	Development team	The description of the RAM user group. The comments must be 1 to 128 characters in length.

Response parameters

Parameter	Type	Example	Description
Group	Struct		The information of the RAM user group.
Comments	String	Development team	The description of the RAM user group.
CreateDate	String	2015-01-23T12:33:18Z	The time when the RAM user group was created.
GroupId	String	g-FpMEHIMysofp****	The ID of the RAM user group.
GroupName	String	Dev-Team	The name of the RAM user group.

Parameter	Type	Example	Description
RequestId	String	D3F0679E-9757-95DB-AF2D-04D5188C69C5	The ID of the request.

Examples

Sample requests

```
https://ram.aliyuncs.com/?Action=CreateGroup
&GroupName=Dev-Team
&Comments=Development team
&<Common request parameters>
```

Sample success responses

XML format

```
<CreateGroupResponse>
  <RequestId>D3F0679E-9757-95DB-AF2D-04D5188C69C5</RequestId>
  <Group>
    <GroupName>Dev-Team</GroupName>
    <Comments>Development team</Comments>
    <CreateDate>2015-01-23T12:33:18Z</CreateDate>
    <GroupId>g-FpMEHiMysofp****</GroupId>
  </Group>
</CreateGroupResponse>
```

JSON format

```
{
  "RequestId": "D3F0679E-9757-95DB-AF2D-04D5188C69C5",
  "Group": {
    "GroupName": "Dev-Team",
    "Comments": "Development team",
    "CreateDate": "2015-01-23T12:33:18Z",
    "GroupId": "g-FpMEHiMysofp****"
  }
}
```

Error codes

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

6.2. GetGroup

Queries the information of a RAM user 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	GetGroup	The operation that you want to perform. Set the value to GetGroup.
GroupName	String	Yes	Dev-Team	The name of the RAM user group.

Response parameters

Parameter	Type	Example	Description
Group	Struct		The information of the RAM user group.
Comments	String	Development team	The description of the RAM user group.
CreateDate	String	2015-01-23T12:33:18Z	The time when the RAM user group was created.
GroupId	String	g-FpMEHiMysofp****	The ID of the RAM user group.
GroupName	String	Dev-Team	The name of the RAM user group.
UpdateDate	String	2015-02-11T03:15:21Z	The time when the information of the RAM user group was updated.
RequestId	String	D4065824-E422-3ED6-68B1-1AF7D5C7804C	The ID of the request.

Examples

Sample requests

```
https://ram.aliyuncs.com/?Action=GetGroup
&GroupName=Dev-Team
&<Common request parameters>
```

Sample success responses

`XML` format

```
<GetGroupResponse>
  <RequestId>D4065824-E422-3ED6-68B1-1AF7D5C7804C</RequestId>
  <Group>
    <GroupName>Dev-Team</GroupName>
    <Comments>Development team</Comments>
    <CreateDate>2015-01-23T12:33:18Z</CreateDate>
    <UpdateDate>2015-02-11T03:15:21Z</UpdateDate>
    <GroupId>g-FpMEHiMysofp****</GroupId>
  </Group>
</GetGroupResponse>
```

JSON format

```
{
  "RequestId": "D4065824-E422-3ED6-68B1-1AF7D5C7804C",
  "Group": {
    "GroupName": "Dev-Team",
    "Comments": "Development team",
    "CreateDate": "2015-01-23T12:33:18Z",
    "UpdateDate": "2015-02-11T03:15:21Z",
    "GroupId": "g-FpMEHiMysofp****"
  }
}
```

Error codes

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

6.3. UpdateGroup

Modifies a RAM user 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	UpdateGroup	The operation that you want to perform. Set the value to UpdateGroup.
GroupName	String	Yes	Dev-Team	The name of the RAM user group.

Parameter	Type	Required	Example	Description
NewGroupName	String	No	NewDev-Team	The new name of the RAM user group. The name must be 1 to 64 characters in length and can contain letters, digits, periods (.), hyphens (-), and underscores (_).
NewComments	String	No	Development team	The new description of the RAM user group. The comments must be 1 to 128 characters in length.

Response parameters

Parameter	Type	Example	Description
Group	Struct		The information of the RAM user group.
Comments	String	Development team	The description of the RAM user group.
CreateDate	String	2015-01-23T12:33:18Z	The time when the RAM user group was created.
GroupId	String	g-FpMEHiMysofp****	The ID of the RAM user group.
GroupName	String	NewDev-Team	The new name of the RAM user group.
UpdateDate	String	2015-01-23T12:33:18Z	The time when the information of the RAM user group was updated.
RequestId	String	EC6647CC-0A36-EC7A-BA72-CC81BF3DE182	The ID of the request.

Examples

Sample requests

```
https://ram.aliyuncs.com/?Action=UpdateGroup
&GroupName=Dev-Team
&NewGroupName=NewDev-Team
&<Common request parameters>
```

Sample success responses

XML format

```
<UpdateGroupResponse>
  <RequestId>EC6647CC-0A36-EC7A-BA72-CC81BF3DE182</RequestId>
  <Group>
    <GroupName>NewDev-Team</GroupName>
    <Comments>Development team</Comments>
    <CreateDate>2015-01-23T12:33:18Z</CreateDate>
    <UpdateDate>2015-01-23T12:33:18Z</UpdateDate>
    <GroupId>g-FpMEHiMysofp****</GroupId>
  </Group>
</UpdateGroupResponse>
```

JSON format

```
{
  "RequestId": "EC6647CC-0A36-EC7A-BA72-CC81BF3DE182",
  "Group": {
    "GroupName": "NewDev-Team",
    "Comments": "Development team",
    "CreateDate": "2015-01-23T12:33:18Z",
    "UpdateDate": "2015-01-23T12:33:18Z",
    "GroupId": "g-FpMEHiMysofp****"
  }
}
```

Error codes

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

6.4. ListGroups

Queries RAM user groups.

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	ListGroups	The operation that you want to perform. Set the value to ListGroups.

Parameter	Type	Required	Example	Description
Marker	String	No	EXAMPLE	The <code>marker</code> . If part of a previous response is truncated, you can use this parameter to obtain the truncated part.
MaxItems	Integer	No	100	The number of entries to return. If a response is truncated because it reaches the value of <code>MaxItems</code> , the value of <code>IsTruncated</code> is <code>true</code> . Valid values: 1 to 1000. Default value: 100.

Response parameters

Parameter	Type	Example	Description
Groups	Array of Group		The list of the RAM user groups.
Group			
Comments	String	Development team	The description of the RAM user group.
CreateDate	String	2015-01-23T12:33:18Z	The time when the RAM user group was created.
GroupId	String	g-FpMEHiMysofp****	The ID of the RAM user group.
GroupName	String	Dev-Team	The name of the RAM user group.
UpdateDate	String	2015-01-23T12:33:18Z	The time when the information of the RAM user group was updated.
IsTruncated	Boolean	true	Indicates whether the response is truncated.
Marker	String	EXAMPLE	The marker. This parameter is returned only if the value of <code>IsTruncated</code> is <code>true</code> . If <code>true</code> is returned, you can call this operation again and set the <code>Marker</code> parameter to obtain the truncated part.

Parameter	Type	Example	Description
RequestId	String	065527AA-2F2E-AD7C-7484-F2626CFE4934	The ID of the request.

Examples

Sample requests

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

Sample success responses

XML **format**

```
<ListGroupsResponse>
  <RequestId>065527AA-2F2E-AD7C-7484-F2626CFE4934</RequestId>
  <IsTruncated>true</IsTruncated>
  <Marker>EXAMPLE</Marker>
  <Groups>
    <Group>
      <GroupName>Dev-Team</GroupName>
      <Comments>Development team</Comments>
      <CreateDate>2015-01-23T12:33:18Z</CreateDate>
      <UpdateDate>2015-01-23T12:33:18Z</UpdateDate>
      <GroupId>g-FpMEHiMysofp****</GroupId>
    </Group>
    <Group>
      <GroupName>QA-Team</GroupName>
      <Comments>Test team</Comments>
      <CreateDate>2015-02-18T17:22:08Z</CreateDate>
      <UpdateDate>2015-02-18T17:22:08Z</UpdateDate>
      <GroupId>g-zYtroLrgbZR1****</GroupId>
    </Group>
  </Groups>
</ListGroupsResponse>
```

JSON **format**

```

{
  "RequestId": "065527AA-2F2E-AD7C-7484-F2626CFE4934",
  "IsTruncated": true,
  "Marker": "EXAMPLE",
  "Groups": {
    "Group": [
      {
        "GroupName": "Dev-Team",
        "Comments": "Development team",
        "CreateDate" : "2015-01-23T12:33:18Z",
        "UpdateDate" : "2015-01-23T12:33:18Z",
        "GroupId": "g-FpMEHiMysofp*****"
      },
      {
        "GroupName": "QA-Team",
        "Comments": "Test team",
        "CreateDate" : "2015-02-18T17:22:08Z",
        "UpdateDate" : "2015-02-18T17:22:08Z",
        "GroupId": "g-zYtroLrgbZR1*****"
      }
    ]
  }
}

```

Error codes

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

6.5. AddUserToGroup

Adds a RAM user to a RAM user 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	AddUserToGroup	The operation that you want to perform. Set the value to AddUserToGroup.
UserName	String	Yes	zhangq****	The name of the RAM user.

Parameter	Type	Required	Example	Description
GroupName	String	Yes	Dev-Team	The name of the RAM user group.

Response parameters

Parameter	Type	Example	Description
RequestId	String	1B968853-B423-63A6-FE1F-45E81BC2AD61	The ID of the request.

Examples

Sample requests

```
https://ram.aliyuncs.com/?Action=AddUserToGroup
&UserName=zhangq****
&GroupName=Dev-Team
&<Common request parameters>
```

Sample success responses

XML format

```
1B968853-B423-63A6-FE1F-45E81BC2AD61
```

JSON format

```
{
  "RequestId": "1B968853-B423-63A6-FE1F-45E81BC2AD61"
}
```

Error codes

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

6.6. RemoveUserFromGroup

Removes a RAM user from a RAM user 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	RemoveUserFromGroup	The operation that you want to perform. Set the value to RemoveUserFromGroup.
GroupName	String	Yes	Dev-Team	The name of the RAM user group.
UserName	String	Yes	zhangq****	The name of the RAM user.

Response parameters

Parameter	Type	Example	Description
RequestId	String	A07EF215-B9B3-8CB2-2899-3F9575C6E320	The ID of the request.

Examples

Sample requests

```
https://ram.aliyuncs.com/?Action=RemoveUserFromGroup
&UserName=zhangq****
&GroupName=Dev-Team
&<Common request parameters>
```

Sample success responses

XML format

```
<RemoveUserFromGroupResponse>
  <RequestId>A07EF215-B9B3-8CB2-2899-3F9575C6E320</RequestId>
</RemoveUserFromGroupResponse>
```

JSON format

```
{
  "RequestId": "A07EF215-B9B3-8CB2-2899-3F9575C6E320"
}
```

Error codes

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

6.7. ListGroupsForUser

Queries the Resource Access Management (RAM) user groups to which a RAM user belongs.

Description

This topic provides an example on how to query the RAM user groups to which the RAM user `Alice` belongs. The response shows that `Alice` belongs to the RAM user group named `Dev-Team`.

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	ListGroupsForUser	The operation that you want to perform. Set the value to ListGroupsForUser .
UserName	String	Yes	Alice	The username of the RAM user.

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

Response parameters

Parameter	Type	Example	Description
RequestId	String	DA772B52-BF9F-54CA-AC77-AA7A2DA89D46	The ID of the request.
Groups	Array of Group		The list of the RAM user groups.
Group			
GroupId	String	g-zYtroLrgbZR1****	The ID of the RAM user group.
GroupName	String	Dev-Team	The name of the RAM user group.
Comments	String	Development team	The description of the RAM user group.
JoinDate	String	2015-01-23T12:33:18Z	The time when the RAM user joined the RAM user group.

Examples

Sample requests

```
https://ram.aliyuncs.com/?Action=ListGroupForUser
&UserName=Alice
&<Common request parameters>
```

Sample success responses

XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<ListGroupForUserResponse>
  <RequestId>DA772B52-BF9F-54CA-AC77-AA7A2DA89D46</RequestId>
  <Groups>
    <Group>
      <GroupName>Dev-Team</GroupName>
      <Comments>Development team</Comments>
      <JoinDate>2015-01-23T12:33:18Z</JoinDate>
      <GroupId>g-zYtroLrgbZR1****</GroupId>
    </Group>
  </Groups>
</ListGroupForUserResponse>
```

JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId" : "DA772B52-BF9F-54CA-AC77-AA7A2DA89D46",
  "Groups" : {
    "Group" : [ {
      "GroupName" : "Dev-Team",
      "Comments": "Development team",
      "JoinDate" : "2015-01-23T12:33:18Z",
      "GroupId" : "g-zYtroLrgbZR1****"
    } ]
  }
}
```

Error codes

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

6.8. ListUsersForGroup

Queries RAM users in a RAM user 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	ListUsersForGroup	The operation that you want to perform. Set the value to ListUsersForGroup.
GroupName	String	Yes	Dev-Team	The name of the RAM user group.
Marker	String	No	EXAMPLE	The <code>marker</code> . If part of a previous response is truncated, you can use this parameter to obtain the truncated part.
MaxItems	Integer	No	100	The number of entries to return. If a response is truncated because it reaches the value of <code>MaxItems</code> , the value of <code>IsTruncated</code> will be <code>true</code> . Valid values: 1 to 1000. Default value: 100.

Response parameters

Parameter	Type	Example	Description
IsTruncated	Boolean	true	Indicates whether the response is truncated.
Marker	String	EXAMPLE	The marker. This parameter is returned only if the value of <code>IsTruncated</code> is <code>true</code> . If the value of <code>IsTruncated</code> is <code>true</code> , you can call this operation again and set <code>marker</code> to obtain the truncated part.
RequestId	String	4B450CA1-36E8-4AA2-8461-86B42BF4CC4E	The ID of the request.
Users	Array		The list of the RAM users.
User			The information of a RAM user.
DisplayName	String	ZhangQiang	The display name of the RAM user.

Parameter	Type	Example	Description
JoinDate	String	2015-01-23T12:33:18Z	The time when the RAM user joined the RAM user group.
UserName	String	zhangqiang	The name of the RAM user.

Examples

Sample requests

```
https://ram.aliyuncs.com/?Action=ListUsersForGroup
&GroupName=dev
&<Common request parameters>
```

Sample success responses

XML format

```
<RequestId>4B450CA1-36E8-4AA2-8461-86B42BF4CC4E</RequestId>
<Users>
  <User>
    <UserName>zhangqiang</UserName>
    <DisplayName>ZhangQiang</DisplayName>
    <JoinDate>2015-01-23T12:33:18Z</JoinDate>
  </User>
  <User>
    <UserName>lili</UserName>
    <DisplayName>LiLi</DisplayName>
    <JoinDate>2015-02-18T17:22:08Z</JoinDate>
  </User>
</Users>
```

JSON format

```
{
  "Users": {
    "User": [
      {
        "JoinDate": "2015-01-23T12:33:18Z",
        "UserName": "zhangqiang",
        "DisplayName": "ZhangQiang"
      },
      {
        "JoinDate": "2015-02-18T17:22:08Z",
        "UserName": "lili",
        "DisplayName": "LiLi"
      }
    ]
  },
  "RequestId": "4B450CA1-36E8-4AA2-8461-86B42BF4CC4E"
}
```

Error codes

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

6.9. DeleteGroup

Deletes a RAM user group.

Before you delete a RAM user group, make sure that no policies are attached to the group and no RAM users are included in the 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	DeleteGroup	The operation that you want to perform. Set the value to DeleteGroup.
GroupName	String	Yes	Dev-Team	The name of the RAM user group. If you want to query the name of a RAM user group, call the ListGroups operation.

Response parameters

Parameter	Type	Example	Description
RequestId	String	FCF40AB5-881C-A0F9-334C-B0AD423AA69D	The ID of the request.

Examples

Sample requests

```
https://ram.aliyuncs.com/?Action=DeleteGroup
&GroupName=Dev-Team
&<Common request parameters>
```

Sample success responses

XML **format**

```
<DeleteGroupResponse>
  <RequestId>FCF40AB5-881C-A0F9-334C-B0AD423AA69D</RequestId>
</DeleteGroupResponse>
```

JSON **format**

```
{
  "RequestId": "FCF40AB5-881C-A0F9-334C-B0AD423AA69D"
}
```

Error codes

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

7. Role management APIs

7.1. CreateRole

Creates a RAM role.

Description

For more information about RAM roles, see [Overview of 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	CreateRole	The operation that you want to perform. Set the value to CreateRole .
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.
AssumeRolePolicy Document	String	Yes	<pre>{"Statement": [{"Action": "sts:AssumeRole", "Effect": "Allow", "Principal": {"RAM": "acs:ram::123456789012**:*:root"}}, {"Version": "1"}]}</pre>	The trust 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.

Parameter	Type	Required	Example	Description
MaxSessionDuration	Long	No	3600	<p>The maximum session duration of the RAM role.</p> <p>Valid values: 3600 to 43200. Unit: seconds. Default value: 3600.</p> <p>If you do not specify this parameter, the default value is used.</p>

The following content provides sample values for the **AssumeRolePolicyDocument** parameter.

- The following policy allows the RAM role to be assumed by all RAM users of the Alibaba Cloud account whose ID is `123456789012****`.

```
{
  "Statement": [{
    "Action": "sts:AssumeRole",
    "Effect": "Allow",
    "Principal": {
      "RAM": [
        "acs:ram::123456789012****:root"
      ]
    }
  ]},
  "Version": "1"
}
```

- The following policy allows the RAM role to be assumed by the RAM user named `testuser` of the trusted Alibaba Cloud account whose ID is `123456789012****`.

 **Note** Before you create the role, ensure that you have created a RAM user named `testuser` whose logon name is `testuser@123456789012****.onaliyun.com`.

```
{
  "Statement": [{
    "Action": "sts:AssumeRole",
    "Effect": "Allow",
    "Principal": {
      "RAM": [
        "acs:ram::123456789012****:user/testuser"
      ]
    }
  ]},
  "Version": "1"
}
```

- The following policy allows the RAM role to be assumed by the Elastic Compute Service (ECS) service of the current trusted Alibaba Cloud account.

```
{
  "Statement": [{
    "Action": "sts:AssumeRole",
    "Effect": "Allow",
    "Principal": {
      "Service": [
        "ecs.aliyuncs.com"
      ]
    }
  ]},
  "Version": "1"
}
```

- The following policy allows the RAM role to be assumed by the Security Assertion Markup Language (SAML) IdP named `testprovider` of the current trusted Alibaba Cloud account whose ID is `123456789012****`.

 **Note** Before you create the role, ensure that you have created a SAML IdP named `testprovider`.

```
{
  "Statement": [{
    "Action": "sts:AssumeRole",
    "Effect": "Allow",
    "Principal": {
      "Federated": [
        "acs:ram::123456789012****:saml-provider/testprovider"
      ]
    }
  ]},
  "Condition": {
    "StringEquals": {
      "saml:recipient": "https://signin.aliyun.com/saml-role/sso"
    }
  }
},
  "Version": "1"
}
```

- The following policy allows the RAM role to be assumed by the OIDC IdP named `TestOIDCProvider` of the current trusted Alibaba Cloud account whose ID is `123456789012****`.

 **Note** Before you create the policy, ensure that you have created an OIDC IdP named `TestOIDCProvider`.

```

{
  "Statement": [{
    "Action": "sts:AssumeRole",
    "Effect": "Allow",
    "Principal": {
      "Federated": [
        "acs:ram::123456789012****:oidc-provider/TestOIDCProvider"
      ]
    },
    "Condition": {
      "StringEquals": {
        "oidc:aud": [
          "496271242565057****"
        ],
        "oidc:iss": "https://dev-xxxxxx.okta.com",
        "oidc:sub": "KryrkIdjylZb7agUgCEf****"
      }
    }
  }],
  "Version": "1"
}

```

Response parameters

Parameter	Type	Example	Description
Role	Object		The information of the RAM role.
AssumeRolePolicyDocument	String	{ "Statement": [{ "Action": "sts:AssumeRole", "Effect": "Allow", "Principal": { "RAM": "acs:ram::123456789012****:root" } }], "Version": "1" }	The trust policy that specifies the trusted entity to assume the RAM role.
Description	String	ECS administrator	The description of the RAM role.
MaxSessionDuration	Long	3600	The maximum session duration of the RAM role.
RoleName	String	ECSAdmin	The name of the RAM role.
CreateDate	String	2015-01-23T12:33:18Z	The time when the RAM user was created.
RoleId	String	901234567890****	The ID of the RAM role.

Parameter	Type	Example	Description
Arn	String	acs:ram::123456789012****:role/ECSAdmin	The Alibaba Cloud Resource Name (ARN) of the role.
RequestId	String	04F0F334-1335-436C-A1D7-6C044FE73368	The ID of the request.

Examples

Sample requests

```
https://ram.aliyuncs.com/?Action=CreateRole
&RoleName=ECSAdmin
&AssumeRolePolicyDocument={"Statement":[{"Action":"sts:AssumeRole","Effect":"Allow","Principal":{"RAM":{"acs:ram::123456789012****:root"}}}], "Version":"1"}
&Description=ECS administrator
&<Common request parameters>
```

Sample success responses

XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<?xml version="1.0" encoding="UTF-8" ?>
<CreateRoleResponse>
  <RequestId>04F0F334-1335-436C-A1D7-6C044FE73368</RequestId>
  <Role>
    <RoleId>901234567890****</RoleId>
    <RoleName>ECSAdmin</RoleName>
    <Arn>acs:ram::123456789012****:role/ECSAdmin</Arn>
    <Description>ECS administrator</Description>
    <MaxSessionDuration>3600</MaxSessionDuration>
    <AssumeRolePolicyDocument>{ &quot;Statement&quot;;: [ { &quot;Action&quot;;: &quot;sts:AssumeRole&quot;;, &quot;Effect&quot;;: &quot;Allow&quot;;, &quot;Principal&quot;;: { &quot;RAM&quot;;: { &quot;acs:ram::123456789012****:root&quot;; } } ], &quot;Version&quot;;: &quot;1&quot;; } </AssumeRolePolicyDocument>
    <CreateDate>2015-01-23T12:33:18Z</CreateDate>
  </Role>
</CreateRoleResponse>
```

JSON format

```

HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId" : "04F0F334-1335-436C-A1D7-6C044FE73368",
  "Role" : {
    "RoleId" : "901234567890****",
    "RoleName" : "ECSAdmin",
    "Arn" : "acs:ram::123456789012****:role/ECSAdmin",
    "Description": "ECS administrator",
    "MaxSessionDuration" : 3600,
    "AssumeRolePolicyDocument" : "{ \"Statement\": [ { \"Action\": \"sts:AssumeRole\", \"Effect\": \"Allow\", \"Principal\": { \"RAM\": \"acs:ram::123456789012****:root\" } } ], \"Version\": \"1\" }",
    "CreateDate" : "2015-01-23T12:33:18Z"
  }
}

```

Error codes

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

7.2. GetRole

Queries 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 (-).

Response parameters

Parameter	Type	Example	Description
RequestId	String	04F0F334-1335-436C-A1D7-6C044FE73368	The ID of the request.

Parameter	Type	Example	Description
Role	Struct		The information of the RAM role.
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::123456789012****:root" } }], "Version": "1" }	The content of the policy that specifies one or more entities entrusted 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	901234567890****	The ID of the RAM role.
RoleName	String	ECSAdmin	The name of the RAM role.
UpdateDate	String	2015-01-23T12:33:18Z	The time when the RAM role was modified.

Examples

Sample requests

```
https://ram.aliyuncs.com/?Action=GetRole
&RoleName=ECSAdmin
&<Common request parameters>
```

Sample success responses

XML format

```
<GetRoleResponse>
  <RequestId>04F0F334-1335-436C-A1D7-6C044FE73368</RequestId>
  <Role>
    <RoleId>901234567890****</RoleId>
    <RoleName>ECSAdmin</RoleName>
    <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::123456789012****:root" } } ], "Version": "1" }</AssumeRolePolicyDocument>
    <CreateDate>2015-01-23T12:33:18Z</CreateDate>
    <UpdateDate>2015-01-23T12:33:18Z</UpdateDate>
  </Role>
</GetRoleResponse>
```

JSON format

```
{
  "RequestId": "04F0F334-1335-436C-A1D7-6C044FE73368",
  "Role": {
    "RoleId": "901234567890****",
    "RoleName": "ECSAdmin",
    "Arn": "acs:ram::123456789012****:role/ECSAdmin",
    "Description": "ECS administrator",
    "MaxSessionDuration": 3600,
    "AssumeRolePolicyDocument": "{ \"Statement\": [ { \"Action\": \"sts:AssumeRole\", \"Effect\": \"Allow\", \"Principal\": { \"RAM\": \"acs:ram::123456789012****:root\" } } ], \"Version\": \"1\" }",
    "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](#).

7.3. UpdateRole

Changes the description of a RAM role.

This topic provides an example to show how to change the description of ECSAdmin 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	<pre>{ "Statement": [{ "Action": "sts:AssumeRole", "Effect": "Allow", "Principal": { "RAM": "acs:ram::12345678901234****:root" } }], "Version": "1" }</pre>	The policy that specifies the trusted entity to assume the RAM role.
NewMaxSessionDuration	Long	No	3600	The maximum session duration of the RAM role. Valid values: 3600 to 43200. Unit: seconds.Default value: 3600. If you do not specify this parameter, the default value is used.
NewDescription	String	No	ECS administrator	The new description of the RAM role. The value must be 1 to 1,024 characters in length.

For more information about common 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 role.
AssumeRolePolicyDocument	String	{ "Statement": [{ "Action": "sts:AssumeRole", "Effect": "Allow", "Principal": { "RAM": "acs:ram::123456789012****:root" } }], "Version": "1" }	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	901234567890****	The ID of the RAM role.
RoleName	String	ECSAdmin	The name of the RAM role.
UpdateDate	String	2015-01-23T12:33:18Z	The time when the description of the RAM role was changed.

Examples

Sample requests

```
https://ram.aliyuncs.com/?Action=UpdateRole
&RoleName=ECSAdmin
&Description=ECS administrator
&<Common request parameters>
```

Sample success responses

XML format

```
<UpdateRoleResponse>
  <RequestId>04F0F334-1335-436C-A1D7-6C044FE73368</RequestId>
  <Role>
    <RoleId>901234567890****</RoleId>
    <RoleName>ECSAdmin</RoleName>
    <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::123456789012****:root" } } ], "Version": "1" }
  </AssumeRolePolicyDocument>
    <CreateDate>2015-01-23T12:33:18Z</CreateDate>
    <UpdateDate>2015-01-23T12:33:18Z</UpdateDate>
  </Role>
</UpdateRoleResponse>
```

JSON format

```
{
  "RequestId": "04F0F334-1335-436C-A1D7-6C044FE73368",
  "Role": {
    "RoleId": "901234567890****",
    "RoleName": "ECSAdmin",
    "Arn": "acs:ram::123456789012****:role/ECSAdmin",
    "Description": "ECS administrator",
    "MaxSessionDuration": 3600,
    "AssumeRolePolicyDocument": "{ \"Statement\": [ { \"Action\": \"sts:AssumeRole\", \"Effect\": \"Allow\", \"Principal\": { \"RAM\": \"acs:ram::123456789012****:root\" } } ], \"Version\": \"1\" }",
    "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](#).

7.4. ListRoles

Queries the list of all 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.
Marker	String	No	EXAMPLE	The <code>marker</code> . If part of a previous response is truncated, you can use this parameter to obtain the truncated part.
MaxItems	Integer	No	100	The number of entries to return. If a response is truncated because it reaches the value of <code>MaxItems</code> , the value of <code>IsTruncated</code> will be <code>true</code> . Valid values: 1 to 1000. Default value: 100.

Response parameters

Parameter	Type	Example	Description
IsTruncated	Boolean	true	Indicates whether the response is truncated.
Marker	String	EXAMPLE	The marker. This parameter is returned only if the value of <code>IsTruncated</code> is <code>true</code> . If the value is <code>true</code> , you can call this operation again and set the <code>Marker</code> parameter to obtain the truncated part.
RequestId	String	7B8A4E7D-6CFF-471D-84DF-195A7A241ECB	The ID of the request.
Roles	Array		The information of RAM roles.
Role			
Arn	String	acs:ram::123456789012****:role/ECSAdmin	The Alibaba Cloud Resource Name (ARN) of the RAM role.

Parameter	Type	Example	Description
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	901234567890****	The ID of the RAM role.
RoleName	String	ECSAdmin	The name of the RAM role.
UpdateDate	String	2015-01-23T12:33:18Z	The time when the RAM role was modified.

Examples

Sample requests

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

Sample success responses

`XML` format

```
<ListRolesResponse>
  <RequestId>7B8A4E7D-6CFF-471D-84DF-195A7A241ECB</RequestId>
  <IsTruncated>true</IsTruncated>
  <Marker>EXAMPLE</Marker>
  <Roles>
    <Role>
      <RoleId>901234567890****</RoleId>
      <RoleName>ECSAdmin</RoleName>
      <Arn>acs:ram::123456789012****:role/ECSAdmin</Arn>
      <Description>ECS administrator</Description>
      <MaxSessionDuration>3600</MaxSessionDuration>
      <CreateDate>2015-01-23T12:33:18Z</CreateDate>
      <UpdateDate>2015-01-23T12:33:18Z</UpdateDate>
    </Role>
    <Role>
      <RoleId>901234567890****</RoleId>
      <RoleName>OSSReadonlyAccess</RoleName>
      <Arn>acs:ram::123456789012****:role/ECSAdmin</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",
  "IsTruncated": true,
  "Marker": "EXAMPLE",
  "Roles": {
    "Role": [
      {
        "RoleId": "901234567890****",
        "RoleName": "ECSAdmin",
        "Arn": "acs:ram::123456789012****:role/ECSAdmin",
        "Description": "ECS administrator",
        "MaxSessionDuration": 3600,
        "CreateDate": "2015-01-23T12:33:18Z",
        "UpdateDate": "2015-01-23T12:33:18Z"
      },
      {
        "RoleId": "901234567890****",
        "RoleName": "OSSReadOnlyAccess",
        "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](#).

7.5. 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.

Response parameters

Parameter	Type	Example	Description
RequestId	String	898FAB24-7509-43EE-A287-086FE4C44394	The ID of the request.

Examples

Sample requests

```
https://ram.aliyuncs.com/?Action=DeleteRole
&RoleName=ECSAdmin
&<Common request parameters>
```

Sample success responses

XML format

```
<DeleteRoleResponse>
  <RequestId>898FAB24-7509-43EE-A287-086FE4C44394</RequestId>
</DeleteRoleResponse>
```

JSON format

```
{
  "RequestId": "898FAB24-7509-43EE-A287-086FE4C44394"
}
```

Error codes

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

8. Policy management APIs

8.1. CreatePolicy

Creates a custom policy.

For more information about policies, see [Policy overview](#).

This topic provides an example on how to create a custom policy to query Elastic Compute Service (ECS) instances in a specific region.

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 .
PolicyName	String	Yes	View-ECS-instances-in-a-specific-region	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	Query ECS instances in a specific region	The description of the policy. The description must be 1 to 1,024 characters in length.
PolicyDocument	String	Yes	null	The content of the policy. The content must be 1 to 2,048 characters in length. For more information about policy elements and sample policies, see Policy elements and Overview of sample policies .

Response parameters

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

Parameter	Type	Example	Description
Policy	Object		The information about the policy.
DefaultVersion	String	v1	The version of the policy. Default value: v1.
Description	String	Query ECS instances in a specific region.	The description of the policy.
PolicyName	String	View-ECS-instances-in-a-specific-region	The name of the policy.
CreateDate	String	2021-10-13T02:46:57Z	The time when the policy was created.
PolicyType	String	Custom	The type of the policy. Valid values: <ul style="list-style-type: none"> Custom: custom policy System: system policy
RequestId	String	BA34C54A-C2B1-5A65-B6B0-B5842C1DB4DA	The ID of the request.

Examples

Sample requests

```
https://ram.aliyuncs.com/?Action=CreatePolicy
&PolicyName=View-ECS-instances-in-a-specific-region
&Description=Query ECS instances in a specific region
&PolicyDocument={"Statement": [{"Effect": "Allow", "Action": "ecs:Describe*", "Resource": "acs:ecs:cn-qingdao:*:instance/*"}], "Version": "1"}
&Common request parameters
```

Sample success responses

`XML` format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<?xml version="1.0" encoding="UTF-8" ?>
<CreatePolicyResponse>
  <Policy>
    <PolicyType>Custom</PolicyType>
    <Description>Query ECS instances in a specific region</Description>
    <DefaultVersion>v1</DefaultVersion>
    <PolicyName>View-ECS-instances-in-a-specific-region</PolicyName>
    <CreateDate>2021-10-13T02:46:57Z</CreateDate>
  </Policy>
  <RequestId>BA34C54A-C2B1-5A65-B6B0-B5842C1DB4DA</RequestId>
</CreatePolicyResponse>
```

JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "Policy" : {
    "PolicyType" : "Custom",
    "Description" : "Query ECS instances in a specific region",
    "DefaultVersion" : "v1",
    "PolicyName" : "View-ECS-instances-in-a-specific-region",
    "CreateDate" : "2021-10-13T02:46:57Z"
  },
  "RequestId" : "BA34C54A-C2B1-5A65-B6B0-B5842C1DB4DA"
}
```

Error codes

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

8.2. 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.

Parameter	Type	Required	Example	Description
PolicyName	String	Yes	OSS-Administrator	The name of the policy.
PolicyType	String	Yes	Custom	The type of the policy. Valid values: <code>System</code> and <code>Custom</code> .

Response parameters

Parameter	Type	Example	Description
DefaultPolicyVersion	Struct		The information of the default policy version.
CreateDate	String	2015-01-23T12:33:18Z	The time when the default policy version was created.
IsDefaultVersion	Boolean	true	An attribute in the <code>DefaultPolicyVersion</code> parameter. The value of the <code>IsDefaultVersion</code> parameter is <code>true</code> .
PolicyDocument	String	{ "Statement": [{ "Action": ["oss:*"], "Effect": "Allow", "Resource": ["acs:oss:*:*:*"]}], "Version": "1" }	The script of the default policy version.
VersionId	String	v1	The ID of the default policy version.
Policy	Struct		The basic information of the policy.
AttachmentCount	Integer	0	The number of references to the policy.
CreateDate	String	2015-01-23T12:33:18Z	The time when the policy was created.
DefaultVersion	String	v1	The default version ID of the policy.
Description	String	OSS administrator	The description of the policy.
PolicyDocument	String	N/A	This parameter is deprecated.

Parameter	Type	Example	Description
PolicyName	String	OSS-Administrator	The name of the policy.
PolicyType	String	Custom	The type of the policy.
UpdateDate	String	2015-01-23T12:33:18Z	The time when the policy was modified.
RequestId	String	697852FB-50D7-44D9-9774-530C31EAC572	The ID of the request.

Examples

Sample requests

```
https://ram.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>
    <CreateDate>2015-01-23T12:33:18Z</CreateDate>
    <UpdateDate>2015-01-23T12:33:18Z</UpdateDate>
    <AttachmentCount>0</AttachmentCount>
  </Policy>
  <DefaultPolicyVersion>
    <VersionId>v1</VersionId>
    <IsDefaultVersion>true</IsDefaultVersion>
    <CreateDate>2015-01-23T12:33:18Z</CreateDate>
    <PolicyDocument>{ "Statement": [{ "Action": ["oss:*"], "Effect": "Allow", "Resource": ["acs:oss:*:*:*"]}], "Version": "1"}</PolicyDocument>
  </DefaultPolicyVersion>
</GetPolicyResponse>
```

JSON format

```
{
  "RequestId": "697852FB-50D7-44D9-9774-530C31EAC572",
  "Policy": {
    "PolicyName": "OSS-Administrator",
    "PolicyType": "Custom",
    "Description": "OSS administrator",
    "DefaultVersion": "v1",
    "CreateDate": "2015-01-23T12:33:18Z",
    "UpdateDate": "2015-01-23T12:33:18Z",
    "AttachmentCount": 0
  },
  "DefaultPolicyVersion": {
    "VersionId": "v1",
    "IsDefaultVersion": true,
    "CreateDate": "2015-01-23T12:33:18Z",
    "PolicyDocument": "{ \"Statement\": [{ \"Action\": [\"oss:*\"], \"Effect\": \"Allow\", \"Resource\": [\"acs:oss:*:*:*\"]}], \"Version\": \"1\"}"
  }
}
```

Error codes

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

8.3. ListPolicies

Queries a list of 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.
Marker	String	No	EXAMPLE	The <code>Marker</code> . If part of a previous response is truncated, you can use this parameter to obtain the truncated part.

Parameter	Type	Required	Example	Description
MaxItems	Integer	No	100	The number of entries to return. If a response is truncated because it reaches the value of <code>MaxItems</code> , the value of <code>IsTruncated</code> will be <code>true</code> . Valid values: 1 to 1000. Default value: 100.
PolicyType	String	No	System	The type of the <code>Policy</code> . Valid values: <code>System</code> and <code>Custom</code> . If you do not specify the parameter, all policies are returned.

Response parameters

Parameter	Type	Example	Description
IsTruncated	Boolean	true	Indicates whether the response is truncated.
Marker	String	EXAMPLE	The marker. This parameter is returned only if the value of <code>IsTruncated</code> is <code>true</code> . If the value of <code>IsTruncated</code> is <code>true</code> , you can call this operation again and set <code>Marker</code> to obtain the truncated part.
Policies	Array		The list of policies.
Policy			The information of a policy.
AttachmentCount	Integer	3	The number of references to the policy.
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.

Parameter	Type	Example	Description
PolicyType	String	System	The type of the policy.
UpdateDate	String	2015-01-23T12:33:18Z	The time when the policy was modified.
RequestId	String	7B8A4E7D-6CFF-471D-84DF-195A7A241ECB	The ID of the request.

Examples

Sample requests

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

Sample success responses

XML **format**

```
<ListPoliciesResponse>
  <RequestId>7B8A4E7D-6CFF-471D-84DF-195A7A241ECB</RequestId>
  <IsTruncated>true</IsTruncated>
  <Marker>EXAMPLE</Marker>
  <Policies>
    <Policy>
      <PolicyName>OSS-Administrator</PolicyName>
      <PolicyType>Custom</PolicyType>
      <Description>OSS administrator</Description>
      <DefaultVersion>v1</DefaultVersion>
      <CreateDate>2015-01-23T12:33:18Z</CreateDate>
      <UpdateDate>2015-01-23T12:33:18Z</UpdateDate>
      <AttachmentCount>0</AttachmentCount>
    </Policy>
    <Policy>
      <PolicyName>ReadOnlyAccess</PolicyName>
      <PolicyType>System</PolicyType>
      <Description>Read-only access</Description>
      <DefaultVersion>v1</DefaultVersion>
      <CreateDate>2015-02-11T18:39:12Z</CreateDate>
      <UpdateDate>2015-02-19T09:43:16Z</UpdateDate>
      <AttachmentCount>0</AttachmentCount>
    </Policy>
  </Policies>
</ListPoliciesResponse>
```

JSON **format**

```
{
  "Policies":{
    "Policy":[
      {
        "AttachmentCount":3,
        "Description":"OSS administrator",
        "PolicyName":"OSS-Administrator",
        "UpdateDate":"2015-01-23T12:33:18Z",
        "CreateDate":"2015-01-23T12:33:18Z",
        "DefaultVersion":"v1",
        "PolicyType":"Custom"
      },
      {
        "AttachmentCount":1,
        "Description":"Read-only access",
        "PolicyName":"ReadOnlyAccess",
        "UpdateDate":"2015-02-19T09:43:16Z",
        "CreateDate":"2015-02-11T18:39:12Z",
        "DefaultVersion":"v1",
        "PolicyType":"System"
      }
    ]
  },
  "IsTruncated":true,
  "RequestId":"7B8A4E7D-6CFF-471D-84DF-195A7A241ECB",
  "Marker":"EXAMPLE"
}
```

Error codes

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

8.4. DeletePolicy

Deletes 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	DeletePolicy	The operation that you want to perform. Set the value to DeletePolicy.
PolicyName	String	Yes	OSS-Administrator	The name of the policy.

Response parameters

Parameter	Type	Example	Description
RequestId	String	898FAB24-7509-43EE-A287-086FE4C44394	The ID of the request.

Examples

Sample requests

```
https://ram.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

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

8.5. UpdatePolicyDescription

Modifies the description of a custom policy.

Usage notes

You can call this operation to modify only the description of a custom policy. You cannot modify the description of a system 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	UpdatePolicyDescription	The operation that you want to perform. Set the value to UpdatePolicyDescription .
PolicyName	String	No	TestPolicy	The name of the policy.
NewDescription	String	No	This is a test policy.	The description of the policy. The value of the parameter 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	7572DEBD-0ECE-518E-8682-D8CB82F8FE8E	The ID of the request.
Policy	Object		The information about the policy.
PolicyName	String	TestPolicy	The name of the policy.
PolicyType	String	Custom	The type of the policy. Valid values: <ul style="list-style-type: none"> Custom: custom policy System: system policy
CreateDate	String	2022-02-28T07:04:15Z	The time when the policy was created.
UpdateDate	String	2022-02-28T07:05:37Z	The time when the policy was modified.
Description	String	This is a test policy.	The description of the policy.
DefaultVersion	String	v1	The version of the policy. Default value: v1.

Examples

Sample requests

```
https://ram.aliyuncs.com/?Action=UpdatePolicyDescription
&PolicyName=TestPolicy
&NewDescription=This is a test policy.
&<Common request parameters>
```

Sample success responses

XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<UpdatePolicyDescriptionResponse>
  <Policy>
    <PolicyType>Custom</PolicyType>
    <UpdateDate>2022-02-28T07:05:37Z</UpdateDate>
    <Description>This is a test policy.</Description>
    <PolicyName>TestPolicy</PolicyName>
    <DefaultVersion>v1</DefaultVersion>
    <CreateDate>2022-02-28T07:04:15Z</CreateDate>
  </Policy>
  <RequestId>7572DEBD-0ECE-518E-8682-D8CB82F8FE8E</RequestId>
</UpdatePolicyDescriptionResponse>
```

JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "Policy" : {
    "PolicyType" : "Custom",
    "UpdateDate" : "2022-02-28T07:05:37Z",
    "Description" : "This is a test policy.",
    "PolicyName" : "TestPolicy",
    "DefaultVersion" : "v1",
    "CreateDate" : "2022-02-28T07:04:15Z"
  },
  "RequestId" : "7572DEBD-0ECE-518E-8682-D8CB82F8FE8E"
}
```

Error codes

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

8.6. 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	<pre>{"Statement": [{"Action": ["oss:*"], "Effect": "Allow", "Resource": ["acs:oss:*:*:*"]}], "Version": "1"}</pre>	The script of the policy. The content can be up to 2,048 bytes in length.
PolicyName	String	Yes	OSS-Administrator	The name of the policy.
RotateStrategy	String	No	None	<p>The rotation strategy of the policy. You can use this parameter to delete an early policy version.</p> <p>Valid values:</p> <ul style="list-style-type: none"> <code>None</code> : indicates no rotation strategy is set. <code>DeleteOldestNonDefaultVersionWhenLimitExceeded</code> : indicates that the earliest non-active version is deleted if the number of versions exceeds the limit. <p>Default value: <code>None</code> .</p>
SetAsDefault	Boolean	No	false	<p>Specifies whether to set the version as the default version of the policy.</p> <p>Default value: <code>false</code> .</p>

Response parameters

Parameter	Type	Example	Description
PolicyVersion			The information of the policy version.
CreateDate	String	2015-01-23T12:33:18Z	The time when the policy version was created.

Parameter	Type	Example	Description
IsDefaultVersion	Boolean	false	Indicates whether the version is the default version of the policy.
PolicyDocument	String	{ "Statement": [{"Action": ["oss:*"], "Effect": "Allow", "Resource": ["acs:oss:*:*:*"]}], "Version": "1" }	The script 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://ram.aliyuncs.com/?Action=CreatePolicyVersion
&PolicyName=OSS-Administrator
&PolicyDocument={"Statement":[{"Action":["oss:*"],"Effect":"Allow","Resource":["acs:oss:*:*:*"]}], "Version":"1"}
&<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>
    <PolicyDocument>{ "Statement": [{"Action": ["oss:*"], "Effect": "Allow", "Resource": ["acs:oss:*:*:*"]}], "Version": "1"}</PolicyDocument>
  </PolicyVersion>
</CreatePolicyVersionResponse>
```

JSON format

```
{
  "RequestId": "9B34724D-54B0-4A51-B34D-4512372FE1BE",
  "PolicyVersion": {
    "IsDefaultVersion": false,
    "VersionId": "v3",
    "PolicyDocument": "{ \"Statement\": [{ \"Action\": [\"oss:*\"], \"Effect\": \"Allow\", \"Resource\": [\"acs:oss:*:*:*\"]}], \"Version\": \"1\"}",
    "CreateDate": "2015-01-23T12:33:18Z"
  }
}
```

Error codes

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

8.7. GetPolicyVersion

Queries the information of a 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.
PolicyType	String	Yes	Custom	The type of the policy. Valid values: <code>System</code> and <code>Custom</code> .
VersionId	String	Yes	v3	The ID of the policy version.

Response parameters

Parameter	Type	Example	Description
PolicyVersion			The information of the policy version.

Parameter	Type	Example	Description
CreateDate	String	2015-01-23T12:33:18Z	The time when the version was created.
IsDefaultVersion	Boolean	false	Indicates whether the version is the default version.
PolicyDocument	String	{ "Statement": [{ "Action": ["oss:*"], "Effect": "Allow", "Resource": ["acs:oss:*:*:*"]}], "Version": "1" }	The script of the policy.
VersionId	String	v3	The ID of the version.
RequestId	String	9B34724D-54B0-4A51-B34D-4512372FE1BE	The ID of the request.

Examples

Sample requests

```
https://ram.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": {
    "IsDefaultVersion": false,
    "VersionId": "v3",
    "PolicyDocument": "{ \"Statement\": [{ \"Action\": [\"oss:*\"], \"Effect\": \"Allow\", \"Resource\": [\"acs:oss:*:*:*\"]}], \"Version\": \"1\"}",
    "CreateDate": "2015-01-23T12:33:18Z"
  }
}
```

Error codes

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

8.8. DeletePolicyVersion

Deletes a 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	DeletePolicyVersion	The operation that you want to perform. Set the value to DeletePolicyVersion.
PolicyName	String	Yes	OSS-Administrator	The name of the policy.
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://ram.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

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

8.9. 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	The name of the policy.
PolicyType	String	Yes	Custom	The type of the policy. Valid values: <code>System</code> and <code>Custom</code> .

Response parameters

Parameter	Type	Example	Description
PolicyVersions	Array		The list of the policy versions.
PolicyVersion			The information of a policy version.
CreateDate	String	2015-02-26T01:25:52Z	The time when the version was created.
IsDefaultVersion	Boolean	false	Indicates whether the version is the default version.
PolicyDocument	String	{ "Statement": [{ "Action": ["oss:*"], "Effect": "Allow", "Resource": ["acs:oss:*:*:*"], "Version": "1" }] }	The script of the policy.
VersionId	String	v3	The ID of the version.
RequestId	String	7B8A4E7D-6CFF-471D-84DF-195A7A241ECB	The ID of the request.

Examples

Sample requests

```
https://ram.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>
      <PolicyDocument>{ "Statement": [{ "Action": ["oss:*"], "Effect": "Allow",
"Resource": ["acs:oss:*:*:*"]}], "Version": "1"}</PolicyDocument>
    </PolicyVersion>
    <PolicyVersion>
      <VersionId>v5</VersionId>
      <IsDefaultVersion>>true</IsDefaultVersion>
      <CreateDate>2015-02-26T01:25:52Z</CreateDate>
      <PolicyDocument>{ "Statement": [{ "Action": ["oss:*"], "Effect": "Allow",
"Resource": ["acs:oss:*:*:*"]}], "Version": "1"}</PolicyDocument>
    </PolicyVersion>
  </PolicyVersions>
</ListPolicyVersionsResponse>

```

JSON **format**

```

{
  "RequestId": "7B8A4E7D-6CFF-471D-84DF-195A7A241ECB",
  "PolicyVersions": {
    "PolicyVersion": [
      {
        "IsDefaultVersion": false,
        "VersionId": "v3",
        "PolicyDocument": "{ \"Statement\": [{ \"Action\": [\"oss:*\"], \"Effect\": \"Allow\", \"Resource\": [\"acs:oss:*:*:*\"]}], \"Version\": \"1\"}",
        "CreateDate": "2015-01-23T12:33:18Z"
      },
      {
        "IsDefaultVersion": true,
        "VersionId": "v5",
        "PolicyDocument": "{ \"Statement\": [{ \"Action\": [\"oss:*\"], \"Effect\": \"Allow\", \"Resource\": [\"acs:oss:*:*:*\"]}], \"Version\": \"1\"}",
        "CreateDate": "2015-02-26T01:25:52Z"
      }
    ]
  }
}

```

Error codes

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

8.10. SetDefaultPolicyVersion

Sets the default version 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	SetDefaultPolicyVersion	The operation that you want to perform. Set the value to SetDefaultPolicyVersion.
PolicyName	String	Yes	OSS-Administrator	The name of the policy.
VersionId	String	Yes	v2	The ID of the policy version that you want to set as the default version.

Response parameters

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

Examples

Sample requests

```
https://ram.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

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

8.11. AttachPolicyToUser

Attaches a policy to a RAM user.

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	AttachPolicyToUser	The operation that you want to perform. Set the value to AttachPolicyToUser.
PolicyName	String	Yes	OSS-Administrator	The name of the policy.
PolicyType	String	Yes	Custom	The type of the policy. Valid values: <code>System</code> and <code>Custom</code> .
UserName	String	Yes	zhangq****	The name of the RAM user.

Response parameters

Parameter	Type	Example	Description
RequestId	String	697852FB-50D7-44D9-9774-530C31EAC572	The ID of the request.

Examples

Sample requests

```
https://ram.aliyuncs.com/?Action=AttachPolicyToUser
&PolicyType=Custom
&PolicyName=OSS-Administrator
&UserName=zhangq****
&<Common request parameters>
```

Sample success responses

`XML` format

```
<AttachPolicyToUserResponse>
  <RequestId>697852FB-50D7-44D9-9774-530C31EAC572</RequestId>
</AttachPolicyToUserResponse>
```

JSON format

```
{
  "RequestId": "697852FB-50D7-44D9-9774-530C31EAC572"
}
```

Error codes

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

8.12. DetachPolicyFromUser

Detaches a policy from a RAM user.

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	DetachPolicyFromUser	The operation that you want to perform. Set the value to DetachPolicyFromUser.
PolicyName	String	Yes	OSS-Administrator	The name of the policy.
PolicyType	String	Yes	Custom	The type of the policy. Valid values: <code>System</code> and <code>Custom</code> .
UserName	String	Yes	zhangq****	The name of the RAM user.

Response parameters

Parameter	Type	Example	Description
RequestId	String	697852FB-50D7-44D9-9774-530C31EAC572	The ID of the request.

Examples

Sample requests

```
https://ram.aliyuncs.com/?Action=DetachPolicyFromUser
&PolicyType=Custom
&PolicyName=OSS-Administrator
&UserName=zhangq****
&<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

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

8.13. AttachPolicyToGroup

Attaches a policy to a RAM user 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	AttachPolicyToGroup	The operation that you want to perform. Set the value to AttachPolicyToGroup.
GroupName	String	Yes	dev	The name of the RAM user group.

Parameter	Type	Required	Example	Description
PolicyName	String	Yes	OSS-Administrator	The name of the policy.
PolicyType	String	Yes	Custom	The type of the policy. Valid values: <code>System</code> and <code>Custom</code> .

Response parameters

Parameter	Type	Example	Description
RequestId	String	697852FB-50D7-44D9-9774-530C31EAC572	The ID of the request.

Examples

Sample requests

```
https://ram.aliyuncs.com/?Action=AttachPolicyToGroup
&PolicyType=Custom
&PolicyName=OSS-Administrator
&GroupName=dev
&<Common request parameters>
```

Sample success responses

XML format

```
<AttachPolicyToGroupResponse>
  <RequestId>697852FB-50D7-44D9-9774-530C31EAC572</RequestId>
</AttachPolicyToGroupResponse>
```

JSON format

```
{
  "RequestId": "697852FB-50D7-44D9-9774-530C31EAC572"
}
```

Error codes

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

8.14. DetachPolicyFromGroup

Detaches a policy from a RAM user 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	DetachPolicyFromGroup	The operation that you want to perform. Set the value to DetachPolicyFromGroup.
GroupName	String	Yes	dev	The name of the RAM user group.
PolicyName	String	Yes	OSS-Administrator	The name of the policy.
PolicyType	String	Yes	Custom	The type of the policy. Valid values: <code>System</code> and <code>Custom</code> .

Response parameters

Parameter	Type	Example	Description
RequestId	String	697852FB-50D7-44D9-9774-530C31EAC572	The ID of the request.

Examples

Sample requests

```
https://ram.aliyuncs.com/?Action=DetachPolicyFromGroup
&PolicyType=Custom
&PolicyName=OSS-Administrator
&GroupName=dev
&<Common request parameters>
```

Sample success responses

`XML` format

```
<DetachPolicyFromGroupResponse>
  <RequestId>697852FB-50D7-44D9-9774-530C31EAC572</RequestId>
</DetachPolicyFromGroupResponse>
```

`JSON` format

```
{
  "RequestId": "697852FB-50D7-44D9-9774-530C31EAC572"
}
```

Error codes

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

8.15. AttachPolicyToRole

Attaches a policy to 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	AttachPolicyToRole	The operation that you want to perform. Set the value to AttachPolicyToRole.
PolicyName	String	Yes	OSS-Administrator	The name of the policy.
PolicyType	String	Yes	Custom	The type of the policy. Valid values: <code>System</code> and <code>Custom</code> .
RoleName	String	Yes	OSSAdminRole	The name of the RAM role.

Response parameters

Parameter	Type	Example	Description
RequestId	String	697852FB-50D7-44D9-9774-530C31EAC572	The ID of the request.

Examples

Sample requests

```
https://ram.aliyuncs.com/?Action=AttachPolicyToRole
&PolicyType=Custom
&PolicyName=OSS-Administrator
&RoleName=OSSAdminRole
&<Common request parameters>
```

Sample success responses

XML format

```
<AttachPolicyToRoleResponse>
  <RequestId>697852FB-50D7-44D9-9774-530C31EAC572</RequestId>
</AttachPolicyToRoleResponse>
```

JSON format

```
{
  "RequestId": "697852FB-50D7-44D9-9774-530C31EAC572"
}
```

Error codes

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

8.16. DetachPolicyFromRole

Detaches a policy from 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	DetachPolicyFromRole	The operation that you want to perform. Set the value to DetachPolicyFromRole.
PolicyName	String	Yes	OSS-Administrator	The name of the policy.
PolicyType	String	Yes	Custom	The type of the policy. Valid values: <code>System</code> and <code>Custom</code> .
RoleName	String	Yes	OSSAdminRole	The name of the RAM role.

Response parameters

Parameter	Type	Example	Description
RequestId	String	697852FB-50D7-44D9-9774-530C31EAC572	The ID of the request.

Examples

Sample requests

```
https://ram.aliyuncs.com/?Action=DetachPolicyFromRole
&PolicyType=Custom
&PolicyName=OSS-Administrator
&RoleName=OSSAdminRole
&<Common request parameters>
```

Sample success responses

XML format

```
<DetachPolicyFromRoleResponse>
  <RequestId>697852FB-50D7-44D9-9774-530C31EAC572</RequestId>
</DetachPolicyFromRoleResponse>
```

JSON format

```
{
  "RequestId": "697852FB-50D7-44D9-9774-530C31EAC572"
}
```

Error codes

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

8.17. ListPoliciesForUser

Queries the policies that are attached to a RAM user.

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	ListPoliciesForUser	The operation that you want to perform. Set the value to ListPoliciesForUser.
UserName	String	Yes	zhangq****	The name of the RAM user.

Response parameters

Parameter	Type	Example	Description
Policies	Array		The list of the policies that are attached to the RAM user.
Policy			The information of a policy.
AttachDate	String	2015-01-23T12:33:18Z	The time when the policy was attached to the RAM user.
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.
RequestId	String	7B8A4E7D-6CFF-471D-84DF-195A7A241ECB	The ID of the request.

Examples

Sample requests

```
https://ram.aliyuncs.com/?Action=ListPoliciesForUser
&UserName=zhangq****
&<Common request parameters>
```

Sample success responses

`XML` format

```
<RequestId>7B8A4E7D-6CFF-471D-84DF-195A7A241ECB</RequestId>
<Policies>
  <Policy>
    <PolicyName>OSS-Administrator</PolicyName>
    <PolicyType>Custom</PolicyType>
    <Description>OSS administrator</Description>
    <DefaultVersion>v1</DefaultVersion>
    <AttachDate>2015-01-23T12:33:18Z</AttachDate>
  </Policy>
  <Policy>
    <PolicyName>ReadOnlyAccess</PolicyName>
    <PolicyType>System</PolicyType>
    <Description>Read-only access</Description>
    <DefaultVersion>v1</DefaultVersion>
    <AttachDate>2015-02-18T17:22:08Z</AttachDate>
  </Policy>
</Policies>
```

JSON **format**

```
{
  "Policies": {
    "Policy": [
      {
        "Description": "OSS administrator",
        "PolicyName": "OSS-Administrator",
        "AttachDate": "2015-01-23T12:33:18Z",
        "DefaultVersion": "v1",
        "PolicyType": "Custom"
      },
      {
        "Description": "Read-only access",
        "PolicyName": "ReadOnlyAccess",
        "AttachDate": "2015-02-18T17:22:08Z",
        "DefaultVersion": "v1",
        "PolicyType": "System"
      }
    ]
  },
  "RequestId": "7B8A4E7D-6CFF-471D-84DF-195A7A241ECB"
}
```

Error codes

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

8.18. ListEntitiesForPolicy

Queries the entities to which a policy is attached.

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	ListEntitiesForPolicy	The operation that you want to perform. Set the value to ListEntitiesForPolicy.
PolicyName	String	Yes	OSS-Administrator	The name of the policy.
PolicyType	String	Yes	Custom	The type of the policy. Valid values: <code>System</code> and <code>Custom</code> .

Response parameters

Parameter	Type	Example	Description
Users	Array		The list of the RAM users to which the policy is attached.
User			The information of a RAM user.
AttachDate	String	2015-01-23T12:33:18Z	The time when the policy was attached to the RAM user.
DisplayName	String	Zhang*	The display name of the RAM user.
UserId	String	122748924538****	The unique ID of the RAM user.
UserName	String	zhangq****	The name of the RAM user.
Groups	Array		The list of the RAM user groups to which the policy is attached.
Group			The information of a RAM user group.

Parameter	Type	Example	Description
AttachDate	String	2015-02-18T17:22:08Z	The time when the policy was attached to the RAM user group.
Comments	String	Test team	The description of the RAM user group.
GroupName	String	QA-Team	The name of the RAM user group.
Roles	Array		The list of the RAM roles to which the policy is attached.
Role			The information of a RAM role.
Arn	String	acs:ram::123456789012****:role/ECSAdmin	The Alibaba Cloud Resource Name (ARN) of the RAM role.
AttachDate	String	2015-01-23T12:33:18Z	The time when the policy was attached to the RAM role.
Description	String	ECS administrator	The description of the RAM role.
RoleId	String	122748924538****	The ID of the RAM role.
RoleName	String	ECSAdmin	The name of the RAM role.
RequestId	String	7B8A4E7D-6CFF-471D-84DF-195A7A241ECB	The ID of the request.

Examples

Sample requests

```
https://ram.aliyuncs.com/?Action=ListEntitiesForPolicy
&PolicyName=OSS-Administrator
&PolicyType=Custom
&<Common request parameters>
```

Sample success responses

XML format

```
<ListEntitiesForPolicyResponse>
  <RequestId>7B8A4E7D-6CFF-471D-84DF-195A7A241ECB</RequestId>
  <Groups>
    <Group>
      <GroupName>QA-Team</GroupName>
      <Comments>Test team</Comments>
      <AttachDate>2015-01-23T12:33:18Z</AttachDate>
    </Group>
    <Group>
      <GroupName>Dev-Team</GroupName>
      <Comments>Development team</Comments>
      <AttachDate>2015-02-18T17:22:08Z</AttachDate>
    </Group>
  </Groups>
  <Users>
    <User>
      <UserId>122748924538****</UserId>
      <UserName>zhangq****</UserName>
      <DisplayName>Zhang*</DisplayName>
      <AttachDate>2015-01-23T12:33:18Z</AttachDate>
    </User>
    <User>
      <UserId>140649822472****</UserId>
      <UserName>li****</UserName>
      <DisplayName>Li*</DisplayName>
      <AttachDate>2015-02-18T17:22:08Z</AttachDate>
    </User>
  </Users>
  <Roles>
    <Role>
      <RoleId>122748924538****</RoleId>
      <RoleName>ECSAdmin</RoleName>
      <Arn>acs:ram::123456789012****:role/ECSAdmin</Arn>
      <Description>ECS administrator</Description>
      <AttachDate>2015-01-23T12:33:18Z</AttachDate>
    </Role>
    <Role>
      <RoleId>140649822472****</RoleId>
      <RoleName>OSSReadonlyAccess</RoleName>
      <Description>OSS read-only access</Description>
      <Arn>acs:ram::123456789012****:role/OSSReadonlyAccess</Arn>
      <AttachDate>2015-01-23T12:33:18Z</AttachDate>
    </Role>
  </Roles>
</ListEntitiesForPolicyResponse>
```

JSON **format**

```
{
  "Groups":{
    "Group":[
      {
        "Comments":"Test team",
        "GroupName":"QA-Team",
        "AttachDate":"2015-01-23T12:33:18Z"
      },
      {
        "Comments":"Development team",
        "GroupName":"Dev-Team",
        "AttachDate":"2015-02-18T17:22:08Z"
      }
    ]
  },
  "Users":{
    "User":[
      {
        "UserName":"zhangq****",
        "UserId":"122748924538****",
        "DisplayName":"Zhang*",
        "AttachDate":"2015-01-23T12:33:18Z"
      },
      {
        "UserName":"li****",
        "UserId":"140649822472****",
        "DisplayName":"Li*",
        "AttachDate":"2015-02-18T17:22:08Z"
      }
    ]
  },
  "RequestId":"7B8A4E7D-6CFF-471D-84DF-195A7A241ECB",
  "Roles":{
    "Role":[
      {
        "RoleName":"ECSAdmin",
        "Description":"ECS administrator",
        "Arn":"acs:ram::123456789012****:role/ECSAdmin",
        "AttachDate":"2015-01-23T12:33:18Z",
        "RoleId":"122748924538****"
      },
      {
        "RoleName":"OSSReadOnlyAccess",
        "Description":"OSS read-only access",
        "Arn":"acs:ram::123456789012****:role/OSSReadOnlyAccess",
        "AttachDate":"2015-02-18T17:22:08Z",
        "RoleId":"140649822472****"
      }
    ]
  }
}
```

Error codes

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

8.19. ListPoliciesForGroup

Queries the policies that are attached to a RAM user 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	ListPoliciesForGroup	The operation that you want to perform. Set the value to ListPoliciesForGroup.
GroupName	String	Yes	dev	The name of the RAM user group.

Response parameters

Parameter	Type	Example	Description
Policies	Array		The list of the policies that are attached to the RAM user group.
Policy			The information of a policy.
AttachDate	String	2015-01-23T12:33:18Z	The time when the policy was attached to the RAM user group.
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.

Parameter	Type	Example	Description
RequestId	String	7B8A4E7D-6CFF-471D-84DF-195A7A241ECB	The ID of the request.

Examples

Sample requests

```
https://ram.aliyuncs.com/?Action=ListPoliciesForGroup
&GroupName=dev
&<Common request parameters>
```

Sample success responses

XML **format**

```
<ListPoliciesForGroupResponse>
  <RequestId>7B8A4E7D-6CFF-471D-84DF-195A7A241ECB</RequestId>
  <Policies>
    <Policy>
      <PolicyName>OSS-Administrator</PolicyName>
      <PolicyType>Custom</PolicyType>
      <Description>OSS administrator</Description>
      <DefaultVersion>v1</DefaultVersion>
      <AttachDate>2015-01-23T12:33:18Z</AttachDate>
    </Policy>
    <Policy>
      <PolicyName>ReadOnlyAccess</PolicyName>
      <PolicyType>System</PolicyType>
      <Description>Read-only access</Description>
      <DefaultVersion>v1</DefaultVersion>
      <AttachDate>2015-02-18T17:22:08Z</AttachDate>
    </Policy>
  </Policies>
</ListPoliciesForGroupResponse>
```

JSON **format**

```

{
  "Policies":{
    "Policy":[
      {
        "Description":"OSS administrator",
        "PolicyName":"OSS-Administrator",
        "AttachDate":"2015-01-23T12:33:18Z",
        "DefaultVersion":"v1",
        "PolicyType":"Custom"
      },
      {
        "Description":"Read-only access",
        "PolicyName":"ReadOnlyAccess",
        "AttachDate":"2015-02-18T17:22:08Z",
        "DefaultVersion":"v1",
        "PolicyType":"System"
      }
    ]
  },
  "RequestId":"7B8A4E7D-6CFF-471D-84DF-195A7A241ECB"
}

```

Error codes

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

8.20. ListPoliciesForRole

Queries the policies that are attached to 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	ListPoliciesForRole	The operation that you want to perform. Set the value to ListPoliciesForRole.
RoleName	String	Yes	AdminRole	The name of the RAM role.

Response parameters

Parameter	Type	Example	Description
Policies	Array		The list of the policies that are attached to the RAM role.
Policy			The information of a policy.
AttachDate	String	2015-01-23T12:33:18Z	The time when the policy was attached to the RAM role.
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.
RequestId	String	7B8A4E7D-6CFF-471D-84DF-195A7A241ECB	The ID of the request.

Examples

Sample requests

```
https://ram.aliyuncs.com/?Action=ListPoliciesForRole
&RoleName=AdminRole
&<Common request parameters>
```

Sample success responses

`XML` format

```
<ListPoliciesForRoleResponse>
  <RequestId>7B8A4E7D-6CFF-471D-84DF-195A7A241ECB</RequestId>
  <Policies>
    <Policy>
      <PolicyName>OSS-Administrator</PolicyName>
      <PolicyType>Custom</PolicyType>
      <Description>OSS administrator</Description>
      <DefaultVersion>v1</DefaultVersion>
      <AttachDate>2015-01-23T12:33:18Z</AttachDate>
    </Policy>
    <Policy>
      <PolicyName>ReadOnlyAccess</PolicyName>
      <PolicyType>System</PolicyType>
      <Description>Read-only access</Description>
      <DefaultVersion>v1</DefaultVersion>
      <AttachDate>2015-02-18T17:22:08Z</AttachDate>
    </Policy>
  </Policies>
</ListPoliciesForRoleResponse>
```

JSON format

```
{
  "Policies": {
    "Policy": [
      {
        "Description": "OSS administrator",
        "PolicyName": "OSS-Administrator",
        "AttachDate": "2015-01-23T12:33:18Z",
        "DefaultVersion": "v1",
        "PolicyType": "Custom"
      },
      {
        "Description": "Read-only access",
        "PolicyName": "ReadOnlyAccess",
        "AttachDate": "2015-02-18T17:22:08Z",
        "DefaultVersion": "v1",
        "PolicyType": "System"
      }
    ]
  },
  "RequestId": "7B8A4E7D-6CFF-471D-84DF-195A7A241ECB"
}
```

Error codes

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

9. Security management APIs

9.1. SetAccountAlias

You can call this operation to specify an alias for an Alibaba 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
AccountAlias	String	Yes	myalias	The alias of the Alibaba Cloud account. The alias must be 3 to 32 characters in length, and can contain lowercase letters, digits, and hyphens (-). Note It cannot start or end with a hyphen (-), and cannot contain consecutive hyphens (-).
Action	String	Yes	SetAccountAlias	The operation that you want to perform. Set the value to SetAccountAlias.

Response parameters

Parameter	Type	Example	Description
RequestId	String	04F0F334-1335-436C-A1D7-6C044FE73368	The ID of the request.

Examples

Sample requests

```
https://ram.aliyuncs.com/?Action=SetAccountAlias
&AccountAlias=myalias
&<Common request parameters>
```

Sample success responses

`XML` format

```
04F0F334-1335-436C-A1D7-6C044FE73368
```

JSON format

```
{
  "RequestId": "04F0F334-1335-436C-A1D7-6C044FE73368"
}
```

Error codes

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

9.2. GetAccountAlias

Queries the alias of an Alibaba 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	GetAccountAlias	The operation that you want to perform. Set the value to GetAccountAlias .

Response parameters

Parameter	Type	Example	Description
RequestId	String	04F0F334-1335-436C-A1D7-6C044FE73368	The ID of the request.
AccountAlias	String	myalias	The alias of the Alibaba Cloud account.

Examples

Sample requests

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

Sample success responses

XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<GetAccountAliasResponse>
  <RequestId>04F0F334-1335-436C-A1D7-6C044FE73368</RequestId>
  <AccountAlias>myalias</AccountAlias>
</GetAccountAliasResponse>
```

JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId" : "04F0F334-1335-436C-A1D7-6C044FE73368",
  "AccountAlias" : "myalias"
}
```

Error codes

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

9.3. ClearAccountAlias

Deletes the alias of the Alibaba 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	ClearAccountAlias	The operation that you want to perform. Set the value to ClearAccountAlias.

Response parameters

Parameter	Type	Example	Description
RequestId	String	04F0F334-1335-436C-A1D7-6C044FE73368	The ID of the request.

Examples

Sample requests

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

Sample success responses

XML format

```
<ClearAccountAliasResponse>
  <RequestId>04F0F334-1335-436C-A1D7-6C044FE73368</RequestId>
</ClearAccountAliasResponse>
```

JSON format

```
{
  "RequestId": "04F0F334-1335-436C-A1D7-6C044FE73368"
}
```

Error codes

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

9.4. SetPasswordPolicy

Sets the password policy, including the password strength, for RAM users.

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	SetPasswordPolicy	The operation that you want to perform. Set the value to SetPasswordPolicy.

Parameter	Type	Required	Example	Description
HardExpiry	Boolean	No	false	<p>Specifies whether the password has expired.</p> <p>Valid values: <code>true</code> and <code>false</code>. Default value: <code>false</code>.</p> <ul style="list-style-type: none"> If the value of this parameter is <code>true</code>, the parent Alibaba Cloud account must reset the password before the RAM user can log on to the console. If the value of this parameter is <code>false</code>, the RAM user can change the password and then log on to the console.
MaxLoginAttempts	Integer	No	5	The maximum number of permitted logon attempts within one hour. The number of logon attempts is reset to zero if a RAM user changes the password.
MaxPasswordAge	Integer	No	0	The number of days for which a password is valid. Default value: 0. The default value indicates that the password never expires.
MinimumPasswordLength	Integer	No	12	The minimum required number of characters in a password.
PasswordReusePrevention	Integer	No	0	The number of previous passwords that the user is prevented from reusing. Default value: 0. The default value indicates that the RAM user is not prevented from reusing previous passwords.
RequireLowercaseCharacters	Boolean	No	true	Specifies whether a password must contain one or more lowercase letters.
RequireNumbers	Boolean	No	true	Specifies whether a password must contain one or more digits.
RequireSymbols	Boolean	No	true	Specifies whether a password must contain one or more special characters.

Parameter	Type	Required	Example	Description
RequireUppercaseCharacters	Boolean	No	true	Specifies whether a password must contain one or more uppercase letters.

Response parameters

Parameter	Type	Example	Description
PasswordPolicy			The policy to manage passwords.
HardExpiry	Boolean	false	<p>Indicates whether the password has expired.</p> <p>Valid values: <code>true</code> and <code>false</code>.</p> <p>Default value: <code>false</code>.</p> <ul style="list-style-type: none"> If the value of this parameter is <code>true</code>, the parent Alibaba Cloud account must reset the password before the RAM user can log on to the console. If the value of this parameter is <code>false</code>, the RAM user can change the password and then log on to the console.
MaxLoginAttempts	Integer	5	The maximum number of permitted logon attempts within one hour. The number of logon attempts is reset to zero if a RAM user changes the password.
MaxPasswordAge	Integer	0	The number of days for which a password is valid. Default value: 0. The default value indicates that the password never expires.
MinimumPasswordLength	Integer	12	The minimum required number of characters in a password.
PasswordReusePrevention	Integer	0	The number of previous passwords that the user is prevented from reusing. Default value: 0. The default value indicates that the RAM user is not prevented from reusing previous passwords.
RequireLowercaseCharacters	Boolean	true	Indicates whether a password must contain one or more lowercase letters.

Parameter	Type	Example	Description
RequireNumbers	Boolean	true	Indicates whether a password must contain one or more digits.
RequireSymbols	Boolean	true	Indicates whether a password must contain one or more special characters.
RequireUppercaseCharacters	Boolean	true	Indicates whether a password must contain one or more uppercase letters.
RequestId	String	04F0F334-1335-436C-A1D7-6C044FE73368	The ID of the request.

Examples

Sample requests

```
https://ram.aliyuncs.com/?Action=SetPasswordPolicy
&MinimumPasswordLength=12
&RequireLowercaseCharacters=true
&RequireUppercaseCharacters=true
&RequireNumbers=true
&RequireSymbols=true
&<Common request parameters>
```

Sample success responses

XML format

```
<SetPasswordPolicyResponse>
  <RequestId>04F0F334-1335-436C-A1D7-6C044FE73368</RequestId>
  <PasswordPolicy>
    <HardExpiry>>false</HardExpiry>
    <MaxLoginAttempts>5</MaxLoginAttempts>
    <MaxPasswordAge>0</MaxPasswordAge>
    <PasswordReusePrevention>0</PasswordReusePrevention>
    <MinimumPasswordLength>12</MinimumPasswordLength>
    <RequireLowercaseCharacters>true</RequireLowercaseCharacters>
    <RequireUppercaseCharacters>true</RequireUppercaseCharacters>
    <RequireNumbers>true</RequireNumbers>
    <RequireSymbols>true</RequireSymbols>
  </PasswordPolicy>
</SetPasswordPolicyResponse>
```

JSON format

```
{
  "RequestId": "04F0F334-1335-436C-A1D7-6C044FE73368",
  "PasswordPolicy": {
    "RequireUppercaseCharacters": true,
    "MaxPasswordAge": 0,
    "HardExpiry": false,
    "RequireNumbers": true,
    "RequireSymbols": true,
    "MaxLoginAttempts": 5,
    "PasswordReusePrevention": 0,
    "RequireLowercaseCharacters": true,
    "MinimumPasswordLength": 12
  }
}
```

Error codes

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

9.5. GetPasswordPolicy

Queries the password policy, including the password strength, of RAM users.

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	GetPasswordPolicy	The operation that you want to perform. Set the value to GetPasswordPolicy.

Response parameters

Parameter	Type	Example	Description
PasswordPolicy			The policy to manage passwords.

Parameter	Type	Example	Description
HardExpiry	Boolean	false	<p>Indicates whether the password has expired.</p> <p>Valid values: <code>true</code> and <code>false</code>.</p> <p>Default value: <code>false</code>.</p> <ul style="list-style-type: none"> If the value of this parameter is <code>true</code>, the parent Alibaba Cloud account must reset the password before the RAM user can log on to the console. If the value of this parameter is <code>false</code>, the RAM user can change the password and then log on to the console.
MaxLoginAttempts	Integer	5	The maximum number of permitted logon attempts within one hour. The number of logon attempts is reset to zero if a RAM user changes the password.
MaxPasswordAge	Integer	0	The number of days for which a password is valid. Default value: 0. The default value indicates that the password never expires.
MinimumPasswordLength	Integer	12	The minimum required number of characters in a password.
PasswordReusePrevention	Integer	0	The number of previous passwords that the user is prevented from reusing. Default value: 0. The default value indicates that the RAM user is not prevented from reusing previous passwords.
RequireLowerCaseCharacters	Boolean	true	Indicates whether a password must contain one or more lowercase letters.
RequireNumbers	Boolean	true	Indicates whether a password must contain one or more digits.
RequireSymbols	Boolean	true	Indicates whether a password must contain one or more special characters.
RequireUpperCaseCharacters	Boolean	true	Indicates whether a password must contain one or more uppercase letters.

Parameter	Type	Example	Description
RequestId	String	04F0F334-1335-436C-A1D7-6C044FE73368	The ID of the request.

Examples

Sample requests

```
https://ram.aliyuncs.com/?Action=GetPasswordPolicy
&AccountAlias=myalias
&<Common request parameters>
```

Sample success responses

XML **format**

```
<RequestId>04F0F334-1335-436C-A1D7-6C044FE73368</RequestId>
<PasswordPolicy>
  <HardExpiry>>false</HardExpiry>
  <MaxLoginAttempts>5</MaxLoginAttempts>
  <MaxPasswordAge>0</MaxPasswordAge>
  <PasswordReusePrevention>0</PasswordReusePrevention>
  <MinimumPasswordLength>12</MinimumPasswordLength>
  <RequireLowercaseCharacters>>true</RequireLowercaseCharacters>
  <RequireUppercaseCharacters>>true</RequireUppercaseCharacters>
  <RequireNumbers>>true</RequireNumbers>
  <RequireSymbols>>true</RequireSymbols>
</PasswordPolicy>
```

JSON **format**

```
{
  "RequestId": "04F0F334-1335-436C-A1D7-6C044FE73368",
  "PasswordPolicy": {
    "RequireUppercaseCharacters": true,
    "MaxPasswordAge": 0,
    "HardExpiry": false,
    "RequireNumbers": true,
    "RequireSymbols": true,
    "MaxLoginAttempts": 5,
    "PasswordReusePrevention": 0,
    "RequireLowercaseCharacters": true,
    "MinimumPasswordLength": 12
  }
}
```

Error codes

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

9.6. SetSecurityPreference

Configures the security preferences.

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	SetSecurityPreference	The operation that you want to perform. Set the value to SetSecurityPreference .
EnableSaveMFATicket	Boolean	No	true	Specifies whether to remember the multi-factor authentication (MFA) devices of Resource Access Management (RAM) users for seven days. Valid values: <ul style="list-style-type: none">true: remembers the MFA devices of RAM users for seven days.false: does not remember the MFA devices of RAM users for seven days.
AllowUserToChangePassword	Boolean	No	true	Specifies whether RAM users can change their passwords. Valid values: <ul style="list-style-type: none">true: RAM users can change their passwords. This is the default value.false: RAM users cannot change their passwords.
AllowUserToManageAccessKeys	Boolean	No	false	Specifies whether RAM users can manage their AccessKey pairs. Valid values: <ul style="list-style-type: none">true: RAM users can manage their AccessKey pairs.false: RAM users cannot manage their AccessKey pairs. This is the default value.

Parameter	Type	Required	Example	Description
AllowUserToManagePublicKeys	Boolean	No	false	<p>Specifies whether RAM users can manage their public keys. Valid values:</p> <ul style="list-style-type: none"> • true: RAM users can manage their public keys. • false: RAM users cannot manage their public keys. This is the default value. <p> Note This parameter is valid only for the Japan site.</p>
AllowUserToManageMFADevices	Boolean	No	true	<p>Specifies whether RAM users can manage their MFA devices. Valid values:</p> <ul style="list-style-type: none"> • true: RAM users can manage their MFA devices. This is the default value. • false: RAM users cannot manage their MFA devices.
LoginSessionDuration	Integer	No	6	<p>The validity period of the logon session of RAM users.</p> <p>Valid values: 1 to 24. Default value: 6. Unit: hours.</p>

Parameter	Type	Required	Example	Description
LoginNetworkMasks	String	No	10.0.0.0/8	<p>The subnet mask that specifies the IP addresses from which you can log on to the Alibaba Cloud Management Console. This parameter takes effect on password-based logon and single sign-on (SSO). However, this parameter does not take effect on API calls that are authenticated by using AccessKey pairs.</p> <ul style="list-style-type: none"> If you specify a subnet mask, RAM users can use only the IP addresses in the subnet mask to log on to the Alibaba Cloud Management Console. If you do not specify a subnet mask, RAM users can use all IP addresses to log on to the Alibaba Cloud Management Console. <p>If you need to specify multiple subnet masks, separate the subnet masks with semicolons (;). Example: 192.168.0.0/16;10.0.0.0/8.</p> <p>You can specify up to 25 subnet masks. The total length of the subnet masks can be a maximum of 512 characters.</p>

Response parameters

Parameter	Type	Example	Description
SecurityPreference	Object		The security preferences.
AccessKeyPreference	Object		The AccessKey pair preference.
AllowUserToManageAccessKeys	Boolean	false	Indicates whether RAM users can manage their AccessKey pairs.
MFAPreference	Object		The MFA preference.
AllowUserToManageMFADevices	Boolean	false	Indicates whether RAM users can manage their MFA devices.
LoginProfilePreference	Object		The logon preference.

Parameter	Type	Example	Description
EnableSaveMFA Ticket	Boolean	false	Indicates whether the MFA devices of RAM users are remembered.
LoginSessionDuration	Integer	6	The validity period of the logon session of RAM users.
LoginNetworkMasks	String	10.0.0.0/8	The subnet mask.
AllowUserToChangePassword	Boolean	true	Indicates whether RAM users can change their passwords.
PublicKeyPreference	Object		The public key preference.  Note This parameter is valid only for the Japan site.
AllowUserToManagePublicKeys	Boolean	false	Indicates whether RAM users can manage their public keys.
RequestId	String	A978915D-F279-4CA0-A89B-9A71219FFB3E	The ID of the request.

Examples

Sample requests

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

Sample success responses

`XML` format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<?xml version="1.0" encoding="UTF-8" ?>
<SetSecurityPreferenceResponse>
  <SecurityPreference>
    <LoginProfilePreference>
      <LoginSessionDuration>6</LoginSessionDuration>
      <LoginNetworkMasks></LoginNetworkMasks>
      <AllowUserToChangePassword>true</AllowUserToChangePassword>
      <EnableSaveMFATicket>false</EnableSaveMFATicket>
    </LoginProfilePreference>
    <AccessKeyPreference>
      <AllowUserToManageAccessKeys>false</AllowUserToManageAccessKeys>
    </AccessKeyPreference>
    <PublicKeyPreference>
      <AllowUserToManagePublicKeys>false</AllowUserToManagePublicKeys>
    </PublicKeyPreference>
    <MFAPreference>
      <AllowUserToManageMFADevices>true</AllowUserToManageMFADevices>
    </MFAPreference>
  </SecurityPreference>
  <RequestId>A978915D-F279-4CA0-A89B-9A71219FFB3E</RequestId>
</SetSecurityPreferenceResponse>
```

JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "SecurityPreference" : {
    "LoginProfilePreference" : {
      "LoginSessionDuration" : 6,
      "LoginNetworkMasks" : "",
      "AllowUserToChangePassword" : true,
      "EnableSaveMFATicket" : false
    },
    "AccessKeyPreference" : {
      "AllowUserToManageAccessKeys" : false
    },
    "PublicKeyPreference" : {
      "AllowUserToManagePublicKeys" : false
    },
    "MFAPreference" : {
      "AllowUserToManageMFADevices" : true
    }
  },
  "RequestId" : "A978915D-F279-4CA0-A89B-9A71219FFB3E"
}
```

Error codes

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

9.7. GetSecurityPreference

Queries the security preferences.

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	GetSecurityPreference	The operation that you want to perform. Set the value to GetSecurityPreference.

Response parameters

Parameter	Type	Example	Description
RequestId	String	DC1213F1-A9D5-4A01-A996-44983689126C	The ID of the request.
SecurityPreference	Struct		The security preferences.
AccessKeyPreference	Struct		The AccessKey pair preference.
AllowUserToManageAccessKeys	Boolean	false	Indicates whether RAM users can manage their AccessKey pairs. Valid values: <ul style="list-style-type: none"> true: RAM users can manage their AccessKey pairs. false: RAM users cannot manage their AccessKey pairs.
LoginProfilePreference	Struct		The logon preferences.
AllowUserToChangePassword	Boolean	true	Indicates whether RAM users can change their passwords. Valid values: <ul style="list-style-type: none"> true: RAM users can change their passwords. false: RAM users cannot change their passwords.

Parameter	Type	Example	Description
EnableSaveMFATicket	Boolean	false	<p>Indicates whether RAM users can save security codes for multi-factor authentication (MFA) during logon. Each security code is valid for seven days. Valid values:</p> <ul style="list-style-type: none"> • true: RAM users can save MFA security codes during logon. • false: RAM users cannot save MFA security codes during logon.
LoginNetworkMasks	String	10.0.0.0/8	<p>The subnet mask that indicates the IP addresses from which logon to the Alibaba Cloud Management Console is allowed. This parameter applies to password-based logon and single sign-on (SSO). However, this parameter does not apply to API calls that are authenticated based on AccessKey pairs.</p> <ul style="list-style-type: none"> • If a subnet mask is specified, RAM users can log on to the Alibaba Cloud Management Console only by using the IP addresses in the subnetwork. • If no subnet mask is specified, RAM users can log on to the Alibaba Cloud Management Console by using all IP addresses. <p>If more than one subnet mask is specified, the masks are separated with semicolons (;), for example, 192.168.0.0/16;10.0.0.0/8.</p>
LoginSessionDuration	Integer	6	The validity period of a logon session of a RAM user. Unit: hours.
MFAPreference	Struct		The MFA preference.
AllowUserToManageMFADevices	Boolean	true	<p>Indicates whether RAM users can manage their MFA devices. Valid values:</p> <ul style="list-style-type: none"> • true: RAM users can manage their MFA devices. • false: RAM users cannot manage their MFA devices.

Parameter	Type	Example	Description
PublicKeyPreference	Struct		<p>The public key preference.</p> <div style="background-color: #e0f2f1; padding: 5px; border: 1px solid #ccc;"> <p> Note The public key preference is valid only for the Japan site.</p> </div>
AllowUserToManagePublicKeys	Boolean	false	<p>Indicates whether RAM users can manage their public keys. Valid values:</p> <ul style="list-style-type: none"> • true: RAM users can manage their public keys. • false: RAM users cannot manage their public keys.

Examples

Sample requests

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

Sample success responses

XML format

```
<GetSecurityPreferenceResponse>
  <SecurityPreference>
    <LoginProfilePreference>
      <LoginSessionDuration>6</LoginSessionDuration>
      <LoginNetworkMasks></LoginNetworkMasks>
      <AllowUserToChangePassword>true</AllowUserToChangePassword>
      <EnableSaveMFATicket>false</EnableSaveMFATicket>
    </LoginProfilePreference>
    <AccessKeyPreference>
      <AllowUserToManageAccessKeys>false</AllowUserToManageAccessKeys>
    </AccessKeyPreference>
    <PublicKeyPreference>
      <AllowUserToManagePublicKeys>false</AllowUserToManagePublicKeys>
    </PublicKeyPreference>
    <MFAPreference>
      <AllowUserToManageMFADevices>true</AllowUserToManageMFADevices>
    </MFAPreference>
  </SecurityPreference>
  <RequestId>DC1213F1-A9D5-4A01-A996-44983689126C</RequestId>
</GetSecurityPreferenceResponse>
```

JSON format

```
{
  "SecurityPreference": {
    "LoginProfilePreference": {
      "LoginSessionDuration": 6,
      "LoginNetworkMasks": "",
      "AllowUserToChangePassword": true,
      "EnableSaveMFATicket": false
    },
    "AccessKeyPreference": {
      "AllowUserToManageAccessKeys": false
    },
    "PublicKeyPreference": {
      "AllowUserToManagePublicKeys": false
    },
    "MFAPreference": {
      "AllowUserToManageMFADevices": true
    }
  },
  "RequestId": "DC1213F1-A9D5-4A01-A996-44983689126C"
}
```

Error codes

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