

Alibaba Cloud Resource Access Management

API Reference

Issue: 20190606

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Generic conventions

Table -1: Style conventions

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

Style	Description	Example
<code>{}</code> or <code>{a b}</code>	It indicates that it is a required value, and only one item can be selected.	<code>switch {stand slave}</code>

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1 Calling methods

1.1 Request Structure

Endpoint

The API access URL for RAM services is:

```
https://ram.aliyuncs.com
```

Communication protocol

To ensure communication security, RAM uses only the HTTPS secure channel to send requests.

HTTP request method

The system allows you to send HTTP GET/POST requests. In this method, request parameters must be included in the request URL.

Request parameters

You must use the Action parameter in each request to specify the operation to perform, and meanwhile you must add public parameters and interface service parameters to the request.

Character encoding

Requests and responses are encoded using UTF-8.

1.2 Public parameters

Format

- **Name:** Format
- **Type:** String
- **Required:** No
- **Description:** Return value type. JSON and XML are supported, and the default value is XML.

Version

- **Name:** Version

- **Type:** String
- **Required:** Yes
- **Description:** API version number. It is in the YYYY-MM-DD format and the current version number is 2015-05-01.

AccessKeyId

- **Name:** AccessKeyId
- **Type:** String
- **Required:** Yes
- **Description:** AccessKey (AK) ID

Signature

- **Name:** Signature
- **Type:** String
- **Required:** Yes
- **Description:** Message signature

SignatureMethod

- **Name:** SignatureMethod
- **Type:** String
- **Required:** Yes
- **Description:** Signature method. Currently, only HMAC-SHA1 is supported.

SignatureVersion

- **Name:** SignatureVersion
- **Type:** String
- **Required:** Yes
- **Description:** Signature algorithm version. The current version is 1.0.

SignatureNonce

- **Name:** SignatureNonce
- **Type:** String
- **Required:** Yes
- **Description:** A unique random number preventing network replay attacks. You must use different random numbers for different requests.

Timestamp

- **Name:** Timestamp
- **Type:** String
- **Required:** Yes
- **Description:** Timestamp for a request. The date format follows the ISO8601 standard and uses UTC time. The timestamp format is:

```
YYYY - MM - DDThh : mm : ssZ
```

For example: 2013-01-10T12:00:00Z (equivalent to 2013-01-10 20:00:00 Beijing time)

Request example

```
https :// ram . aliyuncs . com /
    Format = xml
    & Version = 2015 - 05 - 01
    & Signature = Pc5WB8gokV n0xfeu % 2FZV % 2BiNM1dgI % 3D
    & SignatureM ethod = HMAC - SHA1
    & SignatureN once = 1521552885 2396
    & SignatureV ersion = 1 . 0
    & AccessKeyI d = key - test
    & Timestamp = 2012 - 06 - 01T12 : 00 : 00Z
    ...
```

Public return parameters

Each time you send a request to call an interface, the system will return a unique identification code (RequestId) to you no matter the request is successful or not. This parameter is used to identify requests.

Example

- **XML example**

```
<? xml version =" 1 . 0 " encoding =" utf - 8 "? >
    <!-- Result root node -->
    < Interface name + response >
    <!-- Return request tag -->
    < RequestId > 4C467B38 - 3910 - 447D - 87BC - AC049166F2
16 </ RequestId >
    <!-- Return result data -->
    </ Interface name + response >
```

- **JSON example**

```
" RequestId ": " 4C467B38 - 3910 - 447D - 87BC -
AC049166F2 16 "
/* Return result data */
```

1.3 Signature mechanism

RAM authenticates the identity of each access request. Therefore, no matter whether submitted through HTTP or HTTPS, a request must contain signature information. RAM uses AccessKeyId and AccessKeySecret for symmetric encryption to verify the identities of request senders. AccessKeyId and AccessKeySecret are officially issued to visitors by Alibaba Cloud (visitors can apply for and manage them on the official website of Alibaba Cloud). AccessKeyId indicates the identity of the visitor, and AccessKeySecret is the secret key used to encrypt the signature string and to verify the signature string on the server. It must be kept strictly confidential and should only be known only by Alibaba Cloud and the authenticated visitor.

Procedure

1. Use request parameters to construct a canonicalized query string.
 - a. Sort all request parameters (including public request parameters and user-defined parameters with given request APIs described in this topic and excluding the Signature parameter) alphabetically by parameter name.



Note:

If you use the GET method to submit requests, these parameters will be included in the request URI, namely, the part after the question mark (?) following the ampersand (&) in the URI.

- b. Encode the name and value of each request parameter. URL encoding using the UTF-8 character set is required. URL encoding rules are as follows:
 - Upper case letters from A to Z, lowercase letters from a to z, digits from 0 to 9, and other characters including en dashes (-), underscores (_), periods (.), and tildes (~) are not encoded.
 - Other characters are encoded in %XY format, with XY representing the characters' ASCII code in hexadecimal notation. For example, double quotation marks (") are encoded as %22.
 - It must be noted that spaces are encoded as %20 instead of plus signs (+).



Note:

Generally, URL-encoded libraries (such as `java.net.URLEncoder` in Java) are encoded based on rules of the MIME type in `application/x-www-form-urlencoded` format. You can directly use this encoding method by replacing the plus sign (+) in the encoded string with %20 and the asterisk (*) with %2A. Also, you must change %7E back to the tilde (~) to conform to the encoding rules described above.

- c. Connect the encoded parameter names and values with equal signs (=).
 - d. Connect the parameter name and value pairs connected by equal signs (=) alphabetically by parameter name with ampersands (&) to produce a canonicalized query string.
2. Use the canonicalized query string to construct the string for signature calculation according to the rule:

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

In this rule, `HTTPMethod` is the HTTP method (for example, GET) used for request submission. `percentEncode("/")` is the encoded value (namely, %2F) for the character "/" according to the URL encoding rules described in 1.b.

`percentEncode(CanonicalizedQueryString)` is the canonicalized query string encoded by following the URL encoding rules described in 1.b.

3. Use the string for signature calculation to calculate the HMAC value of the signature based on [RFC2104](#). Note that the key used for signature calculation is your `AccessKeySecret` with an ampersand (&) (ASCII code: 38) and it is based on the hash algorithm SHA1.
4. Encode the HMAC value as a string according to the base64 encoding rules to obtain the signature.
5. Add the signature to the parameters of a request as a signature parameter. Note that the obtained signature value requires URL encoding based on RFC3986 rules like other parameters before it is submitted to the RAM server as the final request parameter value.

Example

Use `CreateUser` as an example. The request URL before signature is:

```
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 - b8e8563dc8 d2
```

The corresponding StringToSign is:

```
GET &% 2F & AccessKeyId % 3Dtestid % 26Action % 3DCreateUser % 26Format % 3DJSON % 26SignatureMethod % 3DHMAC - SHA1 % 26SignatureNonce % 3D6a6e0ca6 - 4557 - 11e5 - 86a2 - b8e8563dc8 d2 % 26SignatureVersion % 3D1 . 0 % 26Timestamp % 3D2015 - 08 - 18T03 % 253A15 % 253A45Z % 26Username % 3Dtest % 26Version % 3D2015 - 05 - 01
```

Assume that the value of the AccessKeyId parameter is testid and that of the AccessKeySecret parameter is testsecret, and the key used for HMAC calculation is testsecret&. The calculated signature value is:

```
kRA2cnpJVa cIhDMzXnoN ZG9tDCI % 3D
```

The signed request URL is (with the Signature parameter added):

```
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 = kRA2cnpJVa cIhDMzXnoN ZG9tDCI % 3D & Action = CreateUser & SignatureNonce = 6a6e0ca6 - 4557 - 11e5 - 86a2 - b8e8563dc8 d2
```

1.4 Return results

After the API service is called, data is returned in a unified format. The returned HTTP status code 2xx indicates that the call is successful, and 4xx or 5xx indicates that the call fails. For successful calls, the returned data are mainly in XML or JSON format. When a request is sent, an external system can enter a parameter to define the format of returned data, which is XML by default. In this topic, examples of returned results are formatted in a way that is easier for you to view. The actual return results are not formatted with line breaks or indentation.

Successful results

- XML example

XML return results include a message stating whether the request is successful and the specific service data. For example:

```
<? xml version =" 1 . 0 " encoding =" utf - 8 " ? >
<!-- Result root node -->
< API name + response >
  <!-- Return request tag -->
  < RequestId > 4C467B38 - 3910 - 447D - 87BC - AC049166F2 16 </
  RequestId >
```



```
<!-- Return result data -->
</ API name + response >
```

- JSON example

```
" RequestId ": " 4C467B38 - 3910 - 447D - 87BC - AC049166F2 16
",
/* Return result data */
```

Incorrect results

If there is an API call error, no result data is returned. You can locate error causes according to [Error code](#).

When an error occurs in a call, an HTTP status code 4xx or 5xx will be returned for an HTTP request. The returned message body contains the specific error code and error message as well as the globally unique RequestId and the requested HostId. If you cannot locate the error cause, you can contact Alibaba Cloud customer service and provide your HostId and RequestId for quick troubleshooting.

- XML example

```
<? xml version = " 1 . 0 " encoding = " UTF - 8 "? >
< Error >
  < RequestId > 8906582E - 6722 - 409A - A6C4 - 0E7863B733 A5 </
RequestId >
  < HostId > ram . aliyuncs . com </ HostId >
  < Code > InvalidPar ameter </ Code >
  < Message > The specified parameter " Action or Version
" is not valid .</ Message >
</ Error >
```

- JSON example

```
" RequestId ": " 7463B73D - 35CC - 4D19 - A010 - 6B8D65D242 EF
",
" HostId ": " ram . aliyuncs . com ",
" Code ": " InvalidPar ameter ",
" Message ": " The specified parameter \" Action or
Version \" is not valid ."
```

2 RAM authentication

This topic describes the APIs that can be authorized in RAM and the corresponding resource formats.

Before an anonymous user calls an API to access the resources of an account, RAM checks whether the resource owner has granted the resource access permission to the user. The resource permission is checked according to the resource types and API functions.

The following table details the rules for API authentication.

API	Resource format
ram:CreateUser	acs : ram :*:\${ AccountId }: user /*
ram:GetUser	acs : ram :*:\${ AccountId }: user /\${ UserName }
ram:UpdateUser	acs : ram :*:\${ AccountId }: user /\${ UserName }
ram>DeleteUser	acs : ram :*:\${ AccountId }: user /\${ UserName }
ram:ListUsers	acs : ram :*:\${ AccountId }: user /*
ram:CreateLoginProfile	acs : ram :*:\${ AccountId }: user /\${ UserName }
ram:GetLoginProfile	acs : ram :*:\${ AccountId }: user /\${ UserName }
ram>DeleteLoginProfile	acs : ram :*:\${ AccountId }: user /\${ UserName }
ram:UpdateLoginProfile	acs : ram :*:\${ AccountId }: user /\${ UserName }
ram:CreateAccessKey	acs : ram :*:\${ AccountId }: user /\${ UserName }
ram:UpdateAccessKey	acs : ram :*:\${ AccountId }: user /\${ UserName }

API	Resource format
ram:DeleteAccessKey	acs : ram :*:\${ AccountId }: user /\${ UserName }
ram:ListAccessKeys	acs : ram :*:\${ AccountId }: user /\${ UserName }
ram:CreateVirtualMFADevice	acs : ram :*:\${ AccountId }: mfa / *
ram:ListVirtualMFADevices	acs : ram :*:\${ AccountId }: mfa / *
ram>DeleteVirtualMFADevice	\${ SerialNumb er }
ram:BindMFADevice	acs : ram :*:\${ AccountId }: user /\${ UserName }
ram:UnbindMFADevice	acs : ram :*:\${ AccountId }: user /\${ UserName }
ram:GetUserMFAInfo	acs : ram :*:\${ AccountId }: user /\${ UserName }
ram:ChangePassword	acs : ram :*:\${ AccountId }: user /\${ UserName }
ram:CreateGroup	acs : ram :*:\${ AccountId }: group /*
ram:GetGroup	acs : ram :*:\${ AccountId }: group /\${ GroupName }
ram:UpdateGroup	acs : ram :*:\${ AccountId }: group /\${ GroupName }
ram:ListGroups	acs : ram :*:\${ AccountId }: group /*
ram>DeleteGroup	acs : ram :*:\${ AccountId }: group /\${ GroupName }
ram:AddUserToGroup	acs : ram :*:\${ AccountId }: user /\${ UserName }
	acs : ram :*:\${ AccountId }: group /\${ GroupName }
ram:RemoveUserFromGroup	acs : ram :*:\${ AccountId }: user /\${ UserName }

API	Resource format
	acs : ram : *: \${ AccountId } : group / \${ GroupName }
ram:ListGroupsWithUser	acs : ram : *: \${ AccountId } : user / \${ UserName }
ram:ListUsersForGroup	acs : ram : *: \${ AccountId } : group / \${ GroupName }
ram:CreateRole	acs : ram : *: \${ AccountId } : role /*
ram:GetRole	acs : ram : *: \${ AccountId } : role / \${ RoleName }
ram:UpdateRole	acs : ram : *: \${ AccountId } : role / \${ RoleName }
ram:ListRoles	acs : ram : *: \${ AccountId } : role /*
ram>DeleteRole	acs : ram : *: \${ AccountId } : role / \${ RoleName }
ram:CreatePolicy	acs : ram : *: \${ AccountId } : policy /*
ram:GetPolicy	acs : ram : *: \${ AccountId } or system : policy / \${ PolicyName }
ram>DeletePolicy	acs : ram : *: \${ AccountId } : policy / \${ PolicyName }
ram:ListPolicies	acs : ram : *: \${ AccountId } : policy /*
ram:CreatePolicyVersion	acs : ram : *: \${ AccountId } : policy / \${ PolicyName }
ram:GetPolicyVersion	acs : ram : *: \${ AccountId } or system : group / \${ PolicyName }
ram>DeletePolicyVersion	acs : ram : *: \${ AccountId } : policy / \${ PolicyName }
ram:ListPolicyVersions	acs : ram : *: \${ AccountId } or system : policy / \${ PolicyName }

API	Resource format
ram:SetDefaultPolicyVersion	acs : ram :*:\${ AccountId }: policy /\${ PolicyName }
ram:AttachPolicyToUser	acs : ram :*:\${ AccountId } : user /\${ UserName }
	acs : ram :*:\${ AccountId } or system : policy /\${ PolicyName }
ram:DetachPolicyFromUser	acs : ram :*:\${ AccountId } : user /\${ UserName }
	acs : ram :*:\${ AccountId } or system : policy /\${ PolicyName }
ram:AttachPolicyToGroup	acs : ram :*:\${ AccountId } : group /\${ GroupName }
	acs : ram :*:\${ AccountId } or system : policy /\${ PolicyName }
ram:DetachPolicyFromGroup	acs : ram :*:\${ AccountId } : group /\${ GroupName }
	acs : ram :*:\${ AccountId } or system : policy /\${ PolicyName }
ram:AttachPolicyToRole	acs : ram :*:\${ AccountId } : role /\${ RoleName }
	acs : ram :*:\${ AccountId } or system : policy /\${ PolicyName }
ram:DetachPolicyFromRole	acs : ram :*:\${ AccountId } : role /\${ RoleName }
	acs : ram :*:\${ AccountId } or system : policy /\${ PolicyName }
ram:ListEntitiesForPolicy	acs : ram :*:\${ AccountId } or system : policy /\${ PolicyName }
ram:SetAccountAlias	acs : ram :*:\${ AccountId } :*
ram:GetAccountAlias	acs : ram :*:\${ AccountId } :*
ram:ClearAccountAlias	acs : ram :*:\${ AccountId } :*
ram:SetPasswordPolicy	acs : ram :*:\${ AccountId } :*

API	Resource format
ram:GetPasswordPolicy	acs : ram :*:\${ AccountId }:*
ram:SetSecurityPreference	acs : ram :*:\${ AccountId }:*

3 API overview

This topic lists all RAM API actions.

For more information about API resources, see [OpenAPI Explorer](#).

User management API actions

Action	Description
CreateUser	Creates a RAM user.
GetUser	Obtains the detailed information about a RAM user.
UpdateUser	Updates the basic information about a RAM user.
DeleteUser	Deletes a RAM user.
ListUsers	Lists all RAM users.
CreateLoginProfile	Enables console logon for a RAM user.
CreateLoginProfile	Views the logon configurations of a RAM user.
DeleteLoginProfile	Disables console logon for a RAM user.
DeleteLoginProfile	Modifies the logon configurations of a RAM user.
CreateAccessKey	Creates an AccessKey for a RAM user.
UpdateAccessKey	Changes the AccessKey status of a RAM user.
DeleteAccessKey	Deletes the AccessKey of a RAM user.
ListAccessKeys	Lists the AccessKey of a RAM user.
CreateVirtualMFADevice	Creates a virtual Multi-Factor Authentication (MFA) device.
ListVirtualMFADevices	Lists virtual MFA devices.
DeleteVirtualMFADevice	Deletes a virtual MFA device.
BindMFADevice	Attaches an MFA device to a RAM user.
UnbindMFADevice	Removes an MFA device from a RAM user.

Action	Description
GetUserMFAInfo	Obtains the MFA device information of a RAM user.
ChangePassword	Changes the password for a RAM user.

Group management API actions

Action	Description
CreateGroup	Creates a RAM user group.
GetGroup	Obtains RAM user group information.
UpdateGroup	Updates RAM user group information.
ListGroup	Lists all 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.
ListGroupForUser	Lists information about the RAM user groups to which a specified RAM user is added.
ListUsersForGroup	Lists the RAM users in a RAM user group.

Role management API actions

Action	Description
CreateRole	Creates a RAM role.
GetRole	Obtains information about a RAM role.
UpdateRole	Updates information about a RAM role.
ListRoles	Lists RAM roles.
DeleteRole	Deletes a RAM role.

Policy management API actions

Action	Description
CreatePolicy	Creates a policy.
GetPolicy	Obtains information about a policy.

Action	Description
DeletePolicy	Deletes a policy.
ListPolicies	Lists policies.
CreatePolicyVersion	Creates a version for a policy.
GetPolicyVersion	Obtains information about the version of a policy.
DeletePolicyVersion	Deletes a version of a policy.
ListPolicyVersions	Lists all versions of a policy.
SetDefaultPolicyVersion	Sets the default version of a policy.
AttachPolicyToUser	Attaches a policy to a RAM user.
DetachPolicyFromUser	Removes a policy from a RAM user.
AttachPolicyToGroup	Attaches a policy to a RAM user group.
DetachPolicyFromGroup	Removes a policy from a RAM user group.
AttachPolicyToRole	Attaches a policy to a RAM role.
DetachPolicyFromRole	Removes a policy from a RAM role.
ListEntitiesForPolicy	Lists the entities that use a policy.
ListPoliciesForUser	Lists the policies attached to a RAM user.
ListPoliciesForGroup	Lists the policies attached to a RAM user group.
ListPoliciesForRole	Lists the policies attached to a RAM role.

Security management API actions

Action	Description
SetAccountAlias	Sets an alias for an Alibaba Cloud account.
GetAccountAlias	Views the alias of an Alibaba Cloud account.
ClearAccountAlias	Deletes the alias of an Alibaba Cloud account.
SetPasswordPolicy	Sets the password policy, including the password strength, for a RAM user.

Action	Description
<i>GetPasswordPolicy</i>	Obtains the password policy, including the password strength, of a RAM user.
<i>SetSecurityPreference</i>	Sets the security preferences.

4 User management APIs

4.1 CreateUser

Creates a RAM user.

Debug

Use [OpenAPI Explorer](#) to perform debug operations and generate SDK code examples.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	CreateUser	The name of this action. Value: CreateUser
UserName	String	Yes	Alice	The username. It must be 1 to 64 characters in length. Pattern: <code>^[a-zA-Z0-9\.\@\-_]+\$</code>
Comments	String	No	This is a cloud computing engineer.	The comment. It must be 1 to 128 characters in length.
DisplayName	String	No	Alice	The display name. It must be 1 to 128 characters in length. Pattern: <code>^[a-zA-Z0-9\.\@\-\ u4e00-\ u9fa5]+\$</code>
Email	String	No	alice@example.com	The email address of the RAM user.
MobilePhone	String	No	86-1868888****	The mobile phone number of the RAM user. Format: International area code-mobile phone number

Response parameters

Parameter	Type	Example value	Description
RequestId	String	04F0F334-1335-436C-A1D7-6C044FE73368	The request ID.
User	N/A	N/A	The RAM user information.
└ Comments	String	This is a cloud computing engineer.	The comment.
└ CreateDate	String	2015-01-23T12:33:18Z	The date and time when the RAM user was created.
└ DisplayName	String	Alice	The display name.
└ Email	String	alice@example.com	The email address of the RAM user.
└ MobilePhone	String	86-1860000****	The mobile phone number of the RAM user.
└ UserId	String	122748924538****	The ID of the RAM user.
└ UserName	String	Alice	The username.

Example

Request example

```
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 parameters>
```

Response example

XML format

```
<CreateUserResponse>
```

```
< RequestId > 04F0F334 - 1335 - 436C - A1D7 - 6C044FE733 68 </
RequestId >
< User >
  < UserId > 1227489245 38 ****</ UserId >
  < UserName > Alice </ UserName >
  < DisplayNam e > Alice </ DisplayNam e >
  < MobilePhon e > 86 - 1860000 ****</ MobilePhon e >
  < Email > alice @ example . com </ Email >
  < Comments > This is a cloud computing engineer .</
Comments >
  < CreateDate > 2015 - 01 - 23T12 : 33 : 18Z </ CreateDate >
</ User >
</ CreateUser Response >
```

JSON format

```
{
  " User ":{
    " Comments ":" This is a cloud computing engineer
.",
    " Email ":" alice @ example . com ",
    " UserName ":" Alice ",
    " UserId ":" 1227489245 38 ****",
    " MobilePhon e ":" 86 - 1860000 ****",
    " DisplayNam e ":" Alice ",
    " CreateDate ":" 2015 - 01 - 23T12 : 33 : 18Z "
  },
  " RequestId ":" 04F0F334 - 1335 - 436C - A1D7 - 6C044FE733 68 "
}
```

Errors

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

4.2 GetUser

Obtains the detailed information about a RAM user.

Debug

Use [API Explorer](#) to perform debug operations and generate SDK code examples.

Request parameters

Parameter	Type	Required ?	Example value	Description
Action	String	Yes	GetUser	The name of this action. Value: GetUser

Parameter	Type	Required ?	Example value	Description
UserName	String	Yes	Alice	The username. It must be 1 to 64 characters in length. Pattern: <code>^[a-zA-Z0-9 \.@\- _]+\$</code>

Response parameters

Parameter	Type	Example value	Description
RequestId	String	2D69A58F-345C-4FDE-88E4-BF5189484043	The request ID.
User	N/A	N/A	The RAM user information.
└ Comments	String	This is a cloud computing engineer.	The comment.
└ CreateDate	String	2015-01-23T12:33:18Z	The date and time when the RAM user was created.
└ DisplayName	String	Alice	The display name.
└ Email	String	alice@example.com	The email address of the RAM user.
└ LastLoginDate	String	2015-01-23T12:33:18Z	The date and time when the user last logged on to the RAM console by using the password.
└ MobilePhone	String	86-1860000****	The mobile phone number of the RAM user.
└ UpdateDate	String	2015-02-11T03:15:21Z	The date and time when the user information was modified.
└ UserId	String	122748924538****	The ID of the RAM user.

Parameter	Type	Example value	Description
└ Username	String	Alice	The username.

Example

Request example

```
https://ram.aliyuncs.com/?Action=GetUser
&Username=Alice
&<Common parameters>
```

Response example

XML format

```
< GetUserResponse >
  < RequestId > 2D69A58F - 345C - 4FDE - 88E4 - BF51894840 43 </
RequestId >
  < User >
    < UserId > 1227489245 38 ****</ 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 </ LastLoginD
ate >
  </ User >
</ GetUserResponse >
```

JSON format

```
{
  "User":{
    "LastLoginDate":"2015 - 01 - 23T12 : 33 : 18Z ",
    "Comments":"This is a cloud computing engineer
.",
    "Email":"alice @ example . com ",
    "Username":"Alice ",
    "UpdateDate":"2015 - 02 - 11T03 : 15 : 21Z ",
    "UserId":"1227489245 38 ****",
    "MobilePhone":"86 - 1860000 ****",
    "DisplayName":"Alice ",
    "CreateDate":"2015 - 01 - 23T12 : 33 : 18Z "
  },
  "RequestId":"2D69A58F - 345C - 4FDE - 88E4 - BF51894840 43 "
}
```

Errors

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

4.3 UpdateUser

Updates the basic information about a RAM user.

Debug

Use [API Explorer](#) to perform debug operations and generate SDK code examples.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	UpdateUser	The name of this action. Value: UpdateUser
UserName	String	Yes	Alice	The username.
NewComments	String	No	This is a cloud computing engineer.	The comment on the new RAM user. It must be 1 to 128 characters in length.
NewDisplayName	String	No	Bob	The display name of the new RAM user.
NewEmail	String	No	bob@example.com	The email address of the new RAM user.
NewMobilePhone	String	No	86-1860000****	The mobile phone number of the new RAM user. Format: International area code-mobile phone number
NewUsername	String	No	Bob	The username of the new RAM user. It must be 1 to 64 characters in length. Pattern: <code>^[a-zA-Z0-9\.\@\-_]+\</code>

Response parameters

Parameter	Type	Example	Description
RequestId	String	04F0F334-1335-436C-A1D7-6C044FE73368	The request ID.
User	N/A	N/A	The RAM user information.
└ Comments	String	This is a cloud computing engineer.	The comment.
└ CreateDate	String	2015-01-23T12:33:18Z	The date and time when the RAM user was created.
└ DisplayName	String	Bob	The display name.
└ Email	String	bob@example.com	The email address of the RAM user.
└ MobilePhone	String	86-1860000****	The mobile phone number of the RAM user.
└ UpdateDate	String	2015-02-11T03:15:21Z	The date and time when the user information was modified.
└ UserId	String	122748924538****	The ID of the RAM user.
└ UserName	String	Bob	The username.

Examples

Request example

```
https://ram.aliyuncs.com/?Action=UpdateUser
&UserName=Alice
&NewUserName=Bob
&NewMobilePhone=86-1860000****
&NewEmail=bob@example.com
&<Common parameters>
```

Response example

XML format

```
< CreateUser Response >
  < RequestId > 04F0F334 - 1335 - 436C - A1D7 - 6C044FE733 68 </
  RequestId >
  < User >
    < UserId > 1227489245 38 ****</ UserId >
    < UserName > Bob </ UserName >
    < DisplayNam e > Bob </ DisplayNam e >
    < MobilePhon e > 86 - 1860000 ****</ MobilePhon e >
    < Email > bob @ 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 >
</ CreateUser Response >
```

JSON format

```
{
  " User ":{
    " Comments ":" This is a cloud computing engineer
    .",
    " Email ":" bob @ example . com ",
    " UserName ":" Bob ",
    " UpdateDate ":" 2015 - 02 - 11T03 : 15 : 21Z ",
    " UserId ":" 1227489245 38 ****",
    " MobilePhon e ":" 86 - 1860000 ****",
    " DisplayNam e ":" Bob ",
    " CreateDate ":" 2015 - 01 - 23T12 : 33 : 18Z "
  },
  " RequestId ":" 04F0F334 - 1335 - 436C - A1D7 - 6C044FE733 68 "
}
```

Errors

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

4.4 DeleteUser

Deletes a RAM user.



Note:

Before you delete a RAM user, make sure that no policy is attached to the user, and the user does not belong to any group.

Debug

Use [API Explorer](#) to perform debug operations and generate SDK code examples.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	DeleteUser	The name of this action. Value: DeleteUser
UserName	String	Yes	Alice	The username. It must be 1 to 64 characters in length. Pattern: <code>^[a-zA-Z0-9 \.@\- _]+\$</code>

Response parameters

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

Example

Request example

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

Response example

XML format

```
<DeleteUserResponse>
  <RequestId>1C488B66-B819-4D14-8711-C4EAAA13AC01</RequestId>
</DeleteUserResponse>
```

JSON format

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

Errors

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

4.5 ListUsers

Lists all RAM users.

Debug

Use [OpenAPI Explorer](#) to perform debug operations and generate SDK code examples.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	ListUsers	The name of this action. Value: ListUsers
Marker	String	No	EXAMPLE	The marker. If part of a response is intercepted, you can use this parameter to obtain the intercepted content.
MaxItems	Integer	No	100	The number of response items. If a response is intercepted when it reaches the maximum value of this parameter, the value of <code>IsTruncated</code> is <code>true</code> . Value range: 1 to 100 Default value: 100

Response parameters

Parameter	Type	Example value	Description
<code>IsTruncated</code>	Boolean	true	Indicates whether a response is intercepted.
Marker	String	EXAMPLE	This parameter is available only when the value of <code>IsTruncated</code> is <code>true</code> . In this case, you need to call this API action and use <code>Marker</code> to obtain the intercepted content.

Parameter	Type	Example value	Description
RequestId	String	4B450CA1-36E8-4AA2-8461-86B42BF4CC4E	The request ID.
Users	N/A	N/A	The information about the RAM users.
└ Comments	String	This is a cloud computing engineer.	The comment.
└ CreateDate	String	2015-01-23T12:33:18Z	The date and time when the RAM user was created.
└ DisplayName	String	Alice	The display name.
└ Email	String	alice@example.com	The email address of the RAM user.
└ MobilePhone	String	86-1860000****	The mobile phone number of the RAM user.
└ UpdateDate	String	2015-01-23T12:33:18Z	The date and time when the user information was modified.
└ UserId	String	122748924538****	The ID of the RAM user.
└ UserName	String	Alice	The username.

Example

Request example

```
https://ram.aliyuncs.com/?Action=ListUsers
&<CommonParameters>
```

Response example

XML format

```
<ListUsersResponse>
  <RequestId>4B450CA1-36E8-4AA2-8461-86B42BF4CC4E</RequestId>
```

```

< Users >
  < User >
    < UserId > 1227489245 38 ****</ UserId >
    < UserName > Alice </ UserName >
    < DisplayNam e > Alice </ DisplayNam e >
    < MobilePhon e > 86 - 1860000 ****</ MobilePhon e >
    < Email > alice @ example . com </ Email >
    < Comments > This is a cloud computing engineer .</
Comments >
    < CreateDate > 2015 - 01 - 23T12 : 33 : 18Z </ CreateDate >
    < UpdateDate > 2015 - 01 - 23T12 : 33 : 18Z </ UpdateDate >
  </ User >
  < User >
    < UserId > 1406498224 72 ****</ UserId >
    < UserName > Bob </ UserName >
    < DisplayNam e > Bob </ DisplayNam e >
    < MobilePhon e > 86 - 1860000 ****</ MobilePhon e >
    < Email > bob @ example . com </ Email >
    < Comments > The administra tor .</ Comments >
    < CreateDate > 2015 - 02 - 18T17 : 22 : 08Z </ CreateDate >
    < UpdateDate > 2015 - 02 - 18T17 : 22 : 08Z </ UpdateDate >
  </ User >
</ Users >
< IsTruncate d > true </ IsTruncate d >
< Marker > EXAMPLE </ Marker >
</ ListUsersR esponse >

```

JSON format

```

{
  " Users ":{
    " User ":[
      {
        " Comments ":" This is a cloud computing
engineer .",
        " Email ":" alice @ example . com ",
        " UserName ":" Alice ",
        " UpdateDate ":" 2015 - 01 - 23T12 : 33 : 18Z ",
        " UserId ":" 1227489245 38 ****",
        " MobilePhon e ":" 86 - 1860000 ****",
        " DisplayNam e ":" Alice ",
        " CreateDate ":" 2015 - 01 - 23T12 : 33 : 18Z "
      },
      {
        " Comments ":" The administra tor .",
        " Email ":" bob @ example . com ",
        " UserName ":" Bob ",
        " UpdateDate ":" 2015 - 02 - 18T17 : 22 : 08Z ",
        " UserId ":" 1406498224 72 ****",
        " MobilePhon e ":" 86 - 1860000 ****",
        " DisplayNam e ":" Bob ",
        " CreateDate ":" 2015 - 02 - 18T17 : 22 : 08Z "
      }
    ]
  },
  " IsTruncate d ": true ,
  " RequestId ":" 4B450CA1 - 36E8 - 4AA2 - 8461 - 86B42BF4CC 4E ",
  " Marker ":" EXAMPLE "
}

```

```
}
```

Errors

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

4.6 CreateLoginProfile

Enables console logon for a RAM user.

Debug

Use [API Explorer](#) to perform debug operations and generate SDK code examples.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	CreateLoginProfile	The name of this action. Value: CreateLoginProfile
UserName	String	Yes	Alice	The username.
Password	String	Yes	mypassword	The password. It must meet the password strength requirements. For information about how to set a strong password, see GetPasswordPolicy .
PasswordResetRequired	Boolean	No	false	Specifies whether you need to change your password upon logon. Default value: false
MFABindRequired	Boolean	No	false	Specifies whether you need to attach an MFA device upon the next logon. Default value: false

Response parameters

Parameter	Type	Example value	Description
LoginProfile	N/A	N/A	The logon configurations.
└ CreateDate	String	2015-01-23T12:33:18Z	The creation time.
└ MFABindRequired	Boolean	false	Indicates that you must attach an MFA device.
└ PasswordResetRequired	Boolean	false	Indicates that you must change your password upon next logon.
└ UserName	String	Alice	The username.
RequestId	String	04F0F334-1335-436C-A1D7-6C044FE73368	The request ID.

Example

Request example

```
https://ram.aliyuncs.com/?Action=CreateLoginProfile
&UserName=Alice
&Password=mypassword
&PasswordResetRequired=false
&<CommonParameters>
```

Response example

XML format

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



```
</ CreateLoginProfile >
```

JSON format

```
{
  "RequestId ":" 04F0F334 - 1335 - 436C - A1D7 - 6C044FE733 68 ",
  "LoginProfile ":{
    "PasswordResetRequired ": true ,
    "MFABindRequired ": true ,
    "UserName ":" Alice ",
    "CreateDate ":" 2015 - 01 - 23T12 : 33 : 18Z "
  }
}
```

Errors

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

4.7 GetLoginProfile

Views the logon configurations of a RAM user.

Debug

Use [API Explorer](#) to perform debug operations and generate SDK code examples.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	GetLoginProfile	The name of this action. Value: GetLoginProfile
UserName	String	Yes	Alice	The username.

Response parameters

Parameter	Type	Example value	Description
LoginProfile	N/A	N/A	The logon configurations.
CreateDate	String	2015-01-23T12:33:18Z	The creation time.

Parameter	Type	Example value	Description
MFABindRequired	Boolean	true	Indicates that you must attach an MFA device.
PasswordResetRequired	Boolean	true	Indicates that you must change your password upon next login.
UserName	String	Alice	The username.
RequestId	String	04F0F334-1335-436C-A1D7-6C044FE73368	The request ID.

Example

Request example

```
https://ram.aliyuncs.com/?Action=GetLoginProfile
&UserName=Alice
&<CommonParameters>
```

Response example

XML format

```
<GetLoginProfile>
  <RequestId> 04F0F334 - 1335 - 436C - A1D7 - 6C044FE733 68 </
  RequestId >
    <LoginProfile>
      <UserName> Alice </UserName>
      <PasswordResetRequired> true </PasswordResetRequired>
      <MFABindRequired> true </MFABindRequired>
      <CreateDate> 2015 - 01 - 23T12 : 33 : 18Z </CreateDate>
    </LoginProfile>
  </GetLoginProfile>
```

JSON format

```
{
  "RequestId": "04F0F334 - 1335 - 436C - A1D7 - 6C044FE733 68",
  "LoginProfile": {
    "PasswordResetRequired": true,
    "MFABindRequired": true,
    "UserName": "Alice",
    "CreateDate": "2015 - 01 - 23T12 : 33 : 18Z"
  }
}
```

```
}
```

Errors

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

4.8 DeleteLoginProfile

Disables console logon for a RAM user.

Debug

Use [API Explorer](#) to perform debug operations and generate SDK code examples.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	DeleteLoginProfile	The name of this action. Value: DeleteLoginProfile
UserName	String	Yes	Alice	The username.

Response parameters

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

Example

Request example

```
https://ram.aliyuncs.com/?Action=DeleteLoginProfile
&UserName=Alice
&<CommonParameters>
```

Response example

XML format

```
<DeleteLoginProfileResponse>
  <RequestId>1C488B66-B819-4D14-8711-C4EAAA13AC01</RequestId>
```

```
</ DeleteLoginProfileResponse >
```

JSON format

```
{
  "RequestId": "1C488B66 - B819 - 4D14 - 8711 - C4EAAA13AC 01 "
}
```

Errors

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

4.9 UpdateLoginProfile

Modifies the logon configurations of a RAM user.

Debug

Use [API Explorer](#) to perform debug operations and generate SDK code examples.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	UpdateLoginProfile	The name of this action. Value: UpdateLoginProfile
UserName	String	Yes	Alice	The username.
MFABindRequired	Boolean	No	true	Indicates that you must attach a device with Multi-Factor Authentication (MFA) upon next logon.
Password	String	No	mypassword	The password. It must meet the password strength requirements.
PasswordResetRequired	Boolean	No	true	Specifies whether you must change your password upon logon.

Response parameters

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

Example

Request example

```
https://ram.aliyuncs.com/?Action=UpdateLogi nProfile
&UserName=Alice
&Password=mypassword
&PasswordRequireSetRequire d=true
&<Common parameters>
```

Response example

XML format

```
<UpdateLogi nProfile>
  <RequestId>04F0F334 - 1335 - 436C - A1D7 - 6C044FE733 68</
  RequestId>
</UpdateLogi nProfile>
```

JSON format

```
{
  "RequestId": "04F0F334 - 1335 - 436C - A1D7 - 6C044FE733 68 "
}
```

Errors

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

4.10 CreateAccessKey

Creates an AccessKey for a RAM user.

Debug

Use [API Explorer](#) to perform debug operations and generate SDK code examples.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	CreateAccessKey	The name of this action. Value: CreateAccessKey
UserName	String	No	Alice	The username of the RAM user that can call this API action to create an AccessKey.

Response parameters

Parameter	Type	Example value	Description
AccessKey	N/A	N/A	The AccessKey.
└ AccessKeyId	String	0wNEpMMLzy7s****	The AccessKeyId.
└ AccessKeySecret	String	PupkTg8jdm au1cXxYacg E736PJ****	The AccessKeySecret.
└ CreateDate	String	2015-01-23T12:33:18Z	The date and time when the AccessKey was created.
└ Status	String	Active	The status of the AccessKey. Valid values: Active Inactive
RequestId	String	04F0F334-1335-436C-A1D7-6C044FE73368	The request ID.

Example

Request example

```
https://ram.aliyuncs.com/?Action=CreateAccessKey  
&UserName=Alice  
&<CommonParameters>
```

Response example

XML format

```
< CreateAccessKeyResponse >
  < RequestId > 04F0F334 - 1335 - 436C - A1D7 - 6C044FE733 68 </
  RequestId >
    < AccessKey >
      < AccessKeyId > 0wNEpMMlzy 7s ****</ AccessKeyId >
      < AccessKeySecret > PupkTg8jdm au1cXxYacg E736PJ ****</
      AccessKeySecret >
      < Status > Active </ Status >
      < CreateDate > 2015 - 01 - 23T12 : 33 : 18Z </ CreateDate >
    </ AccessKey >
  </ CreateAccessKeyResponse >
```

JSON format

```
{
  " AccessKey ":{
    " Status ":" Active ",
    " AccessKeySecret ":" PupkTg8jdm au1cXxYacg E736PJ ****",
    " AccessKeyId ":" 0wNEpMMlzy 7s ****",
    " CreateDate ":" 2015 - 01 - 23T12 : 33 : 18Z "
  },
  " RequestId ":" 04F0F334 - 1335 - 436C - A1D7 - 6C044FE733 68 "
}
```

Errors

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

4.11 UpdateAccessKey

Changes the AccessKey status of a RAM user.

Debug

Use [API Explorer](#) to perform debug operations and generate SDK code examples.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	UpdateAccessKey	The name of this action. Value: UpdateAccessKey
UserAccessKeyId	String	Yes	0wNEpMMlzy 7s****	The ID of the AccessKey to be updated.

Parameter	Type	Required?	Example value	Description
Status	String	Yes	Inactive	The status of the AccessKey. Valid values: Active Inactive
UserName	String	No	Alice	The username.

Response parameters

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

Example

Request example

```
https://ram.aliyuncs.com/?Action=UpdateAccessKey
&UserName=Alice
&UserAccessKeyId=0wNEpMMLzy7s****
&Status=Inactive
&<CommonParameters>
```

Response example

XML format

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

JSON format

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

Errors

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

4.12 DeleteAccessKey

Deletes the AccessKey of a RAM user.

Debug

Use [OpenAPI Explorer](#) to perform debug operations and generate SDK code examples.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	DeleteAccessKey	The name of this action. Value: DeleteAccessKey
UserAccessKeyId	String	Yes	0wNEpMMlzy7s****	The ID of the AccessKey to be deleted.
UserName	String	No	Alice	The username.

Response parameters

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

Example

Request example

```
https://ram.aliyuncs.com/?Action=DeleteAccessKey
&UserName=Alice
&UserAccessKeyId=0wNEpMMlzy7s****
&<CommonParameters>
```

Response example

XML format

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

```
</ DeleteAccessKeyResponse >
```

JSON format

```
{
  "RequestId":"04F0F334 - 1335 - 436C - A1D7 - 6C044FE733 68 "
}
```

Errors

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

4.13 ListAccessKeys

Lists the AccessKeys of a RAM user.

Debug

Use [OpenAPI Explorer](#) to perform debug operations and generate SDK code examples.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	ListAccessKeys	The name of this action. Value: ListAccessKeys
UserName	String	No	Alice	The username of the RAM user . If this parameter is not set when the user logs on to the console, the AccessKeys of this user are displayed.

Response parameters

Parameter	Type	Example value	Description
AccessKeys	N/A	N/A	The information about the RAM user.
AccessKeyId	String	0wNEpMMLzy7s****	The AccessKeyId.

Parameter	Type	Example value	Description
⌞ CreateDate	String	2015-01-23T12:33:18Z	The date and time when an AccessKey was created.
⌞ Status	String	Active	The status of an AccessKey. Valid values: Active Inactive
RequestId	String	4B450CA1-36E8-4AA2-8461-86B42BF4CC4E	The request ID.

Example

Request example

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

Response example

XML format

```
<ListAccessKeysResponse>
  <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>WnIWUruvfaDT****</AccessKeyId>
      <Status>Inactive</Status>
      <CreateDate>2015-03-24T21:12:21Z</CreateDate>
    </AccessKey>
  </AccessKeys>
</ListAccessKeysResponse>
```

JSON format

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

```
    "AccessKeyId": "WnIWUruvfa DT ****",
    "CreateDate": "2015 - 03 - 24T21 : 12 : 21Z "
  }
}
```

Errors

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

4.14 CreateVirtualMFADevice

Creates a virtual Multi-Factor Authentication (MFA) device.

Debug

Use [OpenAPI Explorer](#) to perform debug operations and generate SDK code examples.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	CreateVirtualMFADevice	The name of this action. Value: CreateVirtualMFADevice
VirtualMFADeviceName	String	Yes	device001	The device name. It must be 1 to 64 characters in length. Pattern: [a - zA - Z0 - 9 -] *

Response parameters

Parameter	Type	Example value	Description
RequestId	String	04F0F334-1335-436C-A1D7-6C044FE73368	The request ID.
VirtualMFADevice	N/A	N/A	The virtual MFA device.

Parameter	Type	Example value	Description
└ Base32StringSeed	String	DSF98HAD98 2KJA9SDFNA S9D8FU839B 8ADHBGS****	The key of the virtual MFA device.
└ QRCodePNG	String	YXNkZmFzZD lmeW5hc2Q5 OGZoODd4bX JmcThhaGU5 aSBmYXNkZi BzYWVmIGFG IDRxd2VjIG EgdHEz****	The Base64-encoded QR code PNG.
└ SerialNumber	String	acs:ram:: 1234567890 12****:mfa/ device001	The ID of the MFA device.

Example

Request example

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

Response example

XML format

```
<CreateVirtualMFADeviceResponse>
  <RequestId>04F0F334-1335-436C-A1D7-6C044FE73368</RequestId>
  <VirtualMFADevice>
    <SerialNumber>acs:ram::123456789012****:mfa/device001</SerialNumber>
    <Base32StringSeed>DSF98HAD982KJA9SDFNAS9D8FU839B8ADHBGS****</Base32StringSeed>
    <QRCodePNG>YXNkZmFzZDlmeW5hc2Q5OGZoODd4bXJmcThhaGU5aSBmYXNkZiBzYWVmIGFGIDRxd2VjIGEgdHEz****</QRCodePNG>
  </VirtualMFADevice>
</CreateVirtualMFADeviceResponse>
```

JSON format

```
{
  "VirtualMFADevice": {
    "SerialNumber": "acs:ram::123456789012****:mfa/device001",
```

```

    " QRCodePNG ":" YXNkZmFzZD lmeW5hc2Q5 OGZoODd4bX
    JmcThhaGU5 aSBmYXNkZi BzYWVmIGFG IDRxd2VjIG EgdHEz ****",
    " Base32Stri ngSeed ":" DSF98HAD98 2KJA9SDFNA S9D8FU839B
    8ADHBGS ****"
  },
  " RequestId ":" 04F0F334 - 1335 - 436C - A1D7 - 6C044FE733 68 "
}

```

Errors

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

4.15 ListVirtualMFADevices

Lists virtual Multi-Factor Authentication (MFA) devices.

Debug

Use [OpenAPI Explorer](#) to perform debug operations and generate SDK code examples.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	ListVirtualMFADevices	The name of this action. Value: ListVirtualMFADevices

Response parameters

Parameter	Type	Example value	Description
RequestId	String	04F0F334-1335-436C-A1D7-6C044FE73368	The request ID.
VirtualMFADevices	N/A	N/A	The list of virtual MFA devices.
└ ActivateDate	String	2015-02-18T17:22:08Z	The date and time when an MFA device was activated.
└ SerialNumber	String	acs:ram::123456789012****:mfa/device002	The ID of an MFA device.

Parameter	Type	Example value	Description
└ User	N/A	N/A	The basic information about the RAM user to which the MFA device is attached.
└ DisplayName	String	Alice	The display name of the RAM user.
└ UserId	String	122748924538****	The ID of the RAM user.
└ UserName	String	Alice	The username of the RAM user.

Example

Request example

```
https://ram.aliyuncs.com/?Action=ListVirtualMFADevices
&<CommonParameters>
```

Response example

XML format

```
<ListVirtualMFADevicesResponse>
  <RequestId> 04F0F334 - 1335 - 436C - A1D7 - 6C044FE733 68 </
  RequestId>
  <VirtualMFADevices>
    <VirtualMFADevice>
      <SerialNumber>acs:ram::1234567890 12 ****: mfa /
device001 </SerialNumber>
    </VirtualMFADevice>
    <VirtualMFADevice>
      <SerialNumber>acs:ram::1234567890 12 ****: mfa /
device002 </SerialNumber>
      <ActivateDate>2015 - 02 - 18T17 : 22 : 08Z </ActivateDate>
    <User>
      <UserId>1227489245 38 ****</UserId>
      <UserName>Alice </UserName>
      <DisplayName>Alice </DisplayName>
    </User>
  </VirtualMFADevice>
</VirtualMFADevices>
</ListVirtualMFADevicesResponse>
```

JSON format

```
{
  "RequestId": "04F0F334 - 1335 - 436C - A1D7 - 6C044FE733 68 ",
  "VirtualMFADevices": {
    "VirtualMFADevice": [
      {
```

```
    "SerialNumber ":"acs : ram :: 1234567890 12 ****:",
    "mfa / device001 "
  },
  {
    "User ":{
      "UserName ":" zhangq ****",
      "UserId ":" 1227489245 38 ****",
      "DisplayName ":" Alice "
    },
    "SerialNumber ":"acs : ram :: 1234567890 12 ****:",
    "mfa / device002 ",
    "ActivateDate ":" 2015 - 02 - 18T17 : 22 : 08Z "
  }
]
}
```

Errors

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

4.16 DeleteVirtualMFADevice

Deletes a virtual Multi-Factor Authentication (MFA) device.

Debug

Use [API Explorer](#) to perform debug operations and generate SDK code examples.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	DeleteVirtualMFADevice	The name of this action. Value: DeleteVirtualMFADevice
SerialNumber	String	Yes	acs:ram::123456789012****:mfa/device002	The ID of the MFA device to be deleted.

Response parameters

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

Example

Request example

```
https://ram.aliyuncs.com/?Action=DeleteVirtualMFADevice
&SerialNumber=acs:ram::1234567890:12****:mfa/device002
&<CommonParameters>
```

Response example

XML format

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

JSON format

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

Errors

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

4.17 BindMFADevice

Attaches a Multi-Factor Authentication (MFA) device to a RAM user.

Debug

Use [OpenAPI Explorer](#) to perform debug operations and generate SDK code examples.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	BindMFADevice	The name of this action. Value: BindMFADevice
SerialNumber	String	Yes	acs:ram::1234567890:12****:mfa/device002	The ID of the MFA device.

Parameter	Type	Required?	Example value	Description
UserName	String	Yes	Alice	The username of the RAM user to which the MFA device is attached.
AuthenticationCode1	String	Yes	11****	The first authentication code.
AuthenticationCode2	String	Yes	33****	The second authentication code.

Response parameters

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

Example

Request example

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

Response example

XML format

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

JSON format

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

Errors

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

4.18 UnbindMFADevice

Removes a Multi-Factor Authentication (MFA) device from a RAM user.

Debug

Use [OpenAPI Explorer](#) to perform debug operations and generate SDK code examples.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	UnbindMFADevice	The name of this action. Value: UnbindMFADevice
UserName	String	Yes	Alice	The username of the RAM user from which the MFA device is removed.

Response parameters

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

Example

Request example

```
https://ram.aliyuncs.com/?Action=UnbindMFADevice
&UserName=Alice
&<CommonParameters>
```

Response example

XML format

```
<UnbindMFADeviceResponse>
```

```
< RequestId > 04F0F334 - 1335 - 436C - A1D7 - 6C044FE733 68 </
RequestId >
< MFADevice >
  < SerialNumb er > acs : ram :: 1234567890 12 ****: mfa /
device002 </ SerialNumb er >
</ MFADevice >
</ UnbindMFAD eviceRespo nse >
```

JSON format

```
{
  " RequestId ":" 04F0F334 - 1335 - 436C - A1D7 - 6C044FE733 68 ",
  " MFADevice ":{
    " SerialNumb er ":" acs : ram :: 1234567890 12 ****: mfa /
device002 "
  }
}
```

Errors

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

4.19 GetUserMFAInfo

Obtains the Multi-Factor Authentication (MFA) device information of a RAM user.

Debug

Use [OpenAPI Explorer](#) to perform debug operations and generate SDK code examples.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	GetUserMFAInfo	The name of this action. Value: GetUserMFAInfo
UserName	String	Yes	Alice	The username of the RAM user to which the MFA device is attached.

Response parameters

Parameter	Type	Example value	Description
MFADevice	N/A	N/A	The information about the MFA device.

Parameter	Type	Example value	Description
SerialNumber	String	Virtual-MFA-device002	The ID of the MFA device.
RequestId	String	04F0F334-1335-436C-A1D7-6C044FE73368	The request ID.

Example

Request example

```
https://ram.aliyuncs.com/?Action=GetUserMFAInfo&UserName=Alice&<CommonParameters>
```

Response example

XML format

```
<GetUserMFAInfoResponse>
  <RequestId>04F0F334-1335-436C-A1D7-6C044FE73368</RequestId>
  <MFADevice>
    <SerialNumber>Virtual-MFA-device002</SerialNumber>
  </MFADevice>
</GetUserMFAInfoResponse>
```

JSON format

```
{
  "RequestId": "04F0F334-1335-436C-A1D7-6C044FE73368",
  "MFADevice": {
    "SerialNumber": "Virtual-MFA-device002"
  }
}
```

Errors

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

4.20 ChangePassword

Changes the password for a RAM user.

Debug

Use [OpenAPI Explorer](#) to perform debug operations and generate SDK code examples.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	ChangePassword	The name of this action. Value: ChangePassword
NewPassword	String	Yes	aw\$2****	The new password. It must meet the password strength requirements. For information about how to set a strong password, see SetPasswordPolicy .
OldPassword	String	Yes	12****	The password to be changed.

Response parameters

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

Example

Request example

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

Response example

XML format

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

JSON format

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

```
}
```

Errors

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

5 Group management APIs

5.1 CreateGroup

Creates a RAM user group.

Debug

Use [OpenAPI Explorer](#) to perform debug operations and generate SDK code examples.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	CreateGroup	The name of this action. Value: CreateGroup
GroupName	String	Yes	Dev-Team	The RAM user group name. It must be 1 to 64 characters in length. Pattern: <code>^[a-zA-Z0-9\-\]+\$</code> .
Comments	String	No	Development team	The comment. It must be 1 to 128 characters in length.

Response parameters

Parameter	Type	Example value	Description
Group	N/A	N/A	The information that relates to the RAM user group.
└ Comments	String	Development team	The comment.
└ CreateDate	String	2015-01-23T12:33:18Z	The date and time when the RAM user group was created.
└ GroupName	String	Dev-Team	The RAM user group name.

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

Example

Request example

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

Response example

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>
  </Group>
</CreateGroupResponse>
```

JSON format

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

Errors

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

5.2 GetGroup

Obtains RAM user group information.

Debug

Use [OpenAPI Explorer](#) to perform debug operations and generate SDK code examples.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	GetGroup	The name of this action. Value: GetGroup
GroupName	String	Yes	Dev-Team	The RAM user group name. It must be 1 to 64 characters in length. Pattern: <code>^[a-zA-Z0-9\-\]+\$</code> .

Response parameters

Parameter	Type	Example value	Description
Group	N/A	N/A	The information that relates to the RAM user group.
└ Comments	String	Development team	The comment.
└ CreateDate	String	2015-01-23T12:33:18Z	The date and time when the RAM user group was created.
└ GroupName	String	Dev-Team	The RAM user group name.
└ UpdateDate	String	2015-02-11T03:15:21Z	The date and time when the RAM user group was modified.
RequestId	String	D4065824-E422-3ED6-68B1-1AF7D5C7804C	The request ID.

Example

Request example

```
https://ram.aliyuncs.com/?Action=GetGroup&GroupName=Dev-Team
```

&< Common parameters >

Response example

XML format

```
< GetGroupResponse >
  < RequestId > D4065824 - E422 - 3ED6 - 68B1 - 1AF7D5C780 4C </
  RequestId >
  < Group >
    < GroupName > Dev - Team </ GroupName >
    < Comments > Development team </ Comments >
    < CreateDate > 2015 - 01 - 23T12 : 33 : 18Z </ CreateDate >
    < UpdateDate > 2015 - 02 - 11T03 : 15 : 21Z </ UpdateDate >
  </ Group >
</ GetGroupResponse >
```

JSON format

```
{
  "RequestId ":" D4065824 - E422 - 3ED6 - 68B1 - 1AF7D5C780 4C ",
  "Group ":{
    "Comments ":" Development team ",
    "GroupName ":" Dev - Team ",
    "UpdateDate ":" 2015 - 02 - 11T03 : 15 : 21Z ",
    "CreateDate ":" 2015 - 01 - 23T12 : 33 : 18Z "
  }
}
```

Errors

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

5.3 UpdateGroup

Updates RAM user group information.

Debug

Use [OpenAPI Explorer](#) to perform debug operations and generate SDK code examples.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	UpdateGroup	The name of this action. Value: UpdateGroup

Parameter	Type	Required ?	Example value	Description
GroupName	String	Yes	Dev-Team	The RAM user group name. It must be 1 to 64 characters in length. Pattern: <code>^[a-zA-Z0-9\-\]+\$</code> .
NewComments	String	No	Development team	The new comment. It must be 1 to 128 characters in length.
NewGroupName	String	No	NewDev-Team	The new RAM user group name. It must be 1 to 64 characters in length. Pattern: <code>^[a-zA-Z0-9\-\]+\$</code> .

Response parameters

Parameter	Type	Example value	Description
Group	N/A	N/A	The information that relates to the RAM user group.
└ Comments	String	Development team	The comment.
└ CreateDate	String	2015-01-23T12:33:18Z	The date and time when the RAM user group was created.
└ GroupName	String	NewDev-Team	The RAM user group name.
└ UpdateDate	String	2015-01-23T12:33:18Z	The date and time when the RAM user group was modified.
RequestId	String	EC6647CC-0A36-EC7A-BA72-CC81BF3DE182	The request ID.

Example

Request example

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

Response example

XML format

```
<UpdateGroupResponse>
  <RequestId> EC6647CC - 0A36 - EC7A - BA72 - CC81BF3DE1 82 </
RequestId>
  <Group>
    <GroupName> NewDev - Team </GroupName>
    <Comments> Development team </Comments>
    <CreateDate> 2015 - 01 - 23T12 : 33 : 18Z </CreateDate>
    <UpdateDate> 2015 - 01 - 23T12 : 33 : 18Z </UpdateDate>
  </Group>
</UpdateGroupResponse>
```

JSON format

```
{
  "RequestId": "EC6647CC - 0A36 - EC7A - BA72 - CC81BF3DE1 82",
  "Group": {
    "Comments": "Development team",
    "GroupName": "NewDev - Team",
    "UpdateDate": "2015 - 01 - 23T12 : 33 : 18Z",
    "CreateDate": "2015 - 01 - 23T12 : 33 : 18Z"
  }
}
```

Errors

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

5.4 ListGroups

Lists all RAM user groups.

Debug

Use [OpenAPI Explorer](#) to perform debug operations and generate SDK code examples.

Request parameters

Parameter	Type	Required ?	Example value	Description
Action	String	Yes	ListGroups	The name of this action. Value: ListGroups
Marker	String	No	EXAMPLE	The marker. If part of a response is intercepted, you can use this parameter to obtain the intercepted content.
MaxItems	Integer	No	100	The number of permitted response items. If a response is intercepted when it reaches the maximum value of this parameter, the value of <code>IsTruncated</code> is <code>true</code> . Value range: 1 to 1,000 Default value: 100

Response parameters

Parameter	Type	Example value	Description
Group	N/A	N/A	The information that relates to a RAM user group.
└ Comments	String	Development team	The comment.
└ CreateDate	String	2015-01-23T12:33:18Z	The date and time when a RAM user group was created.
└ GroupName	String	Dev-Team	The RAM user group name.
└ UpdateDate	String	2015-01-23T12:33:18Z	The date and time when a RAM user group was modified.

Parameter	Type	Example value	Description
IsTruncated	Boolean	true	Indicates whether a response is intercepted.
Marker	String	EXAMPLE	This parameter is available only when the value of IsTruncated is true. In which case, you can call this action and use the specific marker to obtain the intercepted content.
RequestId	String	065527AA-2F2E-AD7C-7484-F2626CFE4934	The request ID.

Example

Request example

```
https://ram.aliyuncs.com/?Action=ListGroups
&<CommonParameters>
```

Response example

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>
    </Group>
    <Group>
      <GroupName>QA-Team</GroupName>
      <Comments>Test development team</Comments>
      <CreateDate>2015-02-18T17:22:08Z</CreateDate>
      <UpdateDate>2015-02-18T17:22:08Z</UpdateDate>
    </Group>
  </Groups>
</ListGroupsResponse>
```

JSON format

```
{
  "Groups":{
    "Group":[
      {
        "Comments":"Development team",
```

```

        " GroupName ":" Dev - Team ",
        " UpdateDate ":" 2015 - 01 - 23T12 : 33 : 18Z ",
        " CreateDate ":" 2015 - 01 - 23T12 : 33 : 18Z "
      },
      {
        " Comments ":" Test developmen t ",
        " GroupName ":" QA - Team ",
        " UpdateDate ":" 2015 - 02 - 18T17 : 22 : 08Z ",
        " CreateDate ":" 2015 - 02 - 18T17 : 22 : 08Z "
      }
    ]
  },
  " IsTruncate d ": true ,
  " RequestId ":" 065527AA - 2F2E - AD7C - 7484 - F2626CFE49 34 ",
  " Marker ":" EXAMPLE "
}

```

Errors

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

5.5 DeleteGroup

Deletes a RAM user group.



Note:

Before you delete a RAM user group, make sure that no policy is attached to the group and no RAM user belongs to this group.

Debug

Use [OpenAPI Explorer](#) to perform debug operations and generate SDK code examples.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	DeleteGroup	The name of this action. Value: DeleteGroup
GroupName	String	Yes	Dev-Team	The RAM user group name. It must be 1 to 64 characters in length. Pattern: <code>^[a-zA-Z0-9 \-]+\$</code> .

Response parameters

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

Example

Request example

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

Response example

XML format

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

JSON format

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

Errors

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

5.6 AddUserToGroup

Adds a RAM user to a RAM user group.

Debug

Use [API Explorer](#) to perform debug operations and generate SDK code examples.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	AddUserToGroup	The name of this action. Value: AddUserToGroup
GroupName	String	Yes	Dev-Team	The RAM user group name.
UserName	String	Yes	Alice	The username of the RAM user to be added to the group.

Response parameters

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

Example

Request example

```
https://ram.aliyuncs.com/?Action=AddUserToGroup
&UserName=Alice
&GroupName=Dev-Team
&<CommonParameters>
```

Response example

XML format

```
<AddUserToGroupResponse>
  <RequestId>1B968853-B423-63A6-FE1F-45E81BC2AD61</RequestId>
</AddUserToGroupResponse>
```

JSON format

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

Errors

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

5.7 RemoveUserFromGroup

Removes a RAM user from a RAM user group.

Debug

Use [API Explorer](#) to perform debug operations and generate SDK code examples.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	RemoveUserFromGroup	The name of this action. Value: RemoveUserFromGroup
GroupName	String	Yes	Dev-Team	The RAM user group name.
UserName	String	Yes	Alice	The username of the RAM user to be removed.

Response parameters

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

Example

Request example

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

Response example

XML format

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

JSON format

```
{
```

```
} "RequestId ":" A07EF215 - B9B3 - 8CB2 - 2899 - 3F9575C6E3 20 "
```

Errors

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

5.8 ListGroupsForUser

Lists information about the RAM user groups to which a RAM user is added.

Debug

Use [API Explorer](#) to perform debug operations and generate SDK code examples.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	ListGroupsForUser	The name of this action. Value: ListGroupsForUser
UserName	String	Yes	Alice	The username of the RAM user.

Response parameters

Parameter	Type	Example value	Description
Groups	N/A	N/A	The information about the RAM user groups.
└ Comments	String	Development team	The comment.
└ GroupName	String	Dev-Team	The RAM user group name.
└ JoinDate	String	2015-01-23T12:33:18Z	The date and time when the user joined a user group.
RequestId	String	0945BF6F-54A4-C384-C89C-C500DCEE367C	The request ID.

Example

Request example

```
https://ram.aliyuncs.com/?Action=ListGroupsForUser
&UserName=Alice
&<CommonParameters>
```

Response example

XML format

```
<ListGroupsForUserResponse>
  <RequestId>0945BF6F-54A4-C384-C89C-C500DCEE367C</RequestId>
  <Groups>
    <Group>
      <GroupName>Dev-Team</GroupName>
      <Comments>Development team</Comments>
      <JoinDate>2015-01-23T12:33:18Z</JoinDate>
    </Group>
    <Group>
      <GroupName>QA-Team</GroupName>
      <Comments>Test team</Comments>
      <JoinDate>2015-02-18T17:22:08Z</JoinDate>
    </Group>
  </Groups>
</ListGroupsForUserResponse>
```

JSON format

```
{
  "Groups":{
    "Group":[
      {
        "Comments":"Development team",
        "GroupName":"Dev-Team",
        "JoinDate":"2015-01-23T12:33:18Z"
      },
      {
        "Comments":"Test team",
        "GroupName":"QA-Team",
        "JoinDate":"2015-02-18T17:22:08Z"
      }
    ]
  },
  "RequestId":"0945BF6F-54A4-C384-C89C-C500DCEE367C"
}
```

Errors

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

5.9 ListUsersForGroup

Lists the RAM users in a RAM user group.

Debug

Use [API Explorer](#) to perform debug operations and generate SDK code examples.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	ListUsersForGroup	The name of this action. Value: ListUsersForGroup
GroupName	String	Yes	Dev-Team	The RAM user group name.
Marker	String	No	EXAMPLE	The marker. If part of a response is intercepted, you can use this parameter to obtain the intercepted content.
MaxItems	Integer	No	100	The number of permitted response items. If a response is intercepted when it reaches the maximum value of this parameter, the value of <code>IsTruncated</code> is <code>true</code> . Value range: 1 to 1,000 Default value: 100

Response parameters

Parameter	Type	Example value	Description
<code>IsTruncated</code>	Boolean	true	Indicates whether a response is intercepted.

Parameter	Type	Example value	Description
Marker	String	EXAMPLE	This parameter is available only when the value of <code>IsTruncate</code> is <code>true</code> . In which case, you can call this action and use the specific marker to obtain the intercepted content.
RequestId	String	4B450CA1-36E8-4AA2-8461-86B42BF4CC4E	The request ID.
Users	N/A	N/A	The information about the RAM users.
<code>└ DisplayName</code>	String	Alice	The display name of a RAM user.
<code>└ JoinDate</code>	String	2015-01-23T12:33:18Z	The date and time when a user joined the RAM user group.
<code>└ UserName</code>	String	Alice	The username of a RAM user.

Example

Request example

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

Response example

XML format

```
<ListUsersForGroupResponse>
  <RequestId> 5756784B-79C4-E82E-24C2-FC3E171E5A-B3 </
RequestId>
  <Users>
    <User>
      <UserName> Alice </UserName>
      <DisplayName> Alice </DisplayName>
      <JoinDate> 2015-01-23T12:33:18Z </JoinDate>
    </User>
    <User>
      <UserName> Bob </UserName>
      <DisplayName> Bob </DisplayName>
      <JoinDate> 2015-02-18T17:22:08Z </JoinDate>
    </User>
  </Users>
```

```
</ ListUsersForGroupResponse >
```

JSON format

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

Errors

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

6 Role management APIs

6.1 CreateRole

Creates a RAM role.

Debug

Use [OpenAPI Explorer](#) to perform debug operations and generate SDK code examples.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	CreateRole	The name of this action. Value: CreateRole
RoleName	String	Yes	ECSAdmin	The RAM role name. It must be 1 to 64 characters in length. Pattern: <code>^[a-zA-Z0-9\.\@\-]+\$</code>
AssumeRolePolicyDocument	String	Yes	<pre>{"Statement": [{"Action": "sts:AssumeRole", "Effect": "Allow", "Principal": {"RAM": "acs:ram::123456789012****:root"}}, {"Version": "1"}]}</pre>	The policy text that specifies one or more entities entrusted to assume the RAM role. The entrusted entity can be an Alibaba Cloud account, an Alibaba Cloud service, or an identity provider (IdP).
Description	String	Yes	ECS administrator	The RAM role description. It must be 1 to 1,024 characters in length.

Example of AssumeRolePolicyDocument

- The following policy allows the RAM role to be assumed by RAM users under the entrusted Alibaba Cloud account (ID: 123456789012****):

```
{
  "Statement": [
    {
      "Action": "sts : AssumeRole ",
      "Effect": "Allow ",
      "Principal": {
        "RAM": [
          "acs : ram :: 1234567890 12 ****: root "
        ]
      }
    }
  ],
  "Version": " 1 "
}
```

- The following policy allows the RAM role to be assumed by the RAM user (testuser) under the entrusted Alibaba Cloud account (ID: 123456789012****):

```
{
  "Statement": [
    {
      "Action": "sts : AssumeRole ",
      "Effect": "Allow ",
      "Principal": {
        "RAM": [
          "acs : ram :: 1234567890 12 ****: user / testuser "
        ]
      }
    }
  ],
  "Version": " 1 "
}
```

- The following policy allows the RAM role to be assumed by ECS under the current Alibaba Cloud account:

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



Note:

After the RAM role is assumed by ECS, you can specify to use this role when you create an instance. The STS token of role to be assumed is then obtained when you start the instance.

- The following policy allows the RAM role to be assumed by users under the IdP (testprovider) in the current Alibaba Cloud account (ID: 123456789012****):

```
{
  "Statement": [
    {
      "Action": "sts : AssumeRole ",
      "Effect": "Allow ",
      "Principal": {
        "Federated": [
          "acs : ram :: 1234567890 12 ****: saml -
provider / testprovid er "
        ]
      },
      "Condition": {
        "StringEquals": {
          "saml : recipient ":" https :// signin . aliyun
. com / saml - role / sso "
        }
      }
    }
  ],
  "Version": " 1 "
}
```

Response parameters

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

Parameter	Type	Example value	Description
└ AssumeRole PolicyDocument	String	{ "Statement": [{ "Action": "sts:AssumeRole", "Effect": "Allow", "Principal": { "RAM": "acs:ram::123456789012****:root" } }], "Version": "1" }	The policy that specifies the entity entrusted to assume the RAM role.
└ CreateDate	String	2015-01-23T12:33:18Z	The date and time when the RAM role was created.
└ Description	String	ECS administrator	The description of the RAM role.
└ RoleId	String	901234567890****	The ID of the RAM role.
└ RoleName	String	ECSAdmin	The name of the RAM role.

Example

Request example

```
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 parameters>
```

Response example

XML format

```
<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>
    <AssumeRolePolicyDocument>{"Statement":[{"Action":"sts:AssumeRole","Effect":"Allow","Principal":{"RAM
```

```

": " acs : ram :: 1234567890 12 ****: root " } } ], " Version ": " 1
" }</ AssumeRole PolicyDocu ment >
  < CreateDate > 2015 - 01 - 23T12 : 33 : 18Z </ CreateDate >
</ Role >
</ CreateRole Response >

```

JSON format

```

{
  " RequestId ":" 04F0F334 - 1335 - 436C - A1D7 - 6C044FE733 68 ",
  " Role ":{
    " RoleName ":" ECSAdmin ",
    " Descriptio n ":" ECS  administra tor ",
    " AssumeRole PolicyDocu ment ":"{ \" Statement \": [ { \"
Action \": \" sts : AssumeRole \", \" Effect \": \" Allow \", \"
Principal \": { \" RAM \": \" acs : ram :: 1234567890 12 ****: root
\" } } ], \" Version \": \" 1 \" }\",
    " Arn ":" acs : ram :: 1234567890 12 ****: role / ECSAdmin ",
    " CreateDate ":" 2015 - 01 - 23T12 : 33 : 18Z ",
    " RoleId ":" 9012345678 90 ****"
  }
}

```

Errors

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

6.2 GetRole

Obtains information about a RAM role.

Debug

Use [API Explorer](#) to perform debug operations and generate SDK code examples.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	GetRole	The name of this action. Value: GetRole
RoleName	String	Yes	ECSAdmin	The RAM role name. It must be 1 to 64 characters in length. Pattern: <code>^[a - zA - Z0 - 9 \. @ \-] + \$</code>

Response parameters

Parameter	Type	Example value	Description
RequestId	String	04F0F334-1335-436C-A1D7-6C044FE73368	The request ID.
Role	N/A	N/A	The information about 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 policy text that specifies one or more entities entrusted to assume the RAM role.
└ CreateDate	String	2015-01-23T12:33:18Z	The date and time when the RAM role was created.
└ Description	String	ECS administrator	The description 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 date and time when the RAM role was modified.

Example

Request example

```
https://ram.aliyuncs.com/?Action=GetRole&RoleName=ECSAdmin
```

&< Common parameters >

Response example

XML format

```
< GetRoleResponse >
  < RequestId > 04F0F334 - 1335 - 436C - A1D7 - 6C044FE733 68 </
  RequestId >
    < Role >
      < RoleId > 9012345678 90 ****</ RoleId >
      < RoleName > ECSAdmin </ RoleName >
      < Arn > acs : ram :: 1234567890 12 ****: role / ECSAdmin </ Arn >
      < Description > ECS administrator </ Description >
      < AssumeRolePolicyDocument >{ " Statement ": [ { " Action ":
" sts : AssumeRole ", " Effect ": " Allow ", " Principal ": { " RAM
": " acs : ram :: 1234567890 12 ****: root " } } ], " Version ": " 1
" }</ AssumeRole PolicyDocument >
      < CreateDate > 2015 - 01 - 23T12 : 33 : 18Z </ CreateDate >
      < UpdateDate > 2015 - 01 - 23T12 : 33 : 18Z </ UpdateDate >
    </ Role >
  </ GetRoleResponse >
```

JSON format

```
{
  " RequestId ":" 04F0F334 - 1335 - 436C - A1D7 - 6C044FE733 68 ",
  " Role ":{
    " RoleName ":" ECSAdmin ",
    " Description ":" ECS administrator ",
    " AssumeRolePolicyDocument ": "{ \" Statement \": [ { \"
Action \": \" sts : AssumeRole \", \" Effect \": \" Allow \", \"
Principal \": { \" RAM \": \" acs : ram :: 1234567890 12 ****: root
\" } } ], \" Version \": \" 1 \" }",
    " UpdateDate ":" 2015 - 01 - 23T12 : 33 : 18Z ",
    " Arn ":" acs : ram :: 1234567890 12 ****: role / ECSAdmin ",
    " CreateDate ":" 2015 - 01 - 23T12 : 33 : 18Z ",
    " RoleId ":" 9012345678 90 ****"
  }
}
```

Errors

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

6.3 UpdateRole

Updates information about a RAM role.

Debug

Use [OpenAPI Explorer](#) to perform debug operations and generate SDK code examples.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	UpdateRole	The name of this action. Value: UpdateRole
RoleName	String	Yes	ECSAdmin	The RAM role name. It must be 1 to 64 characters in length. Pattern: <code>^[a-zA-Z0-9\.\@\-]+\$</code>
NewAssumeRolePolicyDocument	String	No	{ "Statement": [{ "Action": "sts:AssumeRole", "Effect": "Allow", "Principal": { "RAM": "acs:ram::123456789012****:root" } }], "Version": "1" }	The policy text that specifies one or more entities entrusted to assume the RAM role.

Response parameters

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

Parameter	Type	Example value	Description
└ AssumeRolePolicyDocument	String	{ "Statement": [{ "Action": "sts:AssumeRole", "Effect": "Allow", "Principal": { "RAM": "acs:ram::123456789012****:root" } }], "Version": "1" }	The policy that specifies the entity entrusted to assume the RAM role.
└ CreateDate	String	2015-01-23T12:33:18Z	The date and time when the RAM role was created.
└ Description	String	ECS administrator	The description 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 date and time when the RAM role was modified.

Example

Request example

```
https://ram.aliyuncs.com/?Action=UpdateRole
&RoleName=ECSAdmin
&NewAssumeRolePolicyDocument={ "Statement": [ { "Action": "
sts:AssumeRole", "Effect": "Allow", "Principal": { "RAM":
"acs:ram::123456789012****:root" } } ], "Version": "1"
" }
&<CommonParameters>
```

Response example

XML format

```
<UpdateRoleResponse>
  <RequestId> 04F0F334 - 1335 - 436C - A1D7 - 6C044FE733 68 </
RequestId>
  <Role>
    <RoleId> 9012345678 90 ****</RoleId>
    <RoleName> ECSAdmin </RoleName>
```

```

    < Arn > acs : ram :: 1234567890 12 ****: role / ECSAdmin </ Arn >
    < Descriptio n > ECS  administra tor </ Descriptio n >
    < AssumeRole PolicyDocu ment >{ " Statement ": [ { " Action ":
" sts : AssumeRole ", " Effect ": " Allow ", " Principal ": { " RAM
": " acs : ram :: 1234567890 12 ****: root " } } ], " Version ": " 1
" } </ AssumeRole PolicyDocu ment >
    < CreateDate > 2015 - 01 - 23T12 : 33 : 18Z </ CreateDate >
    < UpdateDate > 2015 - 01 - 23T12 : 33 : 18Z </ UpdateDate >
  </ Role >
</ UpdateRole Response >

```

JSON format

```

{
  " RequestId ":" 04F0F334 - 1335 - 436C - A1D7 - 6C044FE733 68 ",
  " Role ":{
    " RoleName ":" ECSAdmin ",
    " Descriptio n ":" ECS  administra tor ",
    " AssumeRole PolicyDocu ment ":"{ \" Statement \": [ { \"
Action \": \" sts : AssumeRole \", \" Effect \": \" Allow \", \"
Principal \": { \" RAM \": \" acs : ram :: 1234567890 12 ****: root
\" } } ], \" Version \": \" 1 \" }",
    " UpdateDate ":" 2015 - 01 - 23T12 : 33 : 18Z ",
    " Arn ":" acs : ram :: 1234567890 12 ****: role / ECSAdmin ",
    " CreateDate ":" 2015 - 01 - 23T12 : 33 : 18Z ",
    " RoleId ":" 9012345678 90 ****"
  }
}

```

Errors

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

6.4 ListRoles

Lists RAM roles.

Debug

Use [OpenAPI Explorer](#) to perform debug operations and generate SDK code examples.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	ListRoles	The name of this action. Value: ListRoles
Marker	String	No	EXAMPLE	The marker. If part of a response is intercepted, you can use this parameter to obtain the intercepted content.

Parameter	Type	Required ?	Example value	Description
MaxItems	Integer	No	100	The number of permitted response items. If a response is intercepted when it reaches the maximum value of this parameter, the value of <code>IsTruncated</code> is <code>true</code>. Value range: 1 to 1,000 Default value: 100

Response parameters

Parameter	Type	Example value	Description
<code>IsTruncated</code>	Boolean	true	Indicates whether a response is intercepted.
Marker	String	EXAMPLE	This parameter is available only when the value of <code>IsTruncated</code> is <code>true</code> . In which case, you can call this action and use the specific marker to obtain the intercepted content.
RequestId	String	7B8A4E7D-6CFF-471D-84DF-195A7A241ECB	The request ID.
Roles	N/A	N/A	The list of RAM roles.
<code>RoleArn</code>	String	acs:ram::123456789012****:role/ECSAdmin	The Alibaba Cloud Resource Name (ARN) of a RAM role.
<code>RoleCreateDate</code>	String	2015-01-23T12:33:18Z	The date and time when a RAM role was created.
<code>RoleDescription</code>	String	ECS administrator	The description of a RAM role.

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

Example

Request example

```
https://ram.aliyuncs.com/?Action=ListRoles
&<CommonParameters>
```

Response example

XML format

```
<ListRolesResponse>
  <RequestId> 7B8A4E7D - 6CFF - 471D - 84DF - 195A7A241E CB </RequestId>
  <IsTruncated> true </IsTruncated>
  <Marker> EXAMPLE </Marker>
  <Roles>
    <Role>
      <RoleId> 9012345678 90 **** </RoleId>
      <RoleName> ECSAdmin </RoleName>
      <Arn> acs:ram::1234567890 12 ****:role/ECSAdmin </Arn>
    </Role>
    <Role>
      <RoleId> 9012345678 90 **** </RoleId>
      <RoleName> OSSReadOnlyAccess </RoleName>
      <Arn> acs:ram::1234567890 12 ****:role/OSSReadOnlyAccess </Arn>
    </Role>
  </Roles>
</ListRolesResponse>
```

JSON format

```
{
  "IsTruncated": true,
  "RequestId": "7B8A4E7D - 6CFF - 471D - 84DF - 195A7A241E CB",
  "Roles": [
    {
      "Role": {
```

```
{
  "RoleName ":" ECSAdmin ",
  " Descriptio n ":" ECS  administra tor ",
  " UpdateDate ":" 2015 - 01 - 23T12 : 33 : 18Z ",
  " Arn ":" acs : ram :: 1234567890 12 ****: role /
ECSAdmin ",
  " CreateDate ":" 2015 - 01 - 23T12 : 33 : 18Z ",
  " RoleId ":" 9012345678 90 ****"
},
{
  " RoleName ":" OSSReadonl yAccess ",
  " Descriptio n ":" OSS  read - only  access ",
  " UpdateDate ":" 2015 - 01 - 23T12 : 33 : 18Z ",
  " Arn ":" acs : ram :: 1234567890 12 ****: role /
OSSReadonl yAccess ",
  " CreateDate ":" 2015 - 01 - 23T12 : 33 : 18Z ",
  " RoleId ":" 9012345678 90 ****"
}
],
" Marker ":" EXAMPLE "
}
```

Errors

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

6.5 DeleteRole

Deletes a RAM role.

Debug

Use [OpenAPI Explorer](#) to perform debug operations and generate SDK code examples.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	DeleteRole	The name of this action. Value: DeleteRole
RoleName	String	Yes	ECSAdmin	The name of the RAM role to be deleted.

Response parameters

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

Example

Request example

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

Response example

XML format

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

JSON format

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

Errors

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

7 Policy management APIs

7.1 CreatePolicy

Creates a policy.

Debug

Use [OpenAPI Explorer](#) to perform debug operations and generate SDK code examples.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	CreatePolicy	The name of this action. Value: CreatePolicy
PolicyDocument	String	Yes	{"Statement":[{"Action":["oss:*"],"Effect":"Allow","Resource":["acs:oss:*:*:*"],"Version":"1"}	The policy text. It can be up to 2048 bytes.
PolicyName	String	Yes	OSS-Administrator	The policy name. It must be 1 to 128 characters in length. Pattern: <code>^[a-zA-Z0-9\\-]+\$</code>
Description	String	No	OSS administrator	The policy description. It must be 1 to 1,024 characters in length.

Response parameters

Parameter	Type	Example value	Description
Policy	N/A	N/A	The information about the policy.

Parameter	Type	Example value	Description
└ CreateDate	String	2015-01-23T12:33:18Z	The date and time when the policy was created.
└ DefaultVersion	String	v1	The default version.
└ Description	String	OSS administrator	The policy description.
└ PolicyName	String	OSS-Administrator	The policy name.
└ PolicyType	String	Custom	The policy type.
RequestId	String	9B34724D-54B0-4A51-B34D-4512372FE1BE	The request ID.

Example

Request example

```
https://ram.aliyuncs.com/?Action=CreatePolicy
&PolicyName=OSS-Administrator
&PolicyDocument={"Statement":[{"Action":["oss:*"],"Effect":"Allow","Resource":["acs:oss:*:*:*"]}], "Version":"1"}
&Description=OSS administrator
&<CommonParameters>
```

Response example

XML format

```
<CreatePolicyResponse>
  <RequestId>9B34724D-54B0-4A51-B34D-4512372FE1BE</RequestId>
  <Policy>
    <PolicyName>OSS-Administrator</PolicyName>
    <PolicyType>Custom</PolicyType>
    <Description>OSS administrator</Description>
    <DefaultVersion>v1</DefaultVersion>
    <CreateDate>2015-01-23T12:33:18Z</CreateDate>
  </Policy>
```



```
</ CreatePolicyResponse >
```

JSON format

```
{
  "Policy": {
    "Description": "OSS administrator",
    "PolicyName": "OSS - Administrator",
    "CreateDate": "2015-01-23T12:33:18Z",
    "DefaultVersion": "v1",
    "PolicyType": "Custom"
  },
  "RequestId": "9B34724D-54B0-4A51-B34D-4512372FE1BE"
}
```

Errors

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

7.2 GetPolicy

Obtains information about a policy.

Debug

Use [OpenAPI Explorer](#) to perform debug operations and generate SDK code examples.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	GetPolicy	The name of this action. Value: GetPolicy
PolicyName	String	Yes	OSS-Administrator	The policy name.
PolicyType	String	Yes	Custom	The policy type. Valid values: System Custom

Response parameters

Parameter	Type	Example value	Description
Policy	N/A	N/A	The information about the policy.

Parameter	Type	Example value	Description
└ AttachmentCount	Integer	0	The number of times that the policy is referenced.
└ CreateDate	String	2015-01-23T12:33:18Z	The date and time when the policy was created.
└ DefaultVersion	String	v1	The default version.
└ Description	String	OSS administrator	The policy description.
└ PolicyDocument	String	{ "Statement": [{ "Action": ["oss:*"], "Effect": "Allow", "Resource": ["acs:oss:*:*:*"], "Version": "1"}] }	N/A
└ PolicyName	String	OSS-Administrator	The policy name.
└ PolicyType	String	Custom	The policy type.
└ UpdateDate	String	2015-01-23T12:33:18Z	The date and time when the policy was modified.
RequestId	String	697852FB-50D7-44D9-9774-530C31EAC572	The request ID.

Example

Request example

```
https://ram.aliyuncs.com/?Action=GetPolicy
&PolicyName=OSS-Administrator
&PolicyType=Custom
```

&< Common parameters >

Response example

XML format

```
< GetPolicyResponse >
  < RequestId > 697852FB - 50D7 - 44D9 - 9774 - 530C31EAC5 72 </
  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 >
</ GetPolicyResponse >
```

JSON format

```
{
  "Policy": {
    "AttachmentCount": 0,
    "Description": "OSS administrator",
    "PolicyName": "OSS - Administrator",
    "UpdateDate": "2015 - 01 - 23T12 : 33 : 18Z",
    "CreateDate": "2015 - 01 - 23T12 : 33 : 18Z",
    "DefaultVersion": "v1",
    "PolicyType": "Custom"
  },
  "RequestId": "697852FB - 50D7 - 44D9 - 9774 - 530C31EAC5 72"
}
```

Errors

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

7.3 DeletePolicy

Deletes a policy.

Debug

Use [OpenAPI Explorer](#) to perform debug operations and generate SDK code examples.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	DeletePolicy	The name of this action. Value: DeletePolicy
PolicyName	String	Yes	OSS-Administrator	The policy name.

Response parameters

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

Example

Request example

```
https://ram.aliyuncs.com/?Action=DeletePolicy
&PolicyName=OSS-Administrator
&<CommonParameters>
```

Response example

XML format

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

JSON format

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

Errors

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

7.4 ListPolicies

Lists policies.

Debug

Use [OpenAPI Explorer](#) to perform debug operations and generate SDK code examples.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	ListPolicies	The name of this action. Value: ListPolicies
Marker	String	No	EXAMPLE	The marker. If part of a response is intercepted, you can use this parameter to obtain the intercepted content.
MaxItems	Integer	No	100	The number of permitted response items. If a response is intercepted when it reaches the maximum value of this parameter, the value of <code>IsTruncated</code> is <code>true</code> . Value range: 1 to 1,000 Default value: 100
PolicyType	String	No	System	The policy type. If this parameter is not set, all policies are listed. Valid values: System Custom

Response parameters

Parameter	Type	Example value	Description
<code>IsTruncated</code>	Boolean	true	Indicates whether a response is intercepted.

Parameter	Type	Example value	Description
Marker	String	EXAMPLE	This parameter is available only when the value of <code>IsTruncated</code> is <code>true</code> . In which case, you can call this action and use the specific marker to obtain the intercepted content.
Policies	N/A	N/A	The policy list.
└ AttachmentCount	Integer	3	The number of times that a policy is referenced.
└ CreateDate	String	2015-01-23T12:33:18Z	The date and time when a policy was created.
└ DefaultVersion	String	v1	The default version.
└ Description	String	OSS administrator	The policy description.
└ PolicyName	String	OSS-Administrator	The policy name.
└ PolicyType	String	System	The policy type.
└ UpdateDate	String	2015-01-23T12:33:18Z	The date and time when a policy was modified.
RequestId	String	7B8A4E7D-6CFF-471D-84DF-195A7A241ECB	The request ID.

Example

Request example

```
https://ram.aliyuncs.com/?Action=ListPolicies
```

&< Common parameters >

Response example

XML format

```
< ListPoliciesResponse >
  < RequestId > 7B8A4E7D - 6CFF - 471D - 84DF - 195A7A241E CB </
  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 permission </ 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 permission",
        "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 - 195A7A241E CB",
  "Marker": "EXAMPLE"
```

```
}
```

Errors

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

7.5 CreatePolicyVersion

Creates a version for a policy.

Debug

Use [OpenAPI Explorer](#) to perform debug operations and generate SDK code examples.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	CreatePolicyVersion	The name of this action. Value: CreatePolicyVersion
PolicyDocument	String	Yes	{"Statement":[{"Action":["oss:*"],"Effect":"Allow","Resource":["acs:oss:*:*:*"]}], "Version":"1"}	The policy content. It can be up to 2048 bytes.
PolicyName	String	Yes	OSS-Administrator	The policy name.
SetAsDefault	Boolean	No	false	Indicates whether to set the version as the default version of the policy. Default value: false

Response parameters

Parameter	Type	Example value	Description
PolicyVersion	N/A	N/A	The information about the policy version.

Parameter	Type	Example value	Description
└ CreateDate	String	2015-01-23T12:33:18Z	The date and time when the policy version was created.
└ 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 policy content.
└ VersionId	String	v3	The ID of the policy version.
RequestId	String	9B34724D-54B0-4A51-B34D-4512372FE1BE	The request ID.

Example

Request example

```
https://ram.aliyuncs.com/?Action=CreatePolicyVersion
&PolicyName=OSS-Administrator
&PolicyDocument={"Statement":[{"Action":["oss:*"],"Effect":"Allow","Resource":["acs:oss:*:*:*"]}], "Version":"1"}
&<CommonParameters>
```

Response example

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>
```

```
</ 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"
  }
}
```

Errors

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

7.6 GetPolicyVersion

Obtains information about the version of a policy.

Debug

Use [OpenAPI Explorer](#) to perform debug operations and generate SDK code examples.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	GetPolicyVersion	The name of this action. Value: GetPolicyVersion
PolicyName	String	Yes	OSS-Administrator	The policy name.
PolicyType	String	Yes	Custom	The policy type. Valid values: System Custom
VersionId	String	Yes	v3	The ID of the policy version.

Response parameters

Parameter	Type	Example value	Description
PolicyVersion	N/A	N/A	The information about the policy version.
⌋ CreateDate	String	2015-01-23T12:33:18Z	The date and time when the policy version was created.
⌋ 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 policy content.
⌋ VersionId	String	v3	The ID of the policy version.
RequestId	String	9B34724D-54B0-4A51-B34D-4512372FE1BE	The request ID.

Example

Request example

```
https://ram.aliyuncs.com/?Action=GetPolicyVersion
&PolicyName=OSS-Administrator
&PolicyType=Custom
&VersionId=v3
&<CommonParameters>
```

Response example

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" }
```

```

    </ PolicyDocu ment >
  </ PolicyVers ion >
</ GetPolicyV ersionResp onse >

```

JSON format

```

{
  " RequestId ":" 9B34724D - 54B0 - 4A51 - B34D - 4512372FE1 BE ",
  " PolicyVers ion ":{
    " IsDefaultV ersion ": false ,
    " VersionId ":" v3 ",
    " PolicyDocu ment ":"{ \" Statement \": [{ \" Action \": [\"
oss :*\", \" Effect \": \" Allow \", \" Resource \": [\" acs : oss
:***\"}]}, \" Version \": \" 1 \"}]",
    " CreateDate ":" 2015 - 01 - 23T12 : 33 : 18Z "
  }
}

```

Errors

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

7.7 DeletePolicyVersion

Deletes a version of a specified policy.

Debug

Use [OpenAPI Explorer](#) to perform debug operations and generate SDK code examples.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	DeletePolicyVersion	The name of this action. Value: DeletePolicyVersion
PolicyName	String	Yes	OSS-Administrator	The policy name.
VersionId	String	Yes	v3	The ID of the target policy version.

Response parameters

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

Example

Request example

```
https://ram.aliyuncs.com/?Action=DeletePolicyVersion
&PolicyName=OSS-Administrator
&VersionId=v3
&<CommonParameters>
```

Response example

XML format

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

JSON format

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

Errors

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

7.8 ListPolicyVersions

Lists all versions of a policy.

Debug

Use [OpenAPI Explorer](#) to perform debug operations and generate SDK code examples.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	ListPolicyVersions	The name of this action. Value: ListPolicyVersions
PolicyName	String	Yes	OSS-Administrator	The policy name.

Parameter	Type	Required ?	Example value	Description
PolicyType	String	Yes	Custom	The policy type. Valid values: System Custom

Response parameters

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

Example

Request example

```
https://ram.aliyuncs.com/?Action=ListPolicyVersions&PolicyName=OSS-Administrator&PolicyType=Custom&<CommonParameters>
```

Response example

XML format

```
<ListPolicyVersionsResponse>
```

```

< RequestId > 7B8A4E7D - 6CFF - 471D - 84DF - 195A7A241E CB </
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 >
</ ListPolicy VersionsResponse >

```

JSON format

```

{
  " RequestId ":" 7B8A4E7D - 6CFF - 471D - 84DF - 195A7A241E CB ",
  " 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 "
      }
    ]
  }
}

```

Errors

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

7.9 SetDefaultPolicyVersion

Sets the default version of a policy.

Debug

Use [OpenAPI Explorer](#) to perform debug operations and generate SDK code examples.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	SetDefaultPolicyVersion	The name of this action. Value: SetDefaultPolicyVersion
PolicyName	String	Yes	OSS-Administrator	The policy name.
VersionId	String	Yes	v2	The ID of the default policy version.

Response parameters

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

Example

Request example

```
https://ram.aliyuncs.com/?Action=SetDefaultPolicyVersion
&PolicyName=OSS-Administrator
&VersionId=v2
&<Common parameters>
```

Response example

XML format

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



```
</ SetDefault PolicyVersionResponse >
```

JSON format

```
{
  "RequestId": "9B34724D - 54B0 - 4A51 - B34D - 4512372FE1 BE "
}
```

Errors

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

7.10 AttachPolicyToUser

Attaches a policy to a RAM user.

Debug

Use [OpenAPI Explorer](#) to perform debug operations and generate SDK code examples.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	AttachPolicyToUser	The name of this action. Value: AttachPolicyToUser
PolicyName	String	Yes	OSS-Administrator	The policy name.
PolicyType	String	Yes	Custom	The policy type. If this parameter is left unspecified, all policies are listed. Valid values: System Custom
UserName	String	Yes	Alice	The username of the RAM user to which the policy is attached.

Response parameters

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

Example

Request example

```
https://ram.aliyuncs.com/?Action=AttachPolicyToUser
&PolicyType=Custom
&PolicyName=OSS-Administrator
&UserName=Alice
&<CommonParameters>
```

Response example

XML format

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

JSON format

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

Errors

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

7.11 DetachPolicyFromUser

Removes a policy from a RAM user.

Debug

Use [OpenAPI Explorer](#) to perform debug operations and generate SDK code examples.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	DetachPolicyFromUser	The name of this action. Value: DetachPolicyFromUser
PolicyName	String	Yes	OSS-Administrator	The policy name.

Parameter	Type	Required?	Example value	Description
PolicyType	String	Yes	Custom	The policy type. Valid values: System Custom
UserName	String	Yes	Alice	The username of the RAM user from which the policy is removed.

Response parameters

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

Example

Request example

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

Response example

XML format

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

JSON format

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

Errors

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

7.12 AttachPolicyToGroup

Attaches a policy to a RAM user group.

Debug

Use [OpenAPI Explorer](#) to perform debug operations and generate SDK code examples.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	AttachPolicyToGroup	The name of this action. Value: AttachPolicyToGroup
GroupName	String	Yes	dev	The name of the RAM user group to which the policy is attached.
PolicyName	String	Yes	OSS-Administrator	The policy name.
PolicyType	String	Yes	Custom	The policy type. Valid values: System Custom

Response parameters

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

Example

Request example

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

Response example

XML format

```
< AttachPolicyToGroupResponse >
  < RequestId > 697852FB - 50D7 - 44D9 - 9774 - 530C31EAC5 72 </
    RequestId >
</ AttachPolicyToGroupResponse >
```

JSON format

```
{
  "RequestId": "697852FB - 50D7 - 44D9 - 9774 - 530C31EAC5 72"
}
```

Errors

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

7.13 DetachPolicyFromGroup

Removes a policy from a RAM user group.

Debug

Use [OpenAPI Explorer](#) to perform debug operations and generate SDK code examples.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	DetachPolicyFromGroup	The name of this action. Value: DetachPolicyFromGroup
GroupName	String	Yes	dev	The name of the RAM user group from which the policy is removed.
PolicyName	String	Yes	OSS-Administrator	The policy name.
PolicyType	String	Yes	Custom	The policy type. Valid values: System Custom

Response parameters

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

Example

Request example

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

Response example

XML format

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

JSON format

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

Errors

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

7.14 AttachPolicyToRole

Attaches a policy to a RAM role.

Debug

Use [OpenAPI Explorer](#) to perform debug operations and generate SDK code examples.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	AttachPolicyToRole	The name of this action. Value: AttachPolicyToRole
PolicyName	String	Yes	OSS-Administrator	The policy name.
PolicyType	String	Yes	Custom	The policy type. Valid values: System Custom
RoleName	String	Yes	OSSAdminRole	The name of the RAM role to which the policy is attached.

Response parameters

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

Example

Request example

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

Response example

XML format

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

JSON format

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

```
}
```

Errors

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

7.15 DetachPolicyFromRole

Removes a policy from a RAM role.

Debug

Use [OpenAPI Explorer](#) to perform debug operations and generate SDK code examples.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	DetachPolicyFromRole	The name of this action. Value: DetachPolicyFromRole
PolicyName	String	Yes	OSS-Administrator	The policy name.
PolicyType	String	Yes	Custom	The policy type. Valid values: System Custom
RoleName	String	Yes	OSSAdminRole	The name of the RAM role from which the policy is removed.

Response parameters

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

Example

Request example

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


&< Common parameters >

Response example

XML format

```
< DetachPolicyFromRoleResponse >
  < RequestId > 697852FB - 50D7 - 44D9 - 9774 - 530C31EAC5 72 </
    RequestId >
</ DetachPolicyFromRoleResponse >
```

JSON format

```
{
  "RequestId": "697852FB - 50D7 - 44D9 - 9774 - 530C31EAC5 72"
}
```

Errors

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

7.16 ListPoliciesForUser

Lists the policies attached to a RAM user.

Debug

Use [OpenAPI Explorer](#) to perform debug operations and generate SDK code examples.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	ListPoliciesForUser	The name of this action. Value: ListPoliciesForUser
UserName	String	Yes	Alice	The username of the RAM user to which the policies are attached.

Response parameters

Parameter	Type	Example value	Description
Policies	N/A	N/A	The policy list.

Parameter	Type	Example value	Description
└ AttachDate	String	2015-01-23T12:33:18Z	The date and time when a policy was attached to the RAM user.
└ DefaultVersion	String	v1	The default policy version.
└ Description	String	OSS administrator	The policy description.
└ PolicyName	String	OSS-Administrator	The policy name.
└ PolicyType	String	Custom	The policy type.
RequestId	String	7B8A4E7D-6CFF-471D-84DF-195A7A241ECB	The request ID.

Example

Request example

```
https://ram.aliyuncs.com/?Action=ListPoliciesForUser
&UserName=Alice
&<CommonParameters>
```

Response example

XML format

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

```

        < Descriptio  n > Read - only  permission </ Descriptio
n >
        < DefaultVer  sion > v1 </ DefaultVer  sion >
        < AttachDate > 2015 - 02 - 18T17 : 22 : 08Z </ AttachDate
>
        </ Policy >
    </ Policies >
</ ListPolicie sForUserR  esponse >

```

JSON format

```

{
  " Policies ":{
    " Policy ":[
      {
        " Descriptio  n ":" OSS  administra  tor ",
        " PolicyName ":" OSS - Administra  tor ",
        " AttachDate ":" 2015 - 01 - 23T12 : 33 : 18Z ",
        " DefaultVer  sion ":" v1 ",
        " PolicyType ":" Custom "
      },
      {
        " Descriptio  n ":" Read - only  permission ",
        " PolicyName ":" ReadOnlyAc  cess ",
        " AttachDate ":" 2015 - 02 - 18T17 : 22 : 08Z ",
        " DefaultVer  sion ":" v1 ",
        " PolicyType ":" System "
      }
    ]
  },
  " RequestId ":" 7B8A4E7D - 6CFF - 471D - 84DF - 195A7A241E  CB "
}

```

Errors

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

7.17 ListEntitiesForPolicy

Lists the entities that use a policy.

Debug

Use [OpenAPI Explorer](#) to perform debug operations and generate SDK code examples.

Request parameters

Parameter	Type	Required ?	Example value	Description
Action	String	Yes	ListEntiti esForPolicy	The name of this action. Value: ListEntitiesForPolicy

Parameter	Type	Required ?	Example value	Description
PolicyName	String	Yes	OSS-Administrator	The policy name.
PolicyType	String	Yes	Custom	The policy type. Valid values: System Custom

Response parameters

Parameter	Type	Example value	Description
Users	N/A	N/A	The information about the RAM users that use a policy.
└ AttachDate	String	2015-01-23T12:33:18Z	The date and time when a policy was attached to a RAM user.
└ DisplayName	String	Alice	The display name of a RAM user.
└ UserId	String	122748924538****	The ID of a RAM user.
└ UserName	String	Alice	The username of a RAM user.
Groups	N/A	N/A	The information about the RAM user groups.
└ AttachDate	String	2015-02-18T17:22:08Z	The date and time when a policy was attached to a RAM user group.
└ Comments	String	Test development	The comment.
└ GroupName	String	QA-Team	The RAM user group name.
Roles	N/A	N/A	The information about the RAM roles.

Parameter	Type	Example value	Description
└ Arn	String	acs:ram::123456789012****:role/ECSAdmin	The Alibaba Cloud Resource Name (ARN) of a RAM role.
└ AttachDate	String	2015-01-23T12:33:18Z	The date and time when a policy was attached to a RAM role.
└ Description	String	ECS administrator	The RAM role description.
└ RoleId	String	122748924538****	The RAM role ID.
└ RoleName	String	ECSAdmin	The RAM role name.
RequestId	String	7B8A4E7D-6CFF-471D-84DF-195A7A241ECB	The request ID.

Example

Request example

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

Response example

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 > 1227489245 38 ****</ UserId >
      < UserName > Alice </ UserName >
      < DisplayNam e > Alice </ DisplayNam e >
      < AttachDate > 2015 - 01 - 23T12 : 33 : 18Z </ AttachDate >
    </ User >
    < User >
      < UserId > 1406498224 72 ****</ UserId >
      < UserName > Bob </ UserName >
      < DisplayNam e > Bob </ DisplayNam e >
      < AttachDate > 2015 - 02 - 18T17 : 22 : 08Z </ AttachDate >
    </ User >
  </ Users >
  < Roles >
    < Role >
      < RoleId > 1227489245 38 ****</ RoleId >
      < RoleName > ECSAdmin </ RoleName >
      < Arn > acs : ram :: 1234567890 12 ****: role / ECSAdmin </ Arn
    >
      < Descriptio n > ECS  administra tor </ Descriptio n >
      < AttachDate > 2015 - 01 - 23T12 : 33 : 18Z </ AttachDate >
    </ Role >
    < Role >
      < RoleId > 1406498224 72 ****</ RoleId >
      < RoleName > OSSReadonl yAccess </ RoleName >
      < Descriptio n > OSS  read - only  permission </ Descriptio
    n >
      < Arn > acs : ram :: 1234567890 12 ****: role / OSSReadonl
    yAccess </ Arn >
      < AttachDate > 2015 - 01 - 23T12 : 33 : 18Z </ AttachDate >
    </ Role >
  </ Roles >
</ ListEntiti esForPolic yResponse >

```

JSON format

```

{
  " Groups ":{
    " Group ":[
      {
        " Comments ":" Test  team ",
        " GroupName ":" QA - Team ",
        " AttachDate ":" 2015 - 01 - 23T12 : 33 : 18Z "
      },
      {
        " Comments ":" Developmen t  team ",
        " GroupName ":" Dev - Team ",
        " AttachDate ":" 2015 - 02 - 18T17 : 22 : 08Z "
      }
    ]
  },
  " Users ":{
    " User ":[
      {
        " UserName ":" Alice ",
        " UserId ":" 1227489245 38 ****",
        " DisplayNam e ":" Alice ",
        " AttachDate ":" 2015 - 01 - 23T12 : 33 : 18Z "
      },
      {
        " UserName ":" Bob ",
        " UserId ":" 1406498224 72 ****",
        " DisplayNam e ":" Bob ",

```

```

        " AttachDate ":" 2015 - 02 - 18T17 : 22 : 08Z "
      }
    ],
    },
    " RequestId ":" 7B8A4E7D - 6CFF - 471D - 84DF - 195A7A241E CB ",
    " Roles ":{
      " Role ":[
        {
          " RoleName ":" ECSAdmin ",
          " Descriptio n ":" ECS  administra  tor ",
          " Arn ":" acs : ram :: 1234567890 12 ****: role /
ECSAdmin ",
          " AttachDate ":" 2015 - 01 - 23T12 : 33 : 18Z ",
          " RoleId ":" 1227489245 38 ****"
        },
        {
          " RoleName ":" OSSReadonl yAccess ",
          " Descriptio n ":" OSS  read - only  permission ",
          " Arn ":" acs : ram :: 1234567890 12 ****: role /
OSSReadonl yAccess ",
          " AttachDate ":" 2015 - 02 - 18T17 : 22 : 08Z ",
          " RoleId ":" 1406498224 72 ****"
        }
      ]
    }
  }
}

```

Errors

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

7.18 ListPoliciesForGroup

Lists the policies attached to a RAM user group.

Debug

Use [OpenAPI Explorer](#) to perform debug operations and generate SDK code examples.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	ListPoliciesForGroup	The name of this action. Value: ListPoliciesForGroup
GroupName	String	Yes	dev	The RAM user group name.

Response parameters

Parameter	Type	Example value	Description
Policies	N/A	N/A	The list of policies attached to the RAM user group.
└ AttachDate	String	2015-01-23T12:33:18Z	The date and time when a policy was attached to the RAM user group.
└ DefaultVersion	String	v1	The default policy version.
└ Description	String	OSS administrator	The policy description.
└ PolicyName	String	OSS-Administrator	The policy name.
└ PolicyType	String	Custom	The policy type.
RequestId	String	7B8A4E7D-6CFF-471D-84DF-195A7A241ECB	The request ID.

Example

Request example

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

Response example

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 permission </ Description >
  < DefaultVersion > v1 </ DefaultVersion >
  < AttachDate > 2015 - 02 - 18T17 : 22 : 08Z </ AttachDate >
</ Policy >
</ Policies >
</ ListPoliciesForGroup Response >

```

JSON format

```

{
  "Policies":{
    "Policy":[
      {
        "Description":"OSS administrator ",
        "PolicyName":"OSS - Administrator ",
        "AttachDate":"2015 - 01 - 23T12 : 33 : 18Z ",
        "DefaultVersion":"v1 ",
        "PolicyType":"Custom "
      },
      {
        "Description":"Read - only permission ",
        "PolicyName":"ReadOnlyAccess ",
        "AttachDate":"2015 - 02 - 18T17 : 22 : 08Z ",
        "DefaultVersion":"v1 ",
        "PolicyType":"System "
      }
    ]
  },
  "RequestId":"7B8A4E7D - 6CFF - 471D - 84DF - 195A7A241E CB "
}

```

Errors

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

7.19 ListPoliciesForRole

Lists the policies attached to a RAM role.

Debug

Use [OpenAPI Explorer](#) to perform debug operations and generate SDK code examples.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	ListPoliciesForRole	The name of this action. Value: ListPoliciesForRole

Parameter	Type	Required?	Example value	Description
RoleName	String	Yes	AdminRole	The RAM role name.

Response parameters

Parameter	Type	Example value	Description
Policies	N/A	N/A	The list of policies attached to the RAM role.
└ AttachDate	String	2015-01-23T12:33:18Z	The date and time when a policy was attached to the RAM role.
└ DefaultVersion	String	v1	The default policy version.
└ Description	String	OSS administrator	The policy description.
└	String	OSS-Administrator	The policy name.
└ PolicyType	String	Custom	The policy type.
RequestId	String	7B8A4E7D-6CFF-471D-84DF-195A7A241ECB	The request ID.

Example

Request example

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

Response example

XML format

```
<ListPoliciesForRoleResponse>
  <RequestId>7B8A4E7D-6CFF-471D-84DF-195A7A241ECB</RequestId>
  <Policies>
```

```

< Policy >
  < PolicyName > OSS - Administra tor </ PolicyName >
  < PolicyType > Custom </ PolicyType >
  < Descriptio n > OSS administra tor </ Descriptio n >
  < DefaultVer sion > v1 </ DefaultVer sion >
  < AttachDate > 2015 - 01 - 23T12 : 33 : 18Z </ AttachDate >
</ Policy >
< Policy >
  < PolicyName > ReadOnlyAc cess </ PolicyName >
  < PolicyType > System </ PolicyType >
  < Descriptio n > Read - only access </ Descriptio n >
  < DefaultVer sion > v1 </ DefaultVer sion >
  < AttachDate > 2015 - 02 - 18T17 : 22 : 08Z </ AttachDate >
</ Policy >
</ Policies >
</ ListPoliciesForRoleResponse >

```

JSON format

```

{
  "Policies":{
    "Policy":[
      {
        "Description":"OSS administra tor ",
        "PolicyName":"OSS - Administra tor ",
        "AttachDate":"2015 - 01 - 23T12 : 33 : 18Z ",
        "DefaultVersion":"v1 ",
        "PolicyType":"Custom "
      },
      {
        "Description":"Read - only access ",
        "PolicyName":"ReadOnlyAc cess ",
        "AttachDate":"2015 - 02 - 18T17 : 22 : 08Z ",
        "DefaultVersion":"v1 ",
        "PolicyType":"System "
      }
    ]
  },
  "RequestId":"7B8A4E7D - 6CFF - 471D - 84DF - 195A7A241E CB "
}

```

Errors

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

8 Security management APIs

8.1 SetAccountAlias

Sets an alias for an Alibaba Cloud account.

Debug

Use [OpenAPI Explorer](#) to perform debug operations and generate SDK code examples.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	SetAccountAlias	The name of this action. Value: SetAccountAlias
AccountAlias	String	Yes	myalias	The alias of the Alibaba Cloud account. It must be 3 to 32 characters in length. Pattern: <code>^[a-z0-9]([a-z0-9] -(?!-))*[a-z0-9]?\$</code>

Response parameters

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

Example

Request example

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

Response example

XML format

```
< SetAccount  AliasRespo  nse >
  < RequestId > 04F0F334 - 1335 - 436C - A1D7 - 6C044FE733 68 </
    RequestId >
</ SetAccount  AliasRespo  nse >
```

JSON format

```
{
  " RequestId ":" 04F0F334 - 1335 - 436C - A1D7 - 6C044FE733 68 "
}
```

Errors

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

8.2 GetAccountAlias

Views the alias of an Alibaba Cloud account.

Debug

Use [OpenAPI Explorer](#) to perform debug operations and generate SDK code examples.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	GetAccountAlias	The name of this action. Value: GetAccountAlias

Response parameters

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

Example**Request example**

```
https://ram.aliyuncs.com/?Action=GetAccountAlias
```

&< Common parameters >

Response example

XML format

```
< GetAccount AliasResponse >
  < RequestId > 04F0F334 - 1335 - 436C - A1D7 - 6C044FE733 68 </
    RequestId >
  < AccountAlias > myalias </ AccountAlias >
</ GetAccount AliasResponse >
```

JSON format

```
{
  "RequestId ":" 04F0F334 - 1335 - 436C - A1D7 - 6C044FE733 68 ",
  "AccountAlias ":" myalias "
}
```

Errors

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

8.3 ClearAccountAlias

Deletes the alias of an Alibaba Cloud account.

Debug

Use [OpenAPI Explorer](#) to perform debug operations and generate SDK code examples.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	ClearAccountAlias	The name of this action. Value: ClearAccountAlias

Response parameters

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

Example

Request example

```
https://ram.aliyuncs.com/?Action=ClearAccountAlias
&<CommonParameters>
```

Response example

XML format

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

JSON format

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

Errors

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

8.4 SetPasswordPolicy

Sets the password policy, including the password strength, for a RAM user.

Debug

Use [OpenAPI Explorer](#) to perform debug operations and generate SDK code examples.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	SetPasswordPolicy	The name of this action. Value: SetPasswordPolicy

Parameter	Type	Required ?	Example value	Description
HardExpiry	Boolean	No	false	Indicates whether the password has expired. Valid values: true false Default value: false  Note: · If the value of this parameter is <code>true</code>, the RAM user cannot log on until the administrator resets the password. · If the value of this parameter is <code>false</code>, the RAM user can change the password after the password expires and continues to log on as the user.
MaxLoginAttemps	Integer	No	5	The maximum number of permitted logon attempts.  Note: The number of logon attempts is reset to zero after you change the password.

Parameter	Type	Required?	Example value	Description
MaxPasswordAge	Integer	No	0	The number of days that the password is valid. Unit: day Default value: 0  Note: The valid period will be changed if you reset the password. If the value of this parameter is 0, the password never expires.
MinimumPasswordLength	Integer	No	12	The minimum number of allowed characters in the password.
PasswordReusePrevention	Integer	No	0	The number of previous passwords that the RAM user is prevented from reusing. Default value: 0  Note: If the value of this parameter is 0, the RAM user is not prevented from reusing previous passwords.
RequireLowercaseCharacters	Boolean	No	true	Indicates that one or more lowercase letters are required.
RequireNumbers	Boolean	No	true	Indicates that one or more numbers are required.
RequireSymbols	Boolean	No	true	Indicates that one or more special characters are required.

Parameter	Type	Required ?	Example value	Description
RequireUppercaseCharacters	Boolean	No	true	Indicates that one or more uppercase letters are required.

Response parameters

Parameter	Type	Example value	Description
PasswordPolicy	N/A	N/A	The password policy.
⌋ HardExpiry	Boolean	false	Indicates whether the password has expired. Valid values: true false Default value: false  Note: · If the value of this parameter is <code>true</code>, the RAM user cannot log on until the administrator resets the password. · If the value of this parameter is <code>false</code>, the RAM user can change the password after the password expires and continues to log on as the user.
⌋ MaxLoginAttempts	Integer	5	The maximum number of permitted logon attempts within one hour.  Note: The number of logon attempts is reset to zero after you change the password.

Parameter	Type	Example value	Description
<code>MaxPasswordAge</code>	Integer	0	The number of days that the password is valid. Unit: day Default value: 0  Note: The valid period will be changed if you reset the password. If the value of this parameter is 0, the password never expires.
<code>MinimumPasswordLength</code>	Integer	12	The minimum number of allowed characters in the password.
<code>PasswordReusePrevention</code>	Integer	0	The number of previous passwords that the RAM user is prevented from reusing. Default value: 0  Note: If the value of this parameter is 0, the RAM user is not prevented from reusing previous passwords.
<code>RequireLowercaseCharacters</code>	Boolean	true	Indicates that one or more lowercase letters are required.
<code>RequireNumbers</code>	Boolean	true	Indicates that one or more numbers are required.
<code>RequireSymbols</code>	Boolean	true	Indicates that one or more special characters are required.

Parameter	Type	Example value	Description
RequireUppercaseCharacters	Boolean	true	Indicates that one or more uppercase letters are required.
RequestId	String	04F0F334-1335-436C-A1D7-6C044FE73368	The request ID.

Example

Request example

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

Response example

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,

```

```
    " PasswordRequireLowMinimumPasswordLength": 0 ,  
    " RequireLowerCaseCharacters ": true ,  
    " MinimumPasswordLength ": 12  
  }  
}
```

Errors

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

8.5 GetPasswordPolicy

Obtains the password policy, including the password strength, of a RAM user.

Debug

Use [OpenAPI Explorer](#) to perform debug operations and generate SDK code examples.

Request parameters

Parameter	Type	Required?	Example value	Description
Action	String	Yes	GetPasswordPolicy	The name of this action. Value: GetPasswordPolicy

Response parameters

Parameter	Type	Example value	Description
PasswordPolicy	N/A	N/A	The password policy.

Parameter	Type	Example value	Description
L HardExpiry	Boolean	false	Indicates whether the password has expired. Valid values: true false Default value: false  Note: · If the value of this parameter is <code>true</code> , the RAM user cannot log on until the administrator resets the password. · If the value of this parameter is <code>false</code> , the RAM user can change the password after the password expires and continues to log on as the user.
L MaxLoginAttempts	Integer	5	The maximum number of permitted logon attempts within one hour.  Note: The number of logon attempts is reset to zero after you change the password.
L MaxPasswordAge	Integer	0	The number of days that the password is valid. Unit: day Default value: 0  Note: The valid period will be changed if you reset the password. If the value of this parameter is <code>0</code> , the password never expires.

Parameter	Type	Example value	Description
MinimumPasswordLength	Integer	12	The minimum number of allowed characters in the password.
PasswordReusePrevention	Integer	0	The number of previous passwords that the RAM user is prevented from reusing. Default value: 0  Note: If the value of this parameter is 0, the RAM user is not prevented from reusing previous passwords.
RequireLowercaseCharacters	Boolean	true	Indicates that one or more lowercase letters are required.
RequireNumbers	Boolean	true	Indicates that one or more numbers are required.
RequireSymbols	Boolean	true	Indicates that one or more special characters are required.
RequireUppercaseCharacters	Boolean	true	Indicates that one or more uppercase letters are required.
RequestId	String	04F0F334-1335-436C-A1D7-6C044FE73368	The request ID.

Example

Request example

```
https://ram.aliyuncs.com/?Action=GetPasswordPolicy
&AccountAlias=myalias
```

&< Common parameters >

Response example

XML format

```
< GetPasswor dPolicyRes ponse >
  < RequestId > 04F0F334 - 1335 - 436C - A1D7 - 6C044FE733 68 </
  RequestId >
  < PasswordPo licy >
    < HardExpiry > false </ HardExpiry >
    < MaxLoginAt temps > 5 </ MaxLoginAt temps >
    < MaxPasswor dAge > 0 </ MaxPasswor dAge >
    < PasswordRe usePrevent ion > 0 </ PasswordRe usePrevent ion >
    < MinimumPas swordLengt h > 12 </ MinimumPas swordLengt h >
    < RequireLow ercaseChar acters > true </ RequireLow ercaseChar
    acters >
    < RequireUpp ercaseChar acters > true </ RequireUpp ercaseChar
    acters >
    < RequireNum bers > true </ RequireNum bers >
    < RequireSym bols > true </ RequireSym bols >
  </ PasswordPo licy >
</ GetPasswor dPolicyRes ponse >
```

JSON format

```
{
  " RequestId ":" 04F0F334 - 1335 - 436C - A1D7 - 6C044FE733 68 ",
  " PasswordPo licy ":{
    " RequireUpp ercaseChar acters ": true ,
    " MaxPasswor dAge ": 0 ,
    " HardExpiry ": false ,
    " RequireNum bers ": true ,
    " RequireSym bols ": true ,
    " MaxLoginAt temps ": 5 ,
    " PasswordRe usePrevent ion ": 0 ,
    " RequireLow ercaseChar acters ": true ,
    " MinimumPas swordLengt h ": 12
  }
}
```

Errors

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

8.6 SetSecurityPreference

Sets the security preferences.

Debug

Use [OpenAPI Explorer](#) to perform debug operations and generate SDK code examples.

Request parameters

Parameter	Type	Required ?	Example value	Description
Action	String	Yes	SetSecurityPreference	The name of this action. Value: SetSecurityPreference
AllowUserToChangePassword	Boolean	No	true	Indicates whether RAM users can change their passwords.
AllowUserToManageAccessKeys	Boolean	No	false	Indicates whether RAM users can manage their AccessKeys.
AllowUserToManageMFADevices	Boolean	No	true	Indicates whether RAM users can attach or remove Multi-Factor Authentication (MFA) devices.
AllowUserToManagePublicKeys	Boolean	No	false	Indicates whether RAM users can manage their public keys.
EnableSaveMFATicket	Boolean	No	true	Indicates whether RAM users can save MFA tickets during logon. The ticket is currently valid for seven days.
LoginNetworkMasks	String	No	10.0.0.0/8	The logon mask. This parameter is left unspecified by default. That is, all IP addresses on the network can be used for logon.
LoginSessionDuration	Integer	No	6	The number of hours that the logon session is valid. Unit: hour

Response parameters

Parameter	Type	Example value	Description
RequestId	String	04F0F334-1335-436C-A1D7-6C044FE73368	The request ID.
SecurityPreference	N/A	N/A	The security preference.
└ AccessKeyPreference	N/A	N/A	The AccessKey preference.
└ AllowUserToManageAccessKeys	Boolean	false	Indicates whether RAM users can manage their AccessKeys.
└ LoginProfilePreference	N/A	N/A	The Logon preference.
└ AllowUserToChangePassword	Boolean	true	Indicates whether RAM users can change their passwords.
└ EnableSaveMFATicket	Boolean	true	Indicates whether RAM users can save MFA tickets during logon.
└ LoginNetworkMasks	String	10.0.0.0/8	The logon mask. This parameter is left unspecified by default. That is, all IP addresses on the network can be used for logon.
└ LoginSessionDuration	Integer	6	The number of hours that the logon session is valid. Unit: hour
└ MFAPreference	N/A	N/A	The MFA preference.

Parameter	Type	Example value	Description
└ AllowUserToManageMFADevices	Boolean	true	Indicates whether RAM users can attach or remove MFA devices.
└ PublicKeyPreference	N/A	N/A	The public key preference.
└ AllowUserToManagePublicKeys	Boolean	false	Indicates whether RAM users can manage their public keys.

Example

Request example

```
https://ram.aliyuncs.com/?Action=SetSecurityPreference
&EnableSaveMFATicket=true
&AllowUserToChangePassword=true
&AllowUserToManageAccessKeys=false
&<CommonParameters>
```

Response example

XML format

```
<SetSecurityPreferenceResponse>
  <RequestId> 04F0F334 - 1335 - 436C - A1D7 - 6C044FE733 68 </RequestId>
  <SecurityPreference>
    <LoginProfilePreference>
      <EnableSaveMFATicket> true </EnableSaveMFATicket>
      <AllowUserToChangePassword> true </AllowUserToChangePassword>
      <LoginNetworkMasks> 10 . 0 . 0 . 0 / 8 </LoginNetworkMasks>
      <LoginSessionDuration> 6 </LoginSessionDuration>
    </LoginProfilePreference> LoginProfilePreference & gt;
    <AccessKeyPreference>
      <AllowUserToManageAccessKeys> false </AllowUserToManageAccessKeys>
    </AccessKeyPreference>
    <MFAPreference>
      <AllowUserToManageMFADevices> false </AllowUserToManageMFADevices>
    </MFAPreference>
    <PublicKeyPreference>
      <AllowUserToManagePublicKeys> false </AllowUserToManagePublicKeys>
    </PublicKeyPreference>
  </SecurityPreference>
```

```
</ SetSecurityPreferenceResponse >
```

JSON format

```
{
  "RequestId ":" 04F0F334 - 1335 - 436C - A1D7 - 6C044FE733 68 ",
  "SecurityPreference ":{
    "LoginProfilePreference ":{
      "LoginSessionDuration ": 6 ,
      "LoginNetworkMasks ":" 10 . 0 . 0 . 0 / 8 ",
      "EnableSaveMFATicket ": true ,
      "AllowUserToChangePassword ": true
    },
    "AccessKeyPreference ":{
      "AllowUserToManageAccessKeys ": false
    },
    "PublicKeyPreference ":{
      "AllowUserToManagePublicKeys ": false
    },
    "MFAPreference ":{
      "AllowUserToManageMFA Devices ": true
    }
  }
}
```

Errors

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