

Alibaba Cloud Resource Access Management

API Reference

Issue: 20190916

Legal disclaimer

Alibaba Cloud reminds you to carefully read and fully understand the terms and conditions of this legal disclaimer before you read or use this document. If you have read or used this document, it shall be deemed as your total acceptance of this legal disclaimer.








1. You shall download and obtain this document from the Alibaba Cloud website or other Alibaba Cloud-authorized channels, and use this document for your own legal business activities only. The content of this document is considered confidential information of Alibaba Cloud. You shall strictly abide by the confidentiality obligations. No part of this document shall be disclosed or provided to any third party for use without the prior written consent of Alibaba Cloud.
2. No part of this document shall be excerpted, translated, reproduced, transmitted, or disseminated by any organization, company, or individual in any form or by any means without the prior written consent of Alibaba Cloud.
3. The content of this document may be changed due to product version upgrades, adjustments, or other reasons. Alibaba Cloud reserves the right to modify the content of this document without notice and the updated versions of this document will be occasionally released through Alibaba Cloud-authorized channels. You shall pay attention to the version changes of this document as they occur and download and obtain the most up-to-date version of this document from Alibaba Cloud-authorized channels.
4. This document serves only as a reference guide for your use of Alibaba Cloud products and services. Alibaba Cloud provides the document in the context that Alibaba Cloud products and services are provided on an "as is", "with all faults" and "as available" basis. Alibaba Cloud makes every effort to provide relevant operational guidance based on existing technologies. However, Alibaba Cloud hereby makes a clear statement that it in no way guarantees the accuracy, integrity, applicability, and reliability of the content of this document, either explicitly or implicitly. Alibaba Cloud shall not bear any liability for any errors or financial losses incurred by any organizations, companies, or individuals arising from their download, use, or trust in this document. Alibaba Cloud shall not, under any circumstances, bear responsibility for any indirect, consequential, exemplary, incidental, special, or punitive damages, including lost profits arising from the use

or trust in this document, even if Alibaba Cloud has been notified of the possibility of such a loss.

5. By law, all the content of the Alibaba Cloud website, including but not limited to works, products, images, archives, information, materials, website architecture, website graphic layout, and webpage design, are intellectual property of Alibaba Cloud and/or its affiliates. This intellectual property includes, but is not limited to, trademark rights, patent rights, copyrights, and trade secrets. No part of the Alibaba Cloud website, product programs, or content shall be used, modified, reproduced, publicly transmitted, changed, disseminated, distributed, or published without the prior written consent of Alibaba Cloud and/or its affiliates. The names owned by Alibaba Cloud shall not be used, published, or reproduced for marketing, advertising, promotion, or other purposes without the prior written consent of Alibaba Cloud. The names owned by Alibaba Cloud include, but are not limited to, "Alibaba Cloud", "Aliyun", "HiChina", and other brands of Alibaba Cloud and/or its affiliates, which appear separately or in combination, as well as the auxiliary signs and patterns of the preceding brands, or anything similar to the company names, trade names, trademarks, product or service names, domain names, patterns, logos, marks, signs, or special descriptions that third parties identify as Alibaba Cloud and/or its affiliates).
6. Please contact Alibaba Cloud directly if you discover any errors in this document.

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 font</code> | 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>swich {stand slave}</code> |

Contents

| | |
|-------------------------------------|-----------|
| Legal disclaimer..... | I |
| Generic conventions..... | I |
| 1 Calling methods..... | 1 |
| 1.1 Request structure..... | 1 |
| 1.2 Common parameters..... | 2 |
| 1.3 Signature mechanism..... | 4 |
| 1.4 Responses..... | 7 |
| 2 RAM authentication..... | 9 |
| 3 API overview..... | 14 |
| 4 User management APIs..... | 17 |
| 4.1 CreateUser..... | 17 |
| 4.2 GetUser..... | 19 |
| 4.3 UpdateUser..... | 22 |
| 4.4 DeleteUser..... | 24 |
| 4.5 ListUsers..... | 26 |
| 4.6 CreateLoginProfile..... | 29 |
| 4.7 GetLoginProfile..... | 31 |
| 4.8 DeleteLoginProfile..... | 33 |
| 4.9 UpdateLoginProfile..... | 34 |
| 4.10 CreateAccessKey..... | 35 |
| 4.11 UpdateAccessKey..... | 37 |
| 4.12 DeleteAccessKey..... | 38 |
| 4.13 ListAccessKeys..... | 39 |
| 4.14 CreateVirtualMFADevice..... | 41 |
| 4.15 ListVirtualMFADevices..... | 43 |
| 4.16 DeleteVirtualMFADevice..... | 46 |
| 4.17 BindMFADevice..... | 47 |
| 4.18 UnbindMFADevice..... | 48 |
| 4.19 GetUserMFAInfo..... | 50 |
| 4.20 ChangePassword..... | 51 |
| 5 Group management APIs..... | 54 |
| 5.1 CreateGroup..... | 54 |
| 5.2 GetGroup..... | 55 |
| 5.3 UpdateGroup..... | 57 |
| 5.4 ListGroups..... | 59 |
| 5.5 DeleteGroup..... | 62 |
| 5.6 AddUserToGroup..... | 63 |
| 5.7 RemoveUserFromGroup..... | 65 |
| 5.8 ListGroupsForUser..... | 66 |

| | |
|--|------------|
| 5.9 ListUsersForGroup..... | 68 |
| 6 Role management APIs..... | 71 |
| 6.1 CreateRole..... | 71 |
| 6.2 GetRole..... | 76 |
| 6.3 UpdateRole..... | 78 |
| 6.4 ListRoles..... | 81 |
| 6.5 DeleteRole..... | 84 |
| 7 Policy management APIs..... | 86 |
| 7.1 CreatePolicy..... | 86 |
| 7.2 GetPolicy..... | 88 |
| 7.3 DeletePolicy..... | 91 |
| 7.4 ListPolicies..... | 92 |
| 7.5 CreatePolicyVersion..... | 95 |
| 7.6 GetPolicyVersion..... | 98 |
| 7.7 DeletePolicyVersion..... | 100 |
| 7.8 ListPolicyVersions..... | 101 |
| 7.9 SetDefaultPolicyVersion..... | 103 |
| 7.10 AttachPolicyToUser..... | 105 |
| 7.11 DetachPolicyFromUser..... | 106 |
| 7.12 AttachPolicyToGroup..... | 107 |
| 7.13 DetachPolicyFromGroup..... | 109 |
| 7.14 AttachPolicyToRole..... | 110 |
| 7.15 DetachPolicyFromRole..... | 111 |
| 7.16 ListPoliciesForUser..... | 113 |
| 7.17 ListEntitiesForPolicy..... | 115 |
| 7.18 ListPoliciesForGroup..... | 119 |
| 7.19 ListPoliciesForRole..... | 121 |
| 8 Security management APIs..... | 124 |
| 8.1 SetAccountAlias..... | 124 |
| 8.2 GetAccountAlias..... | 125 |
| 8.3 ClearAccountAlias..... | 126 |
| 8.4 SetPasswordPolicy..... | 127 |
| 8.5 GetPasswordPolicy..... | 133 |
| 8.6 SetSecurityPreference..... | 136 |

1 Calling methods

1.1 Request structure

This topic describes the details about the request structure, including the endpoint of Resource Access Management (RAM), communications protocol, HTTP request methods, and request parameters.

Endpoint

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

Communications protocol

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

HTTP request methods

RAM allows you to send HTTP GET and POST requests.



Note:

The size of each HTTP GET request cannot exceed 4 KB, and the size of each HTTP POST request cannot exceed 10 MB.

Request parameters

You must specify the following parameters for each API request:

- The `Action` parameter. It specifies the operation you want to perform.
- The common request parameters.
- The request parameters that are specific to the specified API operation.

Character encoding

Requests and responses are encoded by using the UTF-8 character set.

1.2 Common parameters

This topic describes the common parameters, including the common request parameters and common response parameters.

Common request parameters

| Parameter | Type | Required | Description |
|-----------------|--------|----------|---|
| Action | String | Yes | The operation that you want to perform. |
| Format | String | No | The format to return the response values in. Valid values: <code>JSON</code> and <code>XML</code> . Default value: <code>XML</code> . |
| Version | String | Yes | The version number of the API. Specify the version in the YYYY-MM-DD format. Set this parameter to 2015-05-01. |
| Signature | String | Yes | The signature string of the current request. |
| SignatureMethod | String | Yes | The encryption method of the signature string. Set this parameter to HMAC-SHA1. |
| SignatureNonce | String | Yes | A unique, random number used to prevent replay attacks. You must use different numbers for different requests. |

| Parameter | Type | Required | Description |
|------------------|--------|----------|--|
| SignatureVersion | String | Yes | The version of the signature encryption algorithm. Set this parameter to 1.0. |
| AccessKeyId | String | Yes | The AccessKey ID provided to you by Alibaba Cloud. |
| Timestamp | String | Yes | The timestamp of the request. Specify the time in the ISO 8601 standard in the YYYY-MM-DDThh:mm:ssZ format. The time must be in UTC. |

Common response parameters

| Parameter | Type | Example | Description |
|-----------|--------|--------------------------------------|---|
| RequestId | String | 4C467B38-3910-447D-87BC-AC049166F216 | The ID of the request. The system returns a unique request ID for each API request. This request ID is used to identify each API request. |

Sample requests

```
https://ram.aliyuncs.com/?Action=XXXXXX
?Format=xml
&Version=2015-05-01
&Signature=Pc5WB8gokVn0xfeu%2FZV%2BiNM1dg****
&SignatureMethod=HMAC-SHA1
&SignatureNonce=1521552885****
&SignatureVersion=1.0
&AccessKeyId=key-test
&Timestamp=2012-06-01T12:00:00Z
```

...

Sample responses

- XML format

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

- JSON format

```
{
  " RequestId ": " 4C467B38 - 3910 - 447D - 87BC - AC049166F2 16 "
  /* 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-b8e8563dc8d2
```

The corresponding StringToSign is:

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

Assume that the 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:

```
kRA2cnpJVacIhDMzXnoNZG9tDCI%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=kRA2cnpJVacIhDMzXnoN
```



```
ZG9tDCI % 3D & Action = CreateUser & SignatureN once = 6a6e0ca6 -  
4557 - 11e5 - 86a2 - b8e8563dc8 d2
```

1.4 Responses

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

Sample success responses

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

- XML format

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

- JSON format

```
{  
  " RequestId ": " 4C467B38 - 3910 - 447D - 87BC - AC049166F2 16  
  ",  
  /* Result data */  
}
```

Sample error responses

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

- XML format

```
<? xml version = " 1 . 0 " encoding = " UTF - 8 "? >  
< Error >
```

```
< RequestId > 8906582E - 6722 - 409A - A6C4 - 0E7863B733 A5 </
RequestId >
< HostId > ram . aliyuncs . com </ HostId >
< Code > InvalidParameter </ Code >
< Message > The specified parameter " Action or Version
" is not valid . </ Message >
</ Error >
```

• **JSON format**

```
{
  "RequestId": " 7463B73D - 35CC - 4D19 - A010 - 6B8D65D242 EF",
  "HostId": " ram . aliyuncs . com ",
  "Code": " InvalidParameter ",
  "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.

Debug

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

User management API actions

| Action | Description |
|----------------------------|---|
| #unique_10 | Creates a RAM user. |
| #unique_11 | Obtains the detailed information about a RAM user. |
| #unique_12 | Updates the basic information about a RAM user. |
| #unique_13 | Deletes a RAM user. |
| #unique_14 | Lists all RAM users. |
| #unique_15 | Enables console logon for a RAM user. |
| #unique_16 | Views the logon configurations of a RAM user. |
| #unique_17 | Disables console logon for a RAM user. |
| #unique_17 | Modifies the logon configurations of a RAM user. |
| #unique_18 | Creates an AccessKey for a RAM user. |
| #unique_19 | Changes the AccessKey status of a RAM user. |
| #unique_20 | Deletes the AccessKey of a RAM user. |
| #unique_21 | Lists the AccessKey of a RAM user. |
| #unique_22 | Creates a virtual Multi-Factor Authentication (MFA) device. |
| #unique_23 | Lists virtual MFA devices. |
| #unique_24 | Deletes a virtual MFA device. |
| #unique_25 | Attaches an MFA device to a RAM user. |
| #unique_26 | Removes an MFA device from a RAM user. |

| Action | Description |
|----------------------------|---|
| #unique_27 | Obtains the MFA device information of a RAM user. |
| #unique_28 | Changes the password for a RAM user. |

Group management API actions

| Action | Description |
|----------------------------|---|
| #unique_29 | Creates a RAM user group. |
| #unique_30 | Obtains RAM user group information. |
| #unique_31 | Updates RAM user group information. |
| #unique_32 | Lists all RAM user groups. |
| #unique_33 | Deletes a RAM user group. |
| #unique_34 | Adds a RAM user to a RAM user group. |
| #unique_35 | Removes a RAM user from a RAM user group. |
| #unique_36 | Lists information about the RAM user groups to which a specified RAM user is added. |
| #unique_37 | Lists the RAM users in a RAM user group. |

Role management API actions

| Action | Description |
|----------------------------|---------------------------------------|
| #unique_38 | Creates a RAM role. |
| #unique_39 | Obtains information about a RAM role. |
| #unique_40 | Updates information about a RAM role. |
| #unique_41 | Lists RAM roles. |
| #unique_42 | Deletes a RAM role. |

Policy management API actions

| Action | Description |
|----------------------------|-------------------------------------|
| #unique_43 | Creates a policy. |
| #unique_44 | Obtains information about a policy. |
| #unique_45 | Deletes a policy. |

| Action | Description |
|----------------------------|--|
| #unique_46 | Lists policies. |
| #unique_47 | Creates a version for a policy. |
| #unique_48 | Obtains information about the version of a policy. |
| #unique_49 | Deletes a version of a policy. |
| #unique_50 | Lists all versions of a policy. |
| #unique_51 | Sets the default version of a policy. |
| #unique_52 | Attaches a policy to a RAM user. |
| #unique_53 | Removes a policy from a RAM user. |
| #unique_54 | Attaches a policy to a RAM user group. |
| #unique_55 | Removes a policy from a RAM user group. |
| #unique_56 | Attaches a policy to a RAM role. |
| #unique_57 | Removes a policy from a RAM role. |
| #unique_58 | Lists the entities that use a policy. |
| #unique_59 | Lists the policies attached to a RAM user. |
| #unique_60 | Lists the policies attached to a RAM user group. |
| #unique_61 | Lists the policies attached to a RAM role. |

Security management API actions

| Action | Description |
|----------------------------|--|
| #unique_62 | Sets an alias for an Alibaba Cloud account. |
| #unique_63 | Views the alias of an Alibaba Cloud account. |
| #unique_64 | Deletes the alias of an Alibaba Cloud account. |
| #unique_65 | Sets the password policy, including the password strength, for a RAM user. |
| #unique_66 | Obtains the password policy, including the password strength, of a RAM user. |
| #unique_67 | 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

```
<CreateUser Response>
```

```

< 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>
```



```
</ CreateLogi nProfile >
```

JSON format

```
{
  " RequestId ":" 04F0F334 - 1335 - 436C - A1D7 - 6C044FE733 68 ",
  " LoginProfi le ":{
    " PasswordRe setRequire d ": true ,
    " MFABindReq uired ": 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 | GetLoginPr ofile | The name of this action. Value: GetLoginProfile |
| UserName | String | Yes | Alice | The username. |

Response parameters

| Parameter | Type | Example value | Description |
|--------------------------|---------|--------------------------|--|
| LoginProfi le | N/A | N/A | The logon configurations. |
| └ CreateDate | String | 2015-01-23T12:33 :18Z | The creation time. |
| └ MFABindReq uired | Boolean | true | Indicates that you must attach an MFA device. |

| Parameter | Type | Example value | Description |
|-------------------------|---------|--------------------------------------|---|
| └ PasswordResetRequired | Boolean | true | 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=GetLoginProfile
&UserName=Alice
&<CommonParameters>
```

Response example

XML format

```
<GetLoginProfile>
  <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>
</GetLoginProfile>
```

JSON format

```
{
  "RequestId": "04F0F334-1335-436C-A1D7-6C044FE73368",
  "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-C4EAAA13AC01"
```

}

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
&PasswordResetRequired=true
&<CommonParameters>
```

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-A1D7-6C044FE73368</RequestId>
  <AccessKey>
    <AccessKeyId>0wNEpMMLzy7s****</AccessKeyId>
    <AccessKeySecret>PupkTg8jdm au1cXxYacg E736PJ****</AccessKeySecret>
    <Status>Active</Status>
    <CreateDate>2015-01-23T12:33:18Z</CreateDate>
  </AccessKey>
</CreateAccessKeyResponse>
```

JSON format

```
{
```

```

    " AccessKey ":{
      " Status ":" Active ",
      " AccessKeyS ecret ":" PupkTg8jdm  au1cXxYacg  E736PJ  ****",
      " AccessKeyI  d ":" 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 | UpdateAcce ssKey | The name of this action. Value: UpdateAccessKey |
| UserAccess KeyId | String | Yes | 0wNEpMMLzy 7s**** | The ID of the AccessKey to be updated. |
| 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-A1D7-6C044FE73368"
}
```

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. |
| └ 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
&<CommonParameters>
```

Response example

XML format

```
< ListAccess KeysResponse >
  < RequestId > 4B450CA1 - 36E8 - 4AA2 - 8461 - 86B42BF4CC 4E </
  RequestId >
  < AccessKeys >
    < AccessKey >
      < AccessKeyId > 0wNEpMMLzy 7s ****</ AccessKeyId >
      < Status > Active </ Status >
      < CreateDate > 2015 - 01 - 23T12 : 33 : 18Z </ CreateDate >
    </ AccessKey >
    < AccessKey >
      < AccessKeyId > WnIWUruvfa DT ****</ AccessKeyId >
      < Status > Inactive </ Status >
      < CreateDate > 2015 - 03 - 24T21 : 12 : 21Z </ CreateDate >
    </ AccessKey >
  </ AccessKeys >
</ ListAccess KeysResponse >
```

JSON format

```
{
  "RequestId ":" 4B450CA1 - 36E8 - 4AA2 - 8461 - 86B42BF4CC 4E ",
  "AccessKeys ":{
    "AccessKey ":[
      {
        "Status ":" Active ",
        "AccessKeyId ":" 0wNEpMMLzy 7s ****",
        "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 |
| VirtualMFA DeviceName | 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. |
| VirtualMFA Device | N/A | N/A | The virtual MFA device. |
| ⌋ Base32StringSeed | String | DSF98HAD982KJA9SDFNAS9D8FU839B8ADHBGS**** | The key of the virtual MFA device. |
| ⌋ QRCodePNG | String | YXNkZmFzZDlmeW5hc2Q5OGZoODd4bXJmcThhaGU5aSBmYXNkZiBzYWWRmIGFGIDRxd2VjIGEgdHEz**** | The Base64-encoded QR code PNG. |
| ⌋ SerialNumber | String | acs:ram::123456789012****: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>DSF98HAD982KJA9SDFNA S9D8FU839B8ADHBGS****</Base32StringSeed>
    <QRCodePNG>YXNkZmFzZDlmeW5hc2Q5OGZoODd4bXJmcThhaGU5aSBmYXNkZiBzYWVmIGFGIDRxd2VjIG EgdHEz****</QRCodePNG>
  </VirtualMFADevice>
</CreateVirtualMFADeviceResponse>
```

JSON format

```
{
  "VirtualMFADevice":{
    "SerialNumber":"acs:ram::123456789012****:mfa/device001",
    "QRCodePNG":"YXNkZmFzZDlmeW5hc2Q5OGZoODd4bXJmcThhaGU5aSBmYXNkZiBzYWVmIGFGIDRxd2VjIG EgdHEz****",
    "Base32StringSeed":"DSF98HAD982KJA9SDFNA S9D8FU839B8ADHBGS****"
  },
  "RequestId":"04F0F334-1335-436C-A1D7-6C044FE73368"
}
```

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. |
| └ 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
```

&< Common parameters >

Response example

XML format

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

JSON format

```
{
  "RequestId ":" 04F0F334 - 1335 - 436C - A1D7 - 6C044FE733 68 ",
  "VirtualMFA Devices ":{
    "VirtualMFA Device ":[
      {
        "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::123456789012****:mfa/device002
&<CommonParameters>
```

Response example

XML format

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



```
</ DeleteVirtualMFADeviceResponse >
```

JSON format

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

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. |
| 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::1234567890:12****: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 | UnbindMFAD evice | 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. |
| SerialNumber | String | acs:ram:: 1234567890 12****: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-A1D7-6C044FE73368</RequestId>
  <MFADevice>
    <SerialNumber>acs:ram::123456789012****:mfa/device002</SerialNumber>
  </MFADevice>
```

```
</ UnbindMFADeviceResponse >
```

JSON format

```
{
  "RequestId": "04F0F334 - 1335 - 436C - A1D7 - 6C044FE733 68",
  "MFADevice": {
    "SerialNumber": "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. |
| SerialNumber | String | Virtual-MFA-device002 | The ID of the MFA device. |

| Parameter | Type | Example value | Description |
|-----------|--------|--------------------------------------|-----------------|
| 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 | ChangePass word | The name of this action. Value: ChangePassword |
| NewPasswor d | String | Yes | aw\$2**** | The new password. It must meet the password strength requirements. For information about how to set a strong password, see #unique_65 . |
| OldPasswor d | 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=ChangePass word
&NewPasswor d=aw $ 2 ****
&OldPasswor d=12 ****
&< Common parameters >
```

Response example

XML format

```
< ChangePass word >
  < RequestId > 04F0F334 - 1335 - 436C - A1D7 - 6C044FE733 68 </
  RequestId >
</ ChangePass word >
```

JSON format

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

```
}
```

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

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

JSON format

```
{
  " RequestId ":" D4065824 - E422 - 3ED6 - 68B1 - 1AF7D5C780 4C ",
  " Group ":{
    " Comments ":" Developmen t 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 > Developmen t 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 ":" Developmen t 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 true . 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=ListGroupsWithCommonParameters
```

Response example

XML format

```
<ListGroupsWithCommonParametersResponse>
  <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</Comments>
      <CreateDate>2015-02-18T17:22:08Z</CreateDate>
      <UpdateDate>2015-02-18T17:22:08Z</UpdateDate>
    </Group>
  </Groups>
</ListGroupsWithCommonParametersResponse>
```

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 "
  }
]
},
" IsTruncated ": 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.

- Before you delete a RAM user group, make sure that no policy is attached to the group.
- Before you delete a RAM user group, make sure that 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
&<Common parameters>
```

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
&<CommonParameters>
```

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 |
|-------------|---------|---------------|--|
| IsTruncated | 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. |
| RequestId | String | 4B450CA1-36E8-4AA2-8461-86B42BF4CC4E | The request ID. |
| Users | N/A | N/A | The information about the RAM users. |
| └─ DisplayName | String | Alice | The display name of a RAM user. |
| └─ JoinDate | String | 2015-01-23T12:33:18Z | The date and time when a user joined the RAM user group. |
| └─ UserName | 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


You can call this operation to create a RAM role.

Debugging

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

Request parameters

| Parameter | Type | Required | Example | Description |
|-----------|--------|----------|------------|--|
| Action | String | Yes | CreateRole | The operation that you want to perform. Set this parameter to CreateRole. |
| RoleName | String | Yes | ECSAdmin | The name of the RAM role. The specified name can be up to 64 characters in length. Format: <code>^[a-zA-Z0-9\.\@\-]+\$</code> . |

| Parameter | Type | Required | Example | Description |
|--------------------------|--------|----------|---|--|
| AssumeRolePolicyDocument | String | Yes | <code>{"Statement": [{"Action": "sts: AssumeRole", "Effect": "Allow", "Principal": {"RAM": "acs:ram::123456789012****:root"}}, {"Version": "1"}]</code> | <p>The policy text that specifies one or more entities entrusted to assume the RAM role.</p> <p>The trusted entity can be an Alibaba Cloud account, Alibaba Cloud service, or identity provider (IdP).</p> <div style="background-color: #f0f0f0; padding: 5px;">  Note: RAM users cannot assume the RAM roles of the trusted Alibaba Cloud service. </div> |
| Description | String | No | The RAM role is used to manage ECS instances. | The description of the RAM role. The description can be up to 1,024 characters in length. |

Example value of the AssumeRolePolicyDocument parameter

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

 **Note:**

To create the RAM role, you must ensure that you have created the RAM user testuser whose UPN is testuser@123456789012****.onaliyun.com.

```
{
  "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 the ECS service under the current Alibaba Cloud account.

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

- The following policy allows the RAM role to be assumed by users under the IdP named testprovider for the current Alibaba Cloud account whose ID is 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 | Description |
|--------------------------|--------|--|--|
| RequestId | String | 04F0F334-1335-436C-A1D7-6C044FE73368 | The ID of the request. |
| 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 that specifies the trusted entity to assume the RAM role. |
| CreateDate | String | 2015-01-23T12:33:18Z | The time when the RAM role was created. |
| Description | String | The RAM role is used to manage ECS instances. | The description of the RAM role. |
| RoleId | String | 901234567890**** | The ID of the RAM role. |
| RoleName | String | ECSAdmin | The name of the RAM role. |

Examples

Sample requests

```

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

```

```
& AssumeRole PolicyDocu ment ={" Statement ":[{" Action ":" sts :
  AssumeRole "," Effect ":" Allow "," Principal":{" RAM ":" acs : ram
  :: 1234567890 12 ****: root "}}], " Version ":" 1 "}
& Descriptio n = The RAM role is used to manage ECS
instances .
&< Common request parameters >
```

Sample success responses

XML format

```
< CreateRole Response >
  < 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 > The RAM role is used to
  manage ECS instances .</ 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
  >
  </ Role >
</ CreateRole Response >
```

JSON format

```
{
  " RequestId ":" 04F0F334 - 1335 - 436C - A1D7 - 6C044FE733 68 ",
  " Role ":{
    " RoleName ":" ECSAdmin ",
    " Descriptio n ":" The RAM role is used to manage
    ECS instances .",
    " 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 ****"
  }
}
```

Error codes

For more information about error codes, see [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. |

| Parameter | Type | Example value | Description |
|--------------------------|--------|--|---|
| 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 PolicyDocu ment >
  < CreateDate > 2015 - 01 - 23T12 : 33 : 18Z </ CreateDate >
  < UpdateDate > 2015 - 01 - 23T12 : 33 : 18Z </ UpdateDate >
</ Role >
</ GetRoleRes ponse >

```

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](#).

6.3 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> |

| Parameter | Type | Required ? | Example value | Description |
|-----------------------------|--------|---------------|--|---|
| 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. |
| └ 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. |

| Parameter | Type | Example value | Description |
|--------------|--------|--------------------------|---|
| └ 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::1234567890:12****:root" } } ], "Version": "1
" }
&<CommonParameters>
```

Response example

XML format

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

JSON format

```
{
  "RequestId": "04F0F334-1335-436C-A1D7-6C044FE73368",
  "Role": {
    "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](#).

6.4 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. |
| 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 true . Value range: 1 to 1,000 Default value: 100 |

Response parameters

| 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 | 7B8A4E7D-6CFF-471D-84DF-195A7A241ECB | The request ID. |
| Roles | N/A | N/A | The list of RAM roles. |
| └ Arn | String | acs:ram::123456789012****:role/ECSAdmin | The Alibaba Cloud Resource Name (ARN) of a RAM role. |
| └ CreateDate | String | 2015-01-23T12:33:18Z | The date and time when a RAM role was created. |
| └ Description | String | ECS administrator | The description of a RAM role. |
| └ 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

```

< ListRolesR  esponse >
  < RequestId > 7B8A4E7D - 6CFF - 471D - 84DF - 195A7A241E  CB </
  RequestId >
  < IsTruncate d > true </ IsTruncate d >
  < Marker > EXAMPLE </ Marker >
  < Roles >
    < Role >
      < RoleId > 9012345678 90 ****</ RoleId >
      < RoleName > ECSAdmin </ RoleName >
      < Arn > acs : ram :: 1234567890 12 ****: role / ECSAdmin </ Arn
    >
      < Descriptio n > ECS  administra tor </ Descriptio n >
      < CreateDate > 2015 - 01 - 23T12 : 33 : 18Z </ CreateDate >
      < UpdateDate > 2015 - 01 - 23T12 : 33 : 18Z </ UpdateDate >
    </ Role >
    < Role >
      < RoleId > 9012345678 90 ****</ RoleId >
      < RoleName > OSSReadonl yAccess </ RoleName >
      < Arn > acs : ram :: 1234567890 12 ****: role / OSSReadonl
yAccess </ Arn >
      < Descriptio n > OSS  read - only  access </ Descriptio n >
      < CreateDate > 2015 - 01 - 23T12 : 33 : 18Z </ CreateDate >
      < UpdateDate > 2015 - 01 - 23T12 : 33 : 18Z </ UpdateDate >
    </ Role >
  </ Roles >
</ ListRolesR  esponse >

```

JSON format

```

{
  " IsTruncate d ": 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>
```

```
</ DeleteRole Response >
```

JSON format

```
{  
  "RequestId ":" 898FAB24 - 7509 - 43EE - A287 - 086FE4C443 94 "  
}
```

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 | <pre>{ "Statement": [{ "Action": "oss:*", "Effect": "Allow", "Resource": "acs:oss:*:*:*", "Version": "1" }] }</pre> | 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 ":{
    " Descriptio n ":" OSS  administra tor ",
    " PolicyName ":" OSS - Administra tor ",
    " CreateDate ":" 2015 - 01 - 23T12 : 33 : 18Z ",
    " DefaultVer sion ":" v1 ",
    " PolicyType ":" Custom "
  },
  " RequestId ":" 9B34724D - 54B0 - 4A51 - B34D - 4512372FE1 BE "
}
```

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 |
|----------------------|------|---------------|------------------------------------|
| DefaultPolicyVersion | N/A | N/A | The default version of the policy. |

| Parameter | Type | Example value | Description |
|--------------------|---------|--|--|
| ↳ CreateDate | String | 2015-01-23T12:33:18Z | The date and time when the policy was created. |
| ↳ IsDefaultVersion | Boolean | true | The returned struct of <code>DefaultPolicyVersion</code> is the default version. Therefore, the value of <code>isDefault</code> is <code>true</code> . |
| ↳ PolicyDocument | String | { "Statement": [{ "Action": ["oss:*"], "Effect": "Allow", "Resource": ["acs:oss:*:*:*"], "Version": "1" } | The policy content. |
| ↳ VersionId | String | v1 | The ID of the policy version. |
| Policy | N/A | N/A | The information about the policy. |
| ↳ 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 | N/A | This parameter is invalid. |
| ↳ PolicyName | String | OSS-Administrator | The policy name. |
| ↳ PolicyType | String | Custom | The policy type. |

| Parameter | Type | Example value | Description |
|------------|--------|--------------------------------------|---|
| 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
&<CommonParameters>
```

Response example

XML format

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

JSON format

```
{
  "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"
  },
}
```

```

    "DefaultPolicyVersion": {
      "IsDefaultVersion": true,
      "VersionId": "v1",
      "PolicyDocument": "{ \"Statement\": [{ \"Action\": [\"oss:*\"], \"Effect\": \"Allow\", \"Resource\": [\"acs:oss:*:*:*\"]}], \"Version\": \"1\"}",
      "CreateDate": "2015-01-23T12:33:18Z"
    },
    "RequestId": "697852FB-50D7-44D9-9774-530C31EAC572"
  }
}

```

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

```

&< Common parameters >

Response example

XML format

```
< DeletePolicyResponse >
  < RequestId > 898FAB24 - 7509 - 43EE - A287 - 086FE4C443 94 </
  RequestId >
</ DeletePolicyResponse >
```

JSON format

```
{
  "RequestId ":" 898FAB24 - 7509 - 43EE - A287 - 086FE4C443 94 "
}
```

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. |

| 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 |
| 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. |
| 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. |
| <code>AttachmentCount</code> | Integer | 3 | The number of times that a policy is referenced. |
| <code>CreateDate</code> | String | 2015-01-23T12:33:18Z | The date and time when a policy was created. |

| Parameter | Type | Example value | Description |
|----------------|--------|--------------------------------------|---|
| 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
&<CommonParameters>
```

Response example

XML format

```
<ListPoliciesResponse>
  <RequestId>7B8A4E7D-6CFF-471D-84DF-195A7A241ECB</RequestId>
  <IsTruncated>true</IsTruncated>
  <Marker>EXAMPLE</Marker>
  <Policies>
    <Policy>
      <PolicyName>OSS-Administrator</PolicyName>
      <PolicyType>Custom</PolicyType>
      <Description>OSS administrator</Description>
      <DefaultVersion>v1</DefaultVersion>
      <CreateDate>2015-01-23T12:33:18Z</CreateDate>
      <UpdateDate>2015-01-23T12:33:18Z</UpdateDate>
      <AttachmentCount>0</AttachmentCount>
    </Policy>
    <Policy>
      <PolicyName>ReadOnlyAccess</PolicyName>
```



```

    < PolicyType > System </ PolicyType >
    < Descriptio n > Read - only permission </ Descriptio n >
    < DefaultVer sion > v1 </ DefaultVer sion >
    < CreateDate > 2015 - 02 - 11T18 : 39 : 12Z </ CreateDate >
    < UpdateDate > 2015 - 02 - 19T09 : 43 : 16Z </ UpdateDate >
    < Attachment Count > 0 </ Attachment Count >
  </ Policy >
</ Policies >
</ ListPolicie sResponse >

```

JSON format

```

{
  " Policies ":{
    " Policy ":[
      {
        " Attachment Count ": 3 ,
        " Descriptio n ":" OSS administra tor ",
        " PolicyName ":" OSS - Administra tor ",
        " UpdateDate ":" 2015 - 01 - 23T12 : 33 : 18Z ",
        " CreateDate ":" 2015 - 01 - 23T12 : 33 : 18Z ",
        " DefaultVer sion ":" v1 ",
        " PolicyType ":" Custom "
      },
      {
        " Attachment Count ": 1 ,
        " Descriptio n ":" Read - only permission ",
        " PolicyName ":" ReadOnlyAc cess ",
        " UpdateDate ":" 2015 - 02 - 19T09 : 43 : 16Z ",
        " CreateDate ":" 2015 - 02 - 11T18 : 39 : 12Z ",
        " DefaultVer sion ":" v1 ",
        " PolicyType ":" System "
      }
    ]
  },
  " IsTruncate d ": 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 | <pre>{ "Statement": [{ "Action": "oss:*", "Effect": "Allow", "Resource": "acs:oss:*:*:*:*", "Version": "1" }] }</pre> | The policy content. It can be up to 2048 bytes. |
| PolicyName | String | Yes | OSS-Administrator | The policy name. |
| RotateStrategy | String | No | None | The rotation strategy of a policy . You can set this parameter to delete an existing policy. Valid values: <ul style="list-style-type: none"> None : indicates no rotation strategy is set DeleteOldestNonDefaultVersionWhenLimitExceeded : indicates the earliest and non-active version can be deleted when the number of versions exceeds the limit Default value: None |
| 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. |
| 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>
```

```
</ PolicyVers ion >
</ CreatePoli cyVersionR esponse >
```

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](#).

7.6 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 | GetPolicyV ersion | 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 | DeletePoli cyVersion | 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. |
| 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-195A7A241ECB</RequestId>
  <PolicyVersions>
    <PolicyVersion>
      <VersionId>v3</VersionId>
      <IsDefaultVersion>>false</IsDefaultVersion>
      <CreateDate>2015-01-23T12:33:18Z</CreateDate>
      <PolicyDocument>{ "Statement": [ { "Action": [ "oss:*" ], "Effect": "Allow", "Resource": [ "acs:oss:*:*:*" ] }, { "Version": "1" } ] }</PolicyDocument>
```



```

</ PolicyVers ion >
< PolicyVers ion >
  < VersionId > v5 </ VersionId >
  < IsDefaultV ersion > true </ IsDefaultV ersion >
  < CreateDate > 2015 - 02 - 26T01 : 25 : 52Z </ CreateDate >
  < PolicyDocu ment >{ " Statement ": [{ " Action ": [" oss
:*"], " Effect ": " Allow ", " Resource ": [" acs : oss :*:~:*"]}], "
Version ": " 1 "} </ PolicyDocu ment >
</ PolicyVers ion >
</ PolicyVers ions >
</ ListPolicy VersionsRe sponse >

```

JSON format

```

{
  " RequestId ":" 7B8A4E7D - 6CFF - 471D - 84DF - 195A7A241E CB ",
  " PolicyVers ions ":{
    " 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 "
      },
      {
        " IsDefaultV ersion ": true ,
        " VersionId ":" v5 ",
        " PolicyDocu ment ":{ \ " 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 | SetDefault PolicyVersion | 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
&<CommonParameters>
```

Response example

XML format

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

JSON format

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

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 polices 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
<Common parameters>
```

Response example

XML format

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

JSON format

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

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. |
| 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
&<CommonParameters>
```

Response example

XML format

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

JSON format

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

```
}

```

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
```

&< Common parameters >

Response example

XML format

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

JSON format

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

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
&<CommonParameters>
```

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
&<CommonParameters>
```

Response example

XML format

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

JSON format

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

}

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. |
| └ 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. |

| Parameter | Type | Example value | Description |
|------------|--------|--------------------------------------|------------------|
| 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</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>
</ListPoliciesForUserResponse>
```

JSON format

```
{
  "Policies":{
    "Policy":[
      {
        "Description":"OSS administrator",
        "PolicyName":"OSS-Administrator",
        "AttachDate":"2015-01-23T12:33:18Z",
        "DefaultVersion":"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 |
| 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. |

| Parameter | Type | Example value | Description |
|---------------|--------|---|---|
| └ 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. |
| └ 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. |

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

Example

Request example

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

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>122748924538****</UserId>
      <UserName>Alice</UserName>
      <DisplayName>Alice</DisplayName>
      <AttachDate>2015-01-23T12:33:18Z</AttachDate>
    </User>
    <User>
      <UserId>140649822472****</UserId>
      <UserName>Bob</UserName>
      <DisplayName>Bob</DisplayName>
      <AttachDate>2015-02-18T17:22:08Z</AttachDate>
    </User>
  </Users>
  <Roles>
    <Role>
      <RoleId>122748924538****</RoleId>
      <RoleName>ECSAdmin</RoleName>
      <Arn>acs:ram::123456789012****:role/ECSAdmin</Arn>
    </Role>
    <Role>
      <RoleId>140649822472****</RoleId>
      <RoleName>ECSAdministrator</RoleName>
      <AttachDate>2015-01-23T12:33:18Z</AttachDate>
    </Role>
  </Roles>
```

```

    < RoleName > OSSReadonlyAccess </ RoleName >
    < Description > OSS read - only permission </ Description
n >
    < Arn > acs : ram :: 1234567890 12 ****: role / OSSReadonlyAccess </ Arn >
    < AttachDate > 2015 - 01 - 23T12 : 33 : 18Z </ AttachDate >
  </ Role >
</ Roles >
</ ListEntitiesForPolicyResponse >

```

JSON format

```

{
  " Groups ":{
    " Group ":[
      {
        " Comments ":" Test team ",
        " GroupName ":" QA - Team ",
        " AttachDate ":" 2015 - 01 - 23T12 : 33 : 18Z "
      },
      {
        " Comments ":" Development team ",
        " GroupName ":" Dev - Team ",
        " AttachDate ":" 2015 - 02 - 18T17 : 22 : 08Z "
      }
    ]
  },
  " Users ":{
    " User ":[
      {
        " UserName ":" Alice ",
        " UserId ":" 1227489245 38 ****",
        " DisplayName ":" Alice ",
        " AttachDate ":" 2015 - 01 - 23T12 : 33 : 18Z "
      },
      {
        " UserName ":" Bob ",
        " UserId ":" 1406498224 72 ****",
        " DisplayName ":" Bob ",
        " AttachDate ":" 2015 - 02 - 18T17 : 22 : 08Z "
      }
    ]
  },
  " RequestId ":" 7B8A4E7D - 6CFF - 471D - 84DF - 195A7A241E CB ",
  " Roles ":{
    " Role ":[
      {
        " RoleName ":" ECSAdmin ",
        " Description ":" ECS administrator ",
        " Arn ":" acs : ram :: 1234567890 12 ****: role /
ECSAdmin ",
        " AttachDate ":" 2015 - 01 - 23T12 : 33 : 18Z ",
        " RoleId ":" 1227489245 38 ****"
      },
      {
        " RoleName ":" OSSReadonlyAccess ",
        " Description ":" OSS read - only permission ",
        " Arn ":" acs : ram :: 1234567890 12 ****: role /
OSSReadonlyAccess ",
        " 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. |

| Parameter | Type | Example value | Description |
|------------|--------|--------------------------------------|------------------|
| 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>
</ListPoliciesForGroupResponse>
```

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 ":" 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](#).

7.19 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 | ListPolic iesForRole | The name of this action. Value: ListPoliciesForRole |
| 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 administra tor | The policy description. |

| Parameter | Type | Example value | 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-Administrator</PolicyName>
      <PolicyType>Custom</PolicyType>
      <Description>OSS administrator</Description>
      <DefaultVersion>v1</DefaultVersion>
      <AttachDate>2015-01-23T12:33:18Z</AttachDate>
    </Policy>
    <Policy>
      <PolicyName>ReadOnlyAccess</PolicyName>
      <PolicyType>System</PolicyType>
      <Description>Read-only access</Description>
      <DefaultVersion>v1</DefaultVersion>
      <AttachDate>2015-02-18T17:22:08Z</AttachDate>
    </Policy>
  </Policies>
</ListPoliciesForRoleResponse>
```

JSON format

```
{
  "Policies":{
    "Policy":[
      {
        "Description":"OSS administrator",
        "PolicyName":"OSS-Administrator",
        "AttachDate":"2015-01-23T12:33:18Z",
        "DefaultVersion":"v1",
```

```
    " PolicyType ":" Custom "
  },
  {
    " Descriptio n ":" Read - only  access ",
    " 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](#).

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
<Common parameters>
```

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 | GetAccount Alias | The name of this action. Value: GetAccountAlias |

Response parameters

| Parameter | Type | Example value | Description |
|------------------|--------|--|--|
| AccountAli as | 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 = GetAccount  Alias
```

&< 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 | <p>Indicates whether the password has expired.</p> <p>Valid values: true false</p> <p>Default value: false</p> <div style="background-color: #f0f0f0; padding: 5px;">  Note: <ul style="list-style-type: none"> · 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. </div> |
| MaxLoginAttempts | Integer | No | 5 | <p>The maximum number of permitted logon attempts.</p> <div style="background-color: #f0f0f0; padding: 5px;">  Note: <p>The number of logon attempts is reset to zero after you change the password.</p> </div> |

| Parameter | Type | Required ? | Example value | Description |
|----------------------------|---------|---------------|---------------|--|
| MaxPasswordAge | Integer | No | 0 | <p>The number of days that the password is valid.</p> <p>Unit: day</p> <p>Default value: 0</p> <div style="background-color: #f0f0f0; padding: 5px;">  Note: The valid period will be changed if you reset the password. If the value of this parameter is 0, the password never expires. </div> |
| MinimumPasswordLength | Integer | No | 12 | The minimum number of allowed characters in the password. |
| PasswordReusePrevention | Integer | No | 0 | <p>The number of previous passwords that the RAM user is prevented from reusing.</p> <p>Default value: 0</p> <div style="background-color: #f0f0f0; padding: 5px;">  Note: If the value of this parameter is 0, the RAM user is not prevented from reusing previous passwords. </div> |
| 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 | <p>Indicates whether the password has expired.</p> <p>Valid values: true false</p> <p>Default value: false</p> <div style="background-color: #f0f0f0; padding: 5px;"> <p> Note:</p> <ul style="list-style-type: none"> · If the value of this parameter is true , the RAM user cannot log on until the administrator resets the password. · If the value of this parameter is false , the RAM user can change the password after the password expires and continues to log on as the user. </div> |
| ↳ MaxLoginAttempts | Integer | 5 | <p>The maximum number of permitted logon attempts within one hour.</p> <div style="background-color: #f0f0f0; padding: 5px;"> <p> Note:</p> <p>The number of logon attempts is reset to zero after you change the password.</p> </div> |

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

| 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,
  }
}
```

```

    " PasswordRe usePrevent ion ": 0 ,
    " RequireLow ercaseChar acters ": true ,
    " MinimumPas swordLengt h ": 12
  }
}

```

Errors

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

8.5 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 | GetPasswor dPolicy | The name of this action. Value: GetPasswordPolicy |

Response parameters

| Parameter | Type | Example value | Description |
|--------------------|------|---------------|----------------------|
| PasswordPo licy | N/A | N/A | The password policy. |

| Parameter | Type | Example value | Description |
|-----------------------|---------|---------------|---|
| ↳ HardExpiry | Boolean | false | <p>Indicates whether the password has expired.</p> <p>Valid values: true false</p> <p>Default value: false</p> <p> Note:</p> <ul style="list-style-type: none"> · If the value of this parameter is true , the RAM user cannot log on until the administrator resets the password. · If the value of this parameter is false , the RAM user can change the password after the password expires and continues to log on as the user. |
| ↳ MaxLoginAttempts | Integer | 5 | <p>The maximum number of permitted logon attempts within one hour.</p> <p> Note:</p> <p>The number of logon attempts is reset to zero after you change the password.</p> |
| ↳ MaxPasswordAge | Integer | 0 | <p>The number of days that the password is valid.</p> <p>Unit: day</p> <p>Default value: 0</p> <p> Note:</p> <p>The valid period will be changed if you reset the password. If the value of this parameter is 0 , the password never expires.</p> |

| 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-A1D7-6C044FE73368</RequestId>
  <SecurityPreference>
    <LoginProfilePreference>
      <EnableSaveMFATicket>true</EnableSaveMFATicket>
      <AllowUserToChangePassword>true</AllowUserToChangePassword>
      <LoginNetworkMasks>10.0.0.0/8</LoginNetworkMasks>
      <LoginSessionDuration>6</LoginSessionDuration>
    </LoginProfilePreference>
    <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](#).