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# Document conventions

<table>
<thead>
<tr>
<th>Style</th>
<th>Description</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>❗️ <strong>Danger</strong></td>
<td>A danger notice indicates a situation that will cause major system changes, faults, physical injuries, and other adverse results.</td>
<td>❗️ <strong>Danger:</strong> Resetting will result in the loss of user configuration data.</td>
</tr>
<tr>
<td>🔴 <strong>Warning</strong></td>
<td>A warning notice indicates a situation that may cause major system changes, faults, physical injuries, and other adverse results.</td>
<td>🔴 <strong>Warning:</strong> Restarting will cause business interruption. About 10 minutes are required to restart an instance.</td>
</tr>
<tr>
<td>🔴 <strong>Notice</strong></td>
<td>A caution notice indicates warning information, supplementary instructions, and other content that the user must understand.</td>
<td>🔴 <strong>Notice:</strong> If the weight is set to 0, the server no longer receives new requests.</td>
</tr>
<tr>
<td>🔴 <strong>Note</strong></td>
<td>A note indicates supplemental instructions, best practices, tips, and other content.</td>
<td>🔴 <strong>Note:</strong> You can use Ctrl + A to select all files.</td>
</tr>
<tr>
<td>&gt;</td>
<td>Closing angle brackets are used to indicate a multi-level menu cascade.</td>
<td>Click Settings &gt; Network &gt; Set network type.</td>
</tr>
<tr>
<td><strong>Bold</strong></td>
<td>Bold formatting is used for buttons, menus, page names, and other UI elements.</td>
<td>Click OK.</td>
</tr>
<tr>
<td><strong>Courier font</strong></td>
<td>Courier font is used for commands</td>
<td>Run the <code>cd /d C:/windows</code> command to enter the Windows system folder.</td>
</tr>
<tr>
<td><strong>Italic</strong></td>
<td>Italic formatting is used for parameters and variables.</td>
<td><code>bae log list --instanceId Instance_ID</code></td>
</tr>
<tr>
<td>[] or [a</td>
<td>b]</td>
<td>This format is used for an optional value, where only one item can be selected.</td>
</tr>
<tr>
<td>() or (a</td>
<td>b)</td>
<td>This format is used for a required value, where only one item can be selected.</td>
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1. Introduction

This topic describes how to get started with Alibaba Cloud Resource Access Management (RAM). You can use the RAM service to control permissions on Alibaba Cloud resources.

Prerequisites

An Alibaba Cloud account is created. To create an Alibaba Cloud account, visit the account registration page.

Operations in the RAM console

- Set security policies to protect your Alibaba Cloud account. For more information, see Set security policies for RAM users.
- Create RAM users. A RAM user is an entity that is created in Alibaba Cloud to represent a person or application that interacts with Alibaba Cloud. For more information, see Create a RAM user.
- Create RAM user groups to classify and organize RAM users under your Alibaba Cloud account for easier user and permission management. For more information, see Create a RAM user group.
- Grant permissions to RAM users so that the users can access Alibaba Cloud resources. For more information, see Grant permissions to a RAM user.
- Create custom policies to perform finer-grained permission control. For more information, see Create a custom policy.
- Log on to the Alibaba Cloud Management Console as a RAM user. Then, you can access Alibaba Cloud resources and perform necessary operations. For more information, see Log on to the console as a RAM user.

References

You can also perform custom development by using diverse API operations, SDK packages, and other easy-to-use tools. For more information, visit the RAM learning path.
2.Set security policies for RAM users

This topic describes how to use your Alibaba Cloud account to set security policies for RAM users.

Procedure

1. Log on to the RAM console by using an Alibaba Cloud account.
2. In the left-side navigation pane, click Settings under Identities.
3. On the Security Settings tab, click Update RAM User Security Settings. In the dialog box that appears, configure the following parameters:
   - **Save MFA Logon Status for 7 Days**: specifies whether to allow RAM users to keep the multi-factor authentication (MFA) devices logged on for seven days. By default, this parameter is set to Not Allowed.
   - **Manage Passwords**: specifies whether to allow RAM users to change their passwords.
   - **Manage AccessKey**: specifies whether to allow RAM users to change their AccessKey pairs.
   - **Manage MFA Devices**: specifies whether to allow RAM users to enable and disable MFA devices.
   - **Logon Session Valid For**: specifies the maximum duration of a logon session. The validity period is measured in hours.

   **Note** If you log on to the Alibaba Cloud console by assuming a RAM role or using single sign-on (SSO), the maximum session duration is limited by the Logon Session Valid For parameter. For more information, see Assume a RAM role and SAML response for role-based SSO.

   - **Logon Address Mask**: specifies the IP addresses that can be used for password logon or SSO. By default, this parameter is unspecified, which indicates that logon from all IP addresses is allowed. If you use the password or SSO to log on to the Alibaba Cloud console, you can initiate access requests only from the IP addresses that are specified by the subnet masks. However, you can use AccessKey pairs to call API operations to access Alibaba Cloud resources from all IP addresses regardless of the subnet mask setting.

4. Click OK.

   **Note** The settings apply to all the RAM users of your Alibaba Cloud account.

Related information

- [SetSecurityPreference](#)
This topic describes how to create a RAM user. A RAM user is an entity that you create in RAM to represent a person or application. A RAM user can access Alibaba Cloud resources after the RAM user is granted the required permissions.

**Procedure**

1. Log on to the RAM console with an Alibaba Cloud account.
2. In the left-side navigation pane, click Users under Identities.
3. On the Users page, click Create User.

   ![Note](image)
   
   You can click Add User to create multiple RAM users at a time.

4. Set the Logon Name and Display Name parameters.
5. In the Access Mode section, select Console Password Logon or Programmatic Access.
   - **Console Password Logon**: If you select this access mode, you must complete the logon security settings. These settings specify whether to use a system-generated or custom logon password, whether the password must be reset on the next logon, and whether to enable multi-factor authentication (MFA).

   ![Note](image)
   
   If you select Custom Logon Password in the Console Password section, you must specify a password. The password must meet the strength requirements that you have specified on the Identities > Settings page. For more information, see Set a password policy for RAM users.

   - **Programmatic Access**: If you select this access mode, an AccessKey pair is automatically created for the RAM user. The RAM user can call API operations or use SDKs to access Alibaba Cloud resources.

     ![Note](image)
     
     To ensure the security of your Alibaba Cloud account, we recommend that you select only one access mode for the RAM user. This prevents the RAM user from using an AccessKey pair to access Alibaba Cloud resources after the RAM user leaves the organization.

6. Click OK.

**What's next**

- You can attach one or more policies to the RAM user. In this way, you grant the RAM user the access to the Alibaba Cloud resources that are specified in the policies. For more information, see Grant permissions to a RAM user.
- The RAM user can be used to log on to the console. For more information, see Log on to the console as a RAM user.
- You can add the RAM user to one or more RAM user groups and grant permissions to the RAM user groups. For more information, see Add a RAM user to a RAM user group.

**Related information**

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Quick Start · Create a RAM user

- CreateUser
4. **Create a RAM user group**

This topic describes how to create a RAM user group. If you have multiple RAM users under your Alibaba Cloud account, you can create RAM user groups to classify and authorize these RAM users. This simplifies the management of RAM users and permissions.

**Procedure**

1. Log on to the RAM console by using an Alibaba Cloud account.
2. In the left-side navigation pane, click Groups under Identities.
3. On the Groups page, click Create Group.
4. In the Create Group pane, specify the Group Name, Display Name, and Note parameters.
5. Click OK.

**What's next**

You can attach one or more permission policies to the RAM user group. For more information, see [Grant permissions to a RAM user group](#).

**Related information**

- [CreateGroup](#)
5. Create a custom policy

This topic describes how to create a custom policy. Custom policies provide finer-grained access control than system policies.

Prerequisites

You have a basic knowledge of the policy elements, structure, and syntax. For more information, see Policy structure and syntax.

Procedure

1. Log on to the RAM console with an Alibaba Cloud account.
2. In the left-side navigation pane, click Policies under Permissions.
3. On the Policies page, click Create Policy.
4. On the page that appears, set the Policy Name and Note parameters.
5. In the Configuration Mode section, select Visualized or Script.
   - If you select Visualized, click Add Statement. In the dialog box that appears, specify the permission effect, actions, and resources, and then click OK.
   - If you select Script, edit the policy in the Policy Document section. For more information, see Policy structure and syntax.
6. Click OK.

Related information

- CreatePolicy
6. Grant permissions to a RAM user

This topic describes how to grant permissions to a RAM user. A RAM user can access Alibaba Cloud resources after obtaining the relevant permissions.

Method 1

Grant permissions to a RAM user on the Users page.

1. Log on to the RAM console by using an Alibaba Cloud account.
2. In the left-side navigation pane, click Users under Identities.
3. In the User Logon Name/Display Name column, find the RAM user.
4. Click Add Permissions. On the page that appears, the Principal field is automatically filled in.
5. In the Policy Name column, select the policies that you want to attach to the RAM user.
   
   Note: You can click the cross sign (×) next to a policy in the Selected section to delete the policy.
6. Click OK.
7. Click Finished.

Method 2

Grant permissions to a RAM user on the Grants page.

1. Log on to the RAM console by using an Alibaba Cloud account.
2. In the left-side navigation pane, click Grants under Permissions.
3. Click Grant Permission.
4. In the Principal section, enter the name or ID of the RAM user, and then select the RAM user from the auto-complete results.
5. In the Policy Name column, select the policies that you want to attach to the RAM user.
   
   Note: You can click the cross sign (×) next to a policy in the Selected section to delete the policy.
6. Click OK.
7. Click Finished.

Related information

- AttachPolicyToUser
7. Log on to the console as a RAM user

This topic provides the logon URL of RAM users and describes how to log on to the RAM console as a RAM user.

Context

- For information about the default domain name, account alias, and domain alias, see Terms.
- After you log on to the RAM console by using an Alibaba Cloud account, you can view the default domain name and domain alias on the Identities > Settings > Advanced tab.

Procedure

1. Log on to the RAM console as a RAM user.

   Note To view the logon URL of RAM users, use your Alibaba Cloud account to log on to the RAM console. The logon URL is displayed on the Overview page.

2. Enter the logon name of the RAM user and click Next. Three types of logon name are available:
   - Logon name 1: default domain name. The format of the RAM user logon name is `<$username>@<$AccountAlias>.onaliyun.com`, for example, `username@company-alias.onaliyun.com`.

     Note The logon name of the RAM user is in the User Principal Name (UPN) format. All logon names that are listed in the RAM console follow this format. `<$username>` indicates the username of the RAM user. `<$AccountAlias>.onaliyun.com` indicates the default domain name.

   - Logon name 2: the enterprise alias. The format of the RAM user logon name is `<$username>@<$AccountAlias>`, for example, `username@company-alias`.

     Note `<$username>` indicates the username of the RAM user. `<$AccountAlias>` indicates the enterprise alias.

   - Logon name 3: the domain alias if configured. The format of the RAM user logon name is `<$username>@<$DomainAlias>`, for example, `username@example.com`.

     Note `<$username>` indicates the username of the RAM user and `<$DomainAlias>` indicates the domain alias.

3. Enter the logon password and click Log on.