

# Alibaba Cloud Resource Orchestration Service

## Common Tools

Issue: 20190806

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# Generic conventions

Table -1: Style conventions

Style	Description	Example
	This warning information indicates a situation that will cause major system changes, faults, physical injuries, and other adverse results.	 <b>Danger:</b> 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.	 <b>Warning:</b> 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.	 <b>Notice:</b> 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.	 <b>Note:</b> You can use Ctrl + A to select all files.
>	Multi-level menu cascade.	Settings > Network > Set network type
<b>Bold</b>	It is used for buttons, menus, page names, and other UI elements.	Click <b>OK</b> .
Courier font	It is used for commands.	Run the <code>cd / d C :/ windows</code> command to enter the Windows system folder.
<i>Italics</i>	It is used for parameters and variables.	<code>bae log list --instanceid <i>Instance_ID</i></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>



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# 1 Command line tools

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## 1.1 Quick installation

Resource Orchestration Service (ROS) allows you to create, view, update, and delete resource stacks by using Alibaba Cloud Command Line Interface (CLI).

### Overview

You can install Alibaba Cloud CLI by using the installation package or compiling the source code. This topic describes how to install Alibaba Cloud CLI by using the installation package. If you want to install Alibaba Cloud CLI by compiling the source code, see [../SP\\_525/DNICMS19101929/EN-US\\_TP\\_475354.dita#task\\_592879](https://help.aliyun.com/SP_525/DNICMS19101929/EN-US_TP_475354.dita#task_592879).

Alibaba Cloud CLI can be installed and used in the Windows, Linux, and macOS (x64) operating systems. You can see the reference document for each installation method listed in the following table, and follow the installation guide to install Alibaba Cloud CLI.

Installation method	Reference document
Use the installation package.	Refer to the installation procedure for your operating system in this topic. <ul style="list-style-type: none"><li>· Windows</li><li>· Linux</li><li>· macOS</li></ul>
Compile the source code.	<a href="https://help.aliyun.com/SP_525/DNICMS19101929/EN-US_TP_475354.dita#task_592879">../SP_525/DNICMS19101929/EN-US_TP_475354.dita#task_592879</a>

### Scenarios

- You cannot access the ROS console.
- You need to manage resource stacks by calling API operations, such as viewing and deleting resource stacks and viewing resource types.

### Download and install Alibaba Cloud CLI

You can install Alibaba Cloud CLI by using the installation package.

## Windows

- Download the aliyun-cli-windows-3.0.16-amd64.zip package from [Alibaba Cloud official website](#) or [GitHub](#).
- Decompress the aliyun-cli-windows-3.0.16-amd64.zip package to obtain the executable file aliyun.exe.
- Configure the Path environment variable. Add the path of the directory where the aliyun.exe file is stored to the Path environment variable.
  - Go to the Environment Variables dialog box, select the Path environment variable from user variables, and click Edit.
  - Enter the path of the directory where the aliyun.exe file is stored.
  - Click OK sequentially to apply the change.
  - Open the command-line interface and run the corresponding command to check whether the Path environment variable is configured.

CMD: [Try online](#)

```
set path
```

PowerShell: [Try online](#)

```
env : path
```

- Run the following command on the command-line interface to check whether Alibaba Cloud CLI is installed: [Try online](#)

```
aliyun version
```

If the current version number of Alibaba Cloud CLI similar to the following is displayed, Alibaba Cloud CLI is installed:

```
3 . 0 . 16
```

## Linux

- Download the aliyun-cli-linux-3.0.16-amd64.tgz package from [Alibaba Cloud official website](#) or [GitHub](#).
- Decompress the aliyun-cli-linux-3.0.16-amd64.tgz package to obtain the executable file aliyun.

```
cd $ HOME / aliyun
```

```
tar xzvf aliyun - cli - linux - 3 . 0 . 16 - amd64 . tgz
```

**Note:**

The preceding commands assume that the aliyun-cli-linux-3.0.16-amd64.tgz package is downloaded to the \$HOME/aliyun directory and decompress it in this directory.

- Copy the aliyun file to the /usr/local/bin directory. [Try online](#)

```
sudo cp aliyun /usr/local/bin
```

**Note:**

If you are the root user, remove sudo from the command.

## macOS

- Download the aliyun-cli-macosx-3.0.16-amd64.tgz package from [Alibaba Cloud official website](#) or [GitHub](#).
- Decompress the aliyun-cli-macosx-3.0.16-amd64.tgz package to obtain the executable file aliyun.

```
cd $HOME/aliyun
tar xzvf aliyun - cli - macosx - 3 . 0 . 16 - amd64 . tgz
```

**Note:**

The preceding commands assume that the aliyun-cli-macosx-3.0.16-amd64.tgz package is downloaded to the \$HOME/aliyun directory and decompress it in this directory.

- Copy the aliyun file to the /usr/local/bin directory. [Try online](#)

```
sudo cp aliyun /usr/local/bin
```

**Note:**

If you are the root user, remove sudo from the command.

## Configure Alibaba Cloud CLI

Before using Alibaba Cloud CLI, you must configure information required to call Alibaba Cloud resources, including the credential, region, and language.

## Credential type

To specify the credential type, you can add the `--mode <authenticationMethod>` option to the `configure` command in Alibaba Cloud CLI. Currently, four credential types are supported.

Credential type	Description	Interactive credential configuration (fast)	Non-interactive credential configuration
AK	Use the AccessKey ID and AccessKey Secret to authorize access.	<a href="#">Configure AccessKey credential</a>	<a href="#">Configure AccessKey credential</a>
StsToken	Use a Security Token Service (STS) token to authorize access.	<a href="#">Configure STS token credential</a>	<a href="#">Configure STS token credential</a>
RamRoleArn	Use the role of a Resource Access Management (RAM) user to authorize access.	<a href="#">Configure RamRoleArn credential</a>	<a href="#">Configure RamRoleArn credential</a>
EcsRamRole	Use the RAM role of an Elastic Compute Service (ECS) instance to authorize password-free access.	<a href="#">Configure EcsRamRole credential</a>	<a href="#">Configure EcsRamRole credential</a>



### Note:

In the four credential types, only `EcsRamRole` does not require the `AccessKey` information.

## Configure the credential

You can specify the credential type and configure the credential in Alibaba Cloud CLI in interactive or non-interactive mode. This topic describes how to configure the `AccessKey` credential in interactive mode. For more information about how to configure other credential types and the non-interactive configuration mode, see [Method of configuring credentials](#).

- **Interactive configuration (fast):** This mode is convenient and fast. You only need to enter required information as prompted.
- **Non-interactive configuration:** In this mode, you configure all required information in a single command, including the profile name, credential type, and authentication information of the credential.

### Interactive configuration introduction

Run the configure command to configure the credential. Use the following command syntax:

```
aliyun configure -- mode < AuthenticationMode > -- profile < profileName >
```

The parameters to be configured are described as follows:

- **--profile:** the profile name. If the specified profile exists, it is modified. If the specified profile does not exist, it is created.
- **--mode:** the credential type. Valid values: AK, StsToken, RamRoleArn, and EcsRamRole.

In interactive configuration mode, you are prompted to enter required information, including the AccessKey information and region ID.

- Enter correct AccessKey information. Otherwise, misoperation may occur or API operations fail to be called.



#### Note:

You can create and view your AccessKey on the [AccessKey page](#) in the Alibaba Cloud console, or contact your system administrator to obtain the AccessKey.

- For the region IDs supported by Alibaba Cloud, see [../SP\\_27/DNgameshield1843536/EN-US\\_TP\\_13778.dita#concept\\_h4v\\_j5k\\_xdb](#).

### Configure the AccessKey credential

In Alibaba Cloud CLI, the AccessKey credential type is named AK and is the default credential type. Therefore, you can omit the --mode option when configuring the AccessKey credential.

The following example shows how to configure the AccessKey credential with the profile named akProfile.

```
Configuring profile 'akProfile' in ' '
authentication mode ...
```

```
Access Key Id []: AccessKey ID
Access Key Secret []: AccessKey Secret
Default Region Id []: cn - hangzhou
Default Output Format [ json ]: json ( Only support json
))
Default Language [ zh | en ] en :
Saving profile [ akProfile ] ... Done .
```

## Configure the automatic completion feature

When using Alibaba Cloud CLI, you can enable or disable the automatic completion feature for the Z shell (Zsh) or Bash shell.

You can enable and disable the automatic completion feature by running the following commands. Currently, the automatic completion feature supports only the Zsh and Bash shell.

- Enable the automatic completion feature.

```
aliyun auto - completion
```

- Disable the automatic completion feature.

```
aliyun auto - completion -- uninstall
```