

# Koo Command Line Interface

## Getting Started

**Issue**            01  
**Date**             2022-01-14



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# Contents

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<b>1 General Process.....</b>	<b>1</b>
<b>2 Step 1: Make Preparations.....</b>	<b>3</b>
<b>3 Step 2: Install the CLI.....</b>	<b>5</b>
3.1 Overview.....	5
3.2 Installing KooCLI in Windows.....	6
3.3 Installing KooCLI in Linux.....	7
3.4 Installing KooCLI in macOS.....	8
3.5 Configuring and Using KooCLI in Docker.....	10
<b>4 Step 3: (Optional) Initialize Configurations.....</b>	<b>16</b>
<b>5 Step 4: View and Run Cloud Service Operation Commands.....</b>	<b>18</b>
<b>6 Modifying an Initialized Profile.....</b>	<b>22</b>

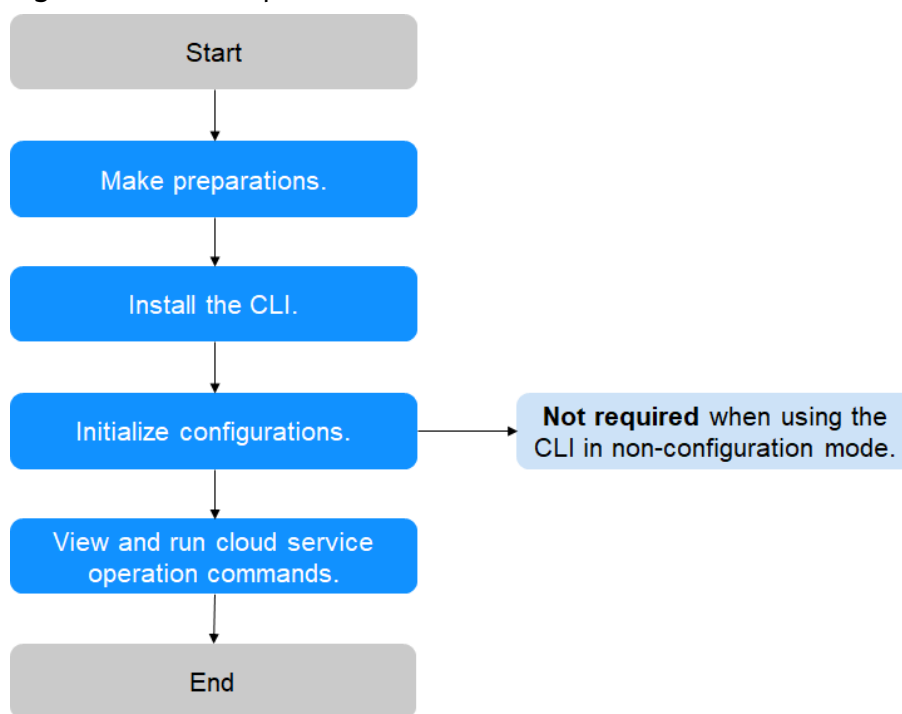
# 1 General Process

This section uses Windows as an example to describe how to use Koo Command Line Interface (KooCLI). The methods for using the CLI in Linux and macOS are similar.

The basic operations of KooCLI include installing the CLI, initializing configurations, and viewing and running cloud service operation commands.

**Figure 1-1** shows the general process of using KooCLI.

**Figure 1-1** General process



**Step 1** Register a HUAWEI ID. Create an Identity and Access Management (IAM) user and grant them permissions. Then obtain an access key. For details, see [Step 1: Make Preparations](#).

- Step 2** To use KooCLI to call open APIs in [API Explorer](#) for managing and using cloud resources, download KooCLI for the corresponding OS version. For details, see [3.1 Overview](#).
- Step 3** Your identity information is obtained for authentication when you use KooCLI. If you are not [using KooCLI in non-configuration mode](#), configure your authentication information. For details, see [4 Step 3: \(Optional\) Initialize Configurations](#).
- Step 4** Use KooCLI to manage and use your cloud service resources. For details, see [5 Step 4: View and Run Cloud Service Operation Commands](#).

----End

# 2 Step 1: Make Preparations

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Before using KooCLI, make the following preparations:

- [Registering a HUAWEI ID and Getting Authenticated](#)
- [Creating an IAM User and Granting Permissions](#)
- [Obtaining an Access Key \(AK/SK\)](#)

## Registering a HUAWEI ID and Getting Authenticated

If you already have a HUAWEI ID, skip this step. If you do not have one, proceed as follows:

- Step 1** Visit <https://www.huaweicloud.com/intl/en-us/> and click **Register** in the upper right corner.
- Step 2** Register a HUAWEI ID as prompted. For details, see [Registering a HUAWEI ID and Enabling Huawei Cloud Services](#). After the registration is complete, the account information page is displayed.
- Step 3** (Optional) If any cloud services require, authenticate your account. Complete [individual real-name authentication](#) or [enterprise real-name authentication](#).

----End

## Creating an IAM User and Granting Permissions

When you use KooCLI to manage and use your cloud resources, provide your IAM user identity information for authentication.

IAM users are created with a HUAWEI ID to use cloud services. Each IAM user has their own identity credentials and uses cloud resources based on assigned permissions. IAM users cannot make payments themselves. You can use your HUAWEI ID to pay their bills.

After you register with Huawei Cloud, an IAM user is automatically created for your HUAWEI ID. The user is marked "Enterprise administrator" in IAM and their permissions cannot be modified. If you need an IAM user with specific permissions, [create another user](#) and [grant the user the required permissions](#).

## Obtaining an Access Key (AK/SK)

When you use KooCLI to manage and use your cloud resources, provide your IAM user identity information for authentication. To complete the initial configuration, [understand access keys and obtain one](#).



# 3 Step 2: Install the CLI

## [3.1 Overview](#)

### [3.2 Installing KooCLI in Windows](#)

### [3.3 Installing KooCLI in Linux](#)

### [3.4 Installing KooCLI in macOS](#)

### [3.5 Configuring and Using KooCLI in Docker](#)

## 3.1 Overview

- Complete installation in different environments using the following methods:
  - [Installing KooCLI in Windows](#)
  - [Installing KooCLI in Linux](#)
  - [Installing KooCLI in macOS](#)
  - [Configuring and Using KooCLI in Docker](#)
- Alternatively, download KooCLI that matches your OS from [Table 3-1](#) to a local directory, upload the CLI to your target location, and decompress and use it.

**Table 3-1** Download addresses

OS	Download Link	Privacy Statement
Windows 64-bit	<a href="#">KooCLI-windows-amd64.zip</a> <a href="#">KooCLI-windows-amd64.zip_sha256</a>	See <a href="#">Privacy Statement</a> .
Linux AMD64	<a href="#">KooCLI-linux-amd64.tar.gz</a> <a href="#">KooCLI-linux-amd64.tar.gz_sha256</a>	
Linux Arm64	<a href="#">KooCLI-linux-arm64.tar.gz</a> <a href="#">KooCLI-linux-arm64.tar.gz_sha256</a>	

OS	Download Link	Privacy Statement
macOS AMD64	<a href="#">KooCLI-mac-amd64.tar.gz</a> <a href="#">KooCLI-mac-amd64.tar.gz_sha256</a>	
macOS Arm64	<a href="#">KooCLI-mac-arm64.tar.gz</a> <a href="#">KooCLI-mac-arm64.tar.gz_sha256</a>	

 **NOTE**

The download links of KooCLI do not contain **sha256**. Links that end with **sha256** are used to download software package verification files.

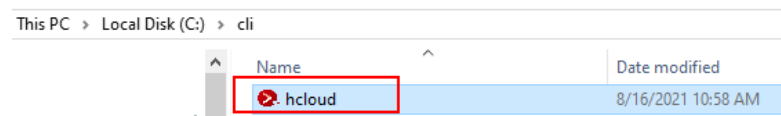
For example, the download link for Windows 64-bit is [KooCLI-windows-amd64.zip](#), and the verification file download link is [KooCLI-windows-amd64.zip\\_sha256](#).

## 3.2 Installing KooCLI in Windows

**Step 1** [Download](#) KooCLI for Windows.

**Step 2** Decompress the package to obtain the **hcloud.exe** file, as shown in [Figure 3-1](#).

**Figure 3-1** hcloud.exe file



**Step 3** (Optional) Add the directory where KooCLI is located to the system environment variable **Path** so that you can run **hcloud** commands in any directory of Command Prompt.

1. If you use Windows 10 or Windows 8, search for and select **View advanced system settings**, and click **Environment Variables**.  
If you use Windows 7, right-click the **Computer** icon on the desktop, and choose **Properties** from the shortcut menu. Click the **Advanced system settings** link, and click **Environment Variables**.
2. On the **Environment Variables** page, select **Path** in the user variable list, and click **Edit**.
3. On the **Edit environment variable** page, click **New** and enter the path of the **hcloud.exe** file.
4. Click **OK** on the three pages successively to save the change.
5. (Optional) Open the Command Prompt, and run the following command to check whether the environment variable contains the directory where the **hcloud.exe** file is located. If yes, the configuration is successful.  

```
set path
```

**Step 4** (Optional) If Step 3 is not performed, go to the directory where KooCLI is located, open the Command Prompt of Windows, and run the following command to check whether the CLI is installed successfully:

```
hcloud version
```

If version information similar to the following is displayed, the installation is successful:

```
hcloud version
Current KooCLI version: 3.2.8
```

----End

## 3.3 Installing KooCLI in Linux

KooCLI can be run on Linux AMD64 or Linux Arm64. You can install the CLI with one click or in several steps. If you choose step-by-step installation, use the installation command that matches your OS. Run the following command to query the OS used by your host:

```
echo $HOSTTYPE
```

If the command output is **x86\_64**, use the download command for AMD64. If the command output is **aarch64**, use the download command for Arm64.

### One-Click Installation

Run the following command to install KooCLI:

```
curl -sSL https://ap-southeast-3-hwcloudcli.obs.ap-southeast-3.myhuaweicloud.com/cli/latest/hcloud_install.sh -o ./hcloud_install.sh && bash ./hcloud_install.sh
```

By default, the KooCLI file is downloaded to the **/usr/local/hcloud/** directory and then moved to the **/usr/local/bin/** directory. You can run **hcloud** commands in any directory. (Ensure that the value of the system variable **PATH** contains **/usr/local/bin**.)

You can modify the file download directory based on the interaction information during command execution. If you do not have sufficient permissions, switch to user **root** and run the installation command again.

To use the default configuration and skip the interaction, add **-y** to the end of the command as follows:

```
curl -sSL https://ap-southeast-3-hwcloudcli.obs.ap-southeast-3.myhuaweicloud.com/cli/latest/hcloud_install.sh -o ./hcloud_install.sh && bash ./hcloud_install.sh -y
```

#### NOTE

**hcloud\_install.sh** is the script file for installing KooCLI in one click. The corresponding software package verification file is [hcloud\\_install.sh.sha256](#).

### Step-by-Step Installation

Perform the following steps:

**Step 1** Run one of the following commands to download KooCLI:

- **curl** commands

- Download command for AMD64

```
curl -LO "https://ap-southeast-3-hwcloudcli.obs.ap-southeast-3.myhuaweicloud.com/cli/latest/huaweicloud-cli-linux-amd64.tar.gz"
```

- Download command for Arm64

```
curl -LO "https://ap-southeast-3-hwcloudcli.obs.ap-southeast-3.myhuaweicloud.com/cli/latest/huaweicloud-cli-linux-arm64.tar.gz"
```

- **wget** commands
  - Download command for AMD64  

```
wget "https://ap-southeast-3-hwcloudcli.obs.ap-southeast-3.myhuaweicloud.com/cli/latest/huaweicloud-cli-linux-amd64.tar.gz" -O huaweicloud-cli-linux-amd64.tar.gz
```
  - Download command for Arm64  

```
wget "https://ap-southeast-3-hwcloudcli.obs.ap-southeast-3.myhuaweicloud.com/cli/latest/huaweicloud-cli-linux-arm64.tar.gz" -O huaweicloud-cli-linux-arm64.tar.gz
```

**Step 2** Decompress the tool package.

- Decompression command for AMD64  

```
tar -zxvf huaweicloud-cli-linux-amd64.tar.gz
```
- Decompression command for Arm64  

```
tar -zxvf huaweicloud-cli-linux-arm64.tar.gz
```

**Step 3** (Optional) Move KooCLI to **/usr/local/bin** so that you can run **hcloud** commands in any directory. Ensure that **/usr/local/bin** exists in the value of the system variable **PATH**.

```
mv $(pwd)/hcloud /usr/local/bin/
```

**Step 4** (Optional) Run the following command to turn on autocomplete:

```
hcloud auto-complete on
```

If the following information is displayed, autocomplete is turned on. If the configuration does not take effect, run the **bash** command as prompted.

```
hcloud auto-complete on  
Autocomplete (bash only) turned on. If it does not work, run the `bash` command.
```

**Step 5** (Optional) Run the following command to check whether the installation is successful:

```
hcloud version
```

If version information similar to the following is displayed, the installation is successful:

```
hcloud version  
Current KooCLI version: 3.2.8
```

----End

## 3.4 Installing KooCLI in macOS

KooCLI can be run on macOS AMD64 or macOS Arm64. You can install the CLI with one click or in several steps. If you choose step-by-step installation, use the installation command that matches your OS. Run the following command to query the OS used by your host:

```
echo $HOSTTYPE
```

If the command output is **x86\_64**, use the download command for AMD64. If the command output is empty, run the following command to check the OS used by your host:

```
uname -a
```

If the command output ends with **x86\_64**, use the download command for AMD64. If the command output ends with **arm64**, use the download command for Arm64.

## One-Click Installation

Run the following command to install KooCLI:

```
curl -sSL https://ap-southeast-3-hwcloudcli.obs.ap-southeast-3.myhuaweicloud.com/cli/latest/hcloud_install.sh -o ./hcloud_install.sh && bash ./hcloud_install.sh
```

By default, the KooCLI file is downloaded to the **/usr/local/hcloud/** directory and then moved to the **/usr/local/bin/** directory. You can run **hcloud** commands in any directory. (Ensure that the value of the system variable **PATH** contains **/usr/local/bin/**.)

You can modify the file download directory based on the interaction information during command execution. If you do not have sufficient permissions, switch to user **root** and run the installation command again.

To use the default configuration and skip the interaction, add **-y** to the end of the command as follows:

```
curl -sSL https://ap-southeast-3-hwcloudcli.obs.ap-southeast-3.myhuaweicloud.com/cli/latest/hcloud_install.sh -o ./hcloud_install.sh && bash ./hcloud_install.sh -y
```

### NOTE

**hcloud\_install.sh** is the script file for installing KooCLI in one click. The corresponding software package verification file is [hcloud\\_install.sh.sha256](#).

---

### CAUTION

If the error message "sha256sum: command not found" is displayed during command execution, install sha256sum and try again.

---

## Step-by-Step Installation

Perform the following steps:

**Step 1** Run one of the following commands to download KooCLI:

- **curl** commands
  - Download command for AMD64  

```
curl -LO "https://ap-southeast-3-hwcloudcli.obs.ap-southeast-3.myhuaweicloud.com/cli/latest/huaweicloud-cli-mac-amd64.tar.gz"
```
  - Download command for Arm64  

```
curl -LO "https://ap-southeast-3-hwcloudcli.obs.ap-southeast-3.myhuaweicloud.com/cli/latest/huaweicloud-cli-mac-arm64.tar.gz"
```
- **wget** commands
  - Download command for AMD64  

```
wget "https://ap-southeast-3-hwcloudcli.obs.ap-southeast-3.myhuaweicloud.com/cli/latest/huaweicloud-cli-mac-amd64.tar.gz" -O huaweicloud-cli-mac-amd64.tar.gz
```
  - Download command for Arm64  

```
wget "https://ap-southeast-3-hwcloudcli.obs.ap-southeast-3.myhuaweicloud.com/cli/latest/huaweicloud-cli-mac-arm64.tar.gz" -O huaweicloud-cli-mac-arm64.tar.gz
```

**Step 2** Decompress the tool package.

- Decompression command for AMD64  

```
tar -zxvf huaweicloud-cli-mac-amd64.tar.gz
```
- Decompression command for Arm64

```
tar -zxvf huaweicloud-cli-mac-arm64.tar.gz
```

**Step 3** (Optional) Move KooCLI to `/usr/local/bin` so that you can run **hcloud** commands in any directory. Ensure that `/usr/local/bin` exists in the value of the system variable **PATH**.

```
mv $(pwd)/hcloud /usr/local/bin/
```

**Step 4** (Optional) Run the following command to turn on autocomplete:

```
hcloud auto-complete on
```

If the following information is displayed, autocomplete is turned on. If the configuration does not take effect, run the **bash** command as prompted.

```
hcloud auto-complete on
```

```
Autocomplete (bash only) turned on. If it does not work, run the `bash` command.
```

**Step 5** (Optional) Run the following command to check whether the installation is successful:

```
hcloud version
```

If version information similar to the following is displayed, the installation is successful:

```
hcloud version
```

```
Current KooCLI version: 3.2.8
```

----End

## 3.5 Configuring and Using KooCLI in Docker

Configure and use KooCLI in Docker by performing the following steps. This procedure uses a Docker container running Ubuntu Linux as an example.

Before performing the following steps, ensure that you have installed Docker. For details about how to install Docker, visit the [Docker website](#). To check whether Docker has been installed, run the following command:

```
docker --version
```

```
[root@hdn /]# docker --version
Docker version 20.10.10, build b485636
```

**Step 1** Create a Dockerfile.

Create a directory and create a text file named **Dockerfile** in the directory. The file content is as follows:

```
FROM ubuntu:latest
RUN apt-get update -y && apt-get install curl -y
# Install KooCLI with one click.
RUN curl -sSL https://ap-southeast-3-hwcloudcli.obs.ap-southeast-3.myhuaweicloud.com/cli/latest/hcloud_install.sh -o ./hcloud_install.sh && bash ./hcloud_install.sh -y
WORKDIR hcloud
```

### NOTE

The name of the Dockerfile contains an uppercase letter D and does not have an extension. Only one Docker file can be saved in each directory.

**hcloud\_install.sh** is the script file for installing KooCLI in one click. The corresponding software package verification file is [hcloud\\_install.sh.sha256](#).

Add the following content to the preceding Dockerfile to specify KooCLI as the program to run when the container is started:

```
ENTRYPOINT ["/usr/local/bin/hcloud"]
```

The container started by the Docker image built using this file (see [Method 2](#)) supports only a single KooCLI command.

## Step 2 Build an image.

Run the following command in the directory to create a Docker image named **hcloudcli**:

```
docker build --no-cache -t hcloudcli .
```

```
[root@hcn cli]# docker build --no-cache -t hcloudcli .
Sending build context to Docker daemon 8.192kB
Step 1/4 : FROM ubuntu:latest
--> d13c942271d6
Step 2/4 : RUN apt-get update -y && apt-get install curl -y
--> Running in 9749e0528633
Get:1 http://security.ubuntu.com/ubuntu focal-security InRelease [114 kB]
Get:2 http://archive.ubuntu.com/ubuntu focal InRelease [265 kB]
Get:3 http://security.ubuntu.com/ubuntu focal-security/restricted amd64 Packages [1937 kB]
```

...

```
Step 3/4 : RUN curl -sSL https://ap-southeast-3-hwcloudcli.obs.ap-southeast-3.myhuaweicloud.com/cli/latest/hcloud_install.sh -o ./hcloud_install.sh && bash hcloud_install.sh -y
--> Running in a4c3f498dfe8
  % Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
                                 Dload  Upload   Total   Spent    Left   Speed
 100 4897k  100 4897k    0     0  3045k      0  0:00:01  0:00:01 --:--:-- 3043k
  % Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
                                 Dload  Upload   Total   Spent    Left   Speed
 100  101  100  101    0     0    301      0  --:--:--  --:--:--  --:--:--   301
hcloud
README.md
OpenSourceSoftwareNotice.md
KooCLI installed.
Removing intermediate container a4c3f498dfe8
--> e60e886d2358
Step 4/4 : WORKDIR hcloud
--> Running in 905c9ee2d66c
Removing intermediate container 905c9ee2d66c
--> 6b099e44355d
Successfully built 6b099e44355d
Successfully tagged hcloudcli:latest
```

### NOTE

The period (.) at the end of the command cannot be omitted. It indicates that the Docker image is built in the current directory.

After you add **ENTRYPOINT ["/usr/local/bin/hcloud"]** to the Dockerfile, the following information is displayed when you build an image:

```
Step 3/5 : RUN curl -sSL https://ap-southeast-3-hwcloudcli.obs.ap-southeast-3.myhuaweicloud.com/cli/latest/hcloud_install.sh -o ./hcloud_install.sh && bash hcloud_install.sh -y
--> Running in 89ce5416f305
  % Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
                                 Dload  Upload   Total   Spent    Left   Speed
 100 4897k  100 4897k    0     0  2144k      0  0:00:02  0:00:02 --:--:-- 2144k
  % Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
                                 Dload  Upload   Total   Spent    Left   Speed
 100  101  100  101    0     0    243      0  --:--:--  --:--:--  --:--:--   243
hcloud
README.md
OpenSourceSoftwareNotice.md
KooCLI installed.
Removing intermediate container 89ce5416f305
--> 50324899a238
Step 4/5 : WORKDIR hcloud
--> Running in 20703f68a67c
Removing intermediate container 20703f68a67c
--> 8345c312efcd
Step 5/5 : ENTRYPOINT ["/usr/local/bin/hcloud"]
--> Running in 06540ac3b81e
Removing intermediate container 06540ac3b81e
--> 0d0ca7c20ba5
Successfully built 0d0ca7c20ba5
Successfully tagged hcloudcli:latest
```

After the image is built successfully, run the following command to view the image:

```
docker images
```

```
[root@hdn cli]# docker images
REPOSITORY          TAG             IMAGE ID         CREATED          SIZE
hcloudcli           latest         59adf2d4c395    2 minutes ago   130MB
```

### Step 3 Use the image.

- Method 1: Create a background container using the **hcloudcli** image and run commands in the container.

```
docker run -it -d --name hcloudcli hcloudcli
```

```
[root@hdn cli]# docker run -it -d --name hcloudcli hcloudcli
5afee3c20152245bfdc133a78f6b483cd9c57b5b4f0960ba96fd846bcf2876d6
```

Run the following command to view the started Docker container:

```
docker ps
```

```
[root@hdn cli]# docker ps
CONTAINER ID   IMAGE     COMMAND   CREATED   STATUS    PORTS   NAMES
5afee3c20152   hcloudcli "bash"    11 seconds ago   Up 10 seconds   hcloudcli
```

Run the following command to enter the Docker container. Then you can use KooCLI in the same way as you use it on the host.

```
docker exec -it hcloudcli /bin/bash
```

```
[root@hdn cli]# docker exec -it hcloudcli /bin/bash
root@5049ae352e6d:/hcloud# hcloud version
KooCLI will connect to the Internet through HTTPS to invoke cloud services and implement cloud resource management. Gateways and services record user access logs. Collect, store, and destroy the data in compliance with Privacy Statement (address: https://www.huaweicloud.com/intl/en-us/declaration/sa_prp.html).
Agree and continue using (y)/Disagree and exit (N): y
Current KooCLI version: 3.4.12
root@5049ae352e6d:/hcloud# hcloud --help
KooCLI Version 3.4.12 Copyright(C) 2020-2022 www.huaweicloud.com

Usage:
  hcloud [options] <service> <operation> [--param1=paramValue1 --param2=paramValue2 ...]

Sample:
  hcloud ECS NovaListServers --cli-region=xxx

Options:
  --help                Display help information.
  --debug               Print debugging information.
  --dryrun              Print the request message after verification, without execution.
  --interactive         Enter interactive mode.
  --cli-region          Region.
  --cli-endpoint        Custom Request Domain Name.
  --cli-access-key      Access key ID required for the AK/SK mode. Configure it by running 'hcloud configure secret-access-key'.
  --cli-secret-key      Secret access key required for the AK/SK mode. Configure it by running 'hcloud configure secret-access-key'.
```

Run the following command to exit the **hcloudcli** container:

```
exit
```

To stop the **hcloudcli** container, run the following command:

```
docker stop hcloudcli
```

- Method 2: Create a temporary container using the **hcloudcli** image:
  - a. Run the following command to create a temporary container:
 

```
docker run --rm -it hcloudcli ${command}
```

    - If the Docker image is created using a Dockerfile that does not contain **ENTRYPOINT** ["/usr/local/bin/hcloud"], specify **hcloud** as the program to run in the **docker run** command, as shown in the following figure.



```
[root@hdn cli]# docker run --rm -it hcloudcli hcloud version
KooCLI will connect to the Internet through HTTPS to invoke cloud services and implement cloud resource management. Gateways and services record user access logs. Collect, store, and destroy the data in compliance with Privacy Statement (address: https://www.huaweicloud.com/intl/en-us/declaration/sa_prp.html).
Agree and continue using (y)/Disagree and exit (N): y
Current KooCLI version: 3.4.12
[root@hdn cli]# docker run --rm -it hcloudcli hcloud --help
KooCLI will connect to the Internet through HTTPS to invoke cloud services and implement cloud resource management. Gateways and services record user access logs. Collect, store, and destroy the data in compliance with Privacy Statement (address: https://www.huaweicloud.com/intl/en-us/declaration/sa_prp.html).
Agree and continue using (y)/Disagree and exit (N): y
KooCLI Version 3.4.12 Copyright(C) 2020-2022 www.huaweicloud.com

Usage:
  hcloud [options] <service> <operation> [--param1=paramValue1 --param2=paramValue2 ...]

Sample:
  hcloud ECS NovaListServers --cli-region=xxx

Options:
  --help            Display help information.
  --debug          Print debugging information.
  --dryrun         Print the request message after verification, without execution.
  --interactive    Enter interactive mode.
  --cli-region     Region.
  --cli-endpoint   Custom Request Domain Name.
```

- If the Docker image is created using a Dockerfile that contains **ENTRYPOINT ["/usr/local/bin/hcloud"]**, you do not need to specify a program to run. In this case, running the **docker run --rm -it hcloudcli** command is equivalent to running the **hcloud** command on the host, as shown in the following figure.

```
[root@hdn cli]# docker run --rm -it hcloudcli version
KooCLI will connect to the Internet through HTTPS to invoke cloud services and implement cloud resource management. Gateways and services record user access logs. Collect, store, and destroy the data in compliance with Privacy Statement (address: https://www.huaweicloud.com/intl/en-us/declaration/sa_prp.html).
Agree and continue using (y)/Disagree and exit (N): y
Current KooCLI version: 3.4.12
[root@hdn cli]# docker run --rm -it hcloudcli --help
KooCLI will connect to the Internet through HTTPS to invoke cloud services and implement cloud resource management. Gateways and services record user access logs. Collect, store, and destroy the data in compliance with Privacy Statement (address: https://www.huaweicloud.com/intl/en-us/declaration/sa_prp.html).
Agree and continue using (y)/Disagree and exit (N): y
KooCLI Version 3.4.12 Copyright(C) 2020-2022 www.huaweicloud.com

Usage:
  hcloud [options] <service> <operation> [--param1=paramValue1 --param2=paramValue2 ...]

Sample:
  hcloud ECS NovaListServers --cli-region=xxx

Options:
  --help            Display help information.
  --debug          Print debugging information.
  --dryrun         Print the request message after verification, without execution.
  --interactive    Enter interactive mode.
  --cli-region     Region.
  --cli-endpoint   Custom Request Domain Name.
```

#### NOTE

If the Docker image is created using a Dockerfile that contains **ENTRYPOINT ["/usr/local/bin/hcloud"]**, **docker run** only supports KooCLI commands.

- b. Create a temporary container and share files of a host (for example, a host running Linux) with the container.

Mount a host directory to a container directory to share files of the host with the container.

Example 1: Mount the **/root/.hcloud/** directory of the host to the **/root/.hcloud/** directory of the container to share the host configuration file with the container.

```
docker run --rm -it -v /root/.hcloud:/root/.hcloud/ hcloudcli ${command}
```

```
[root@hdn cli]# docker run --rm -it hcloudcli configure list
[USE_ERROR]No configuration file exists. Run `hcloud configure init` to initialize configuration
s.
[root@hdn cli]# docker run --rm -it -v /root/.hcloud:/root/.hcloud/ hcloudcli configure list
{
  "language": "cn",
  "offline": "true",
  "agreePrivacy": "true",
  "current": "default",
  "profiles": [
    {
      "name": "default",
      "mode": "AKSK",
      "accessKeyId": "HGP****RHF",
      "secretAccessKey": "****",
      "securityToken": "",
      "xAuthToken": "",
      "expiresAt": "",
      "region": "",
      "projectId": "",
      "domainId": "",
      "skipSecureVerify": "true",
      "readTimeout": 30,
      "connectTimeout": 30,
      "retryCount": 0,
      "agencyDomainId": ""
    }
  ]
}
```

Example 2: Mount the `/cli` directory of the host to the current directory of the container to share the `test.json` file of the host with the container.

`docker run --rm -it -v /root/.hcloud:/root/.hcloud/ -v /cli:$(pwd) hcloudcli ${command}`

```
[root@hdn cli]# docker run --rm -it -v /root/.hcloud:/root/.hcloud/ hcloudcli IAM keystoneShowProject --cli-jsonInput=/cli/test.json
API parameters transferred for the path, query, body, formData, header, and cookies in cli-jsonInput take precedence over command transfers.
[USE_ERROR]Failed to read the target file. Enter the full file path in the cli-jsonInput parameter, or move the file to the current directory.
[root@hdn cli]# docker run --rm -it -v /root/.hcloud:/root/.hcloud/ -v /cli:$(pwd) hcloudcli IAM keystoneShowProject --cli-jsonInput=/cli/test.json
API parameters transferred for the path, query, body, formData, header, and cookies in cli-jsonInput take precedence over command transfers.
{
  "project": {
    "domain_id": "08d0xxxxxxxxxxxxxxxxxxxxxxxx440",
    "is_domain": false,
    "parent_id": "08d0xxxxxxxxxxxxxxxxxxxxxxxx440",
    "name": "cn-north-4",
    "description": "",
    "links": {
      "next": null,
      "previous": null,
      "self": "https://iam.ap-southeast-3.myhuaweicloud.com/v3/projects/08d0xxxxxxxxxxxxxxxxxxxxxxxx440"
    },
    "id": "08d0xxxxxxxxxxxxxxxxxxxxxxxx440",
    "enabled": true
  }
}
```

- c. Create a temporary container and share an environment variable of a host (for example, a host running Linux) with the container.  
Use `-e` to mark the environment variable to be shared with the container.

`docker run --rm -it -e ${envName} hcloudcli ${command}`

**NOTE**

Set an alias for the command (a host running Linux is used as an example). For example, a Docker image has been created using a Dockerfile that contains `ENTRYPOINT ["/usr/local/bin/hcloud"]`. Run the following command to set the alias `hcloud` for the original command:

`alias hcloud='docker run --rm -it hcloudcli'`

Then you can run the original command using the alias. See the following figure.

```
[root@hdn cli]# hcloud meta clear
KooCLI will connect to the Internet through HTTPS to invoke cloud services and implement cloud resource management. Gateways and services record user access logs. Collect, store, and destroy the data in compliance with Privacy Statement (address: https://www.huaweicloud.com/intl/en-us/declaration/sa_prp.html).
Agree and continue using (y)/Disagree and exit (N): y
Cache cleared.
[root@hdn cli]#
```

**Step 4** Update the image.

The KooCLI version in the image is the latest version when the image is created. To ensure that the image uses the latest version, **rebuild the image**.

**Step 5** Remove the image.

Run the following command to remove the **hcloudcli** image:

```
docker rmi hcloudcli
```

```
[root@hdn cli]# docker images
REPOSITORY    TAG       IMAGE ID       CREATED        SIZE
hcloudcli     latest   aa2535965025  2 hours ago   130MB
ubuntu        latest   ba6accedd29   4 weeks ago   72.8MB
[root@hdn cli]# docker rmi hcloudcli
Untagged: hcloudcli:latest
Deleted: sha256:aa25359650252ad04de4329fef7d45b5b5870012c9b372a17231a11daecea1e0
Deleted: sha256:5db0651d1fcafc22a13b322a9218e513c560fb0559851837bcb63e27dfcab9d1
Deleted: sha256:acc85d96f8d28bfcd6f419893b6a9e625814af417409e375a96b114b3b72a331
Deleted: sha256:f58d614fb28ce24e72c5a9a98020be68416df0154023e7cbd2ffc9d7157dfcf
Deleted: sha256:1931dfc860bd576bf92acdc0a8f9f72e11f352a58580ca5118948bd59214ec50
Deleted: sha256:9dc6f32f5e7464f97e5caec52b30e6f6010528433d8bfff32b35311b2663b1817
Deleted: sha256:8d2f2fb21519eab73efcea8eeaf81f540b734622d2ea16b8305b42ba29a7d73c
[root@hdn cli]# docker images
REPOSITORY    TAG       IMAGE ID       CREATED        SIZE
ubuntu        latest   ba6accedd29   4 weeks ago   72.8MB
```

----End

# 4 Step 3: (Optional) Initialize Configurations

This section uses Windows as an example to describe how to use KooCLI. The methods for using the CLI in Linux and macOS are similar.

If you want to [use KooCLI in non-configuration mode](#), skip this step. To add a profile in non-interactive mode, see [Adding or Modifying a Profile](#).

The KooCLI initialization command is used to store the **permanent** AK/SK and region information you often use (see the following table) in the configuration file, eliminating the need for frequently entering the information during operations.

**Table 4-1** Initialized parameters

Parameter	Description
Access Key ID	(Required) Access key ID (AK) of the access key (permanent AK/SK).
Secret Access Key	(Required) Secret access key (SK) of the access key (permanent AK/SK).
Region	(Optional) Region, for example, <b>ap-southeast-1</b> .

After typing in this command, press **Enter** to go to the interactive mode, and set the parameters as prompted.

### hcloud configure init

```
hcloud configure init
Starting initialization. 'Secret Access Key' is anonymized. To obtain the parameter, see 'https://
support.huaweicloud.com/intl/en-us/usermanual-hcli/hcli_09.html'.
Access Key ID [required]: *****
Secret Access Key [required]: ****
Secret Access Key (again): ****
Region: ap-southeast-1

*****
****                               ****
```

```
***** Initialization successful *****  
*****  
*****
```

 **NOTE**

- During initialization, you need to enter an SK for **Secret Access Key** twice. The value you enter is anonymized to ensure account security. The entered characters are displayed as asterisks (\*) after you press **Enter**. After the configuration is complete, KooCLI **encrypts** sensitive authentication information in the profiles and **saves** the information to a local directory.
- If you run the initialization command again, the existing configuration file is deleted and a new file is generated. The path for storing the new configuration file is as follows:
  - Windows OS: **C:\Users\{Your Windows username}\.hcloud\config.json**
  - Linux OS: **/home/{Current username}\.hcloud/config.json**
  - macOS: **~/Users/{Current username}\.hcloud/config.json**

After initialization, you can run the following command to query the configuration information. KooCLI versions earlier than 1.2.7 display sensitive information of query results in **ciphertext**. KooCLI 1.2.7 and later versions **anonymize** the sensitive information.

**hcloud configure show --cli-profile=default**

```
hcloud configure show --cli-profile=default  
{  
  "name": "default",  
  "mode": "AKSK",  
  "accessKeyId": "*****",  
  "secretAccessKey": "*****",  
  "securityToken": "",  
  "region": "ap-southeast-1",  
  "projectId": "",  
  "domainId": "",  
  "skipSecureVerify": "false",  
  "readTimeout": 10,  
  "connectTimeout": 5,  
  "retryCount": 0  
}
```

# 5 Step 4: View and Run Cloud Service Operation Commands

This section uses Windows as an example to describe how to use KooCLI. The methods for using the CLI in Linux and macOS are similar.

After the initialization is complete, you can query the cloud services supported by KooCLI and run operation commands. The following uses the Elastic Cloud Server (ECS) API for querying ECS details as an example to describe how to query and run a command.

**Step 1** Query the operations of a cloud service.

**hcloud <service> --help**

As shown below, **Available Operations** lists the operations supported by ECS.

```
hcloud ECS --help

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Usage:
  hcloud ECS <operation> --param1=value1 --param2=value2 ...

Service:
  ECS

Available Operations:
  AddServerGroupMember      MigrateServer      NovaShowServerAction
  AssociateServerVirtualIp  NovaAssociateSecurityGroup  NovaShowServerGroup
  AttachServerVolume        NovaAttachInterface  NovaShowServerInterface
  BatchAddServerNics        NovaAttachVolume    NovaShowServerMetadata
  ...
```

## NOTE

- **During command execution, your authentication information will be used for requests, and the invocation of some APIs will incur charges.**
- Alternatively, you can query the operations supported by a cloud service on [API Explorer](#).
- To query the cloud services supported by KooCLI, run the **hcloud --help** command.

**NOTICE**

If your KooCLI uses the **offline mode**, it automatically downloads the **offline metadata package** when executing commands for the first time. Once downloaded, the package will not be automatically updated. To invoke newly launched services in the offline mode, run the **hcloud meta download** command to update the offline metadata package, or run the **hcloud configure set --cli-offline=false** command to switch to the **online mode**.

**Step 2** Query the help information about an operation.

**hcloud <service> <operation> --help**

Select **NovaShowServer** from the obtained ECS operation list to query the help information about the API. The API description, parameters, and parameter descriptions are displayed.

```
hcloud ECS NovaShowServer --help

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Service:
  ECS

Description:
  This API is used to query details about an ECS by ECS ID.

Method:
  GET

Params:
  --cli-region
    required string Region where the API can be called. If no region is specified in the command, cli-region
    in the current profile is used.
  --project_id
    required string path Specifies the project ID. If no project ID is specified in the command, either the
    parent project ID of the specified region in the authentication information or cli-project-id in the current
    profile is used.
  --server_id
    required string path Specifies the ECS ID.
  --OpenStack-API-Version
    optional string header API with a microversion.
```

**Step 3** Run the command to call the API and obtain the execution result.

**hcloud <service> <operation> [--param1=paramValue1 --param2=paramValue2 ...]**

After you enter **cli-region** (region), **project\_id** (project ID), and **server\_id** (ECS ID) and press **Enter**, the ECS information is returned.

```
hcloud ECS NovaShowServer --cli-region="ap-southeast-1" --project_id="0dd8cb*****19b5a84546" --
server_id="4f06****_****_****_****_****04dd856a"
{
  "server": {
    "tenant_id": "0dd8cb*****19b5a84546",
    "metadata": {},
    "addresses": {
      "c865****_****_****_****_****efe7e8d8": [
        {
          "OS-EXT-IPS-MAC:mac_addr": "fa:*.**.*.**,
          "OS-EXT-IPS:type": "fixed",
          "addr": "192.*.*.*",
          "version": 4
        }
      ]
    }
  }
}
```

```
}
]
},
"OS-EXT-STS:task_state": null,
"OS-DCF:diskConfig": "AUTO",
"OS-EXT-AZ:availability_zone": "ap-southeast-1a",
"links": [
  {
    "rel": "self",
    "href": "https://ecs.ap-southeast-1.myhuaweicloud.com/v2.1/0dd8cb*****19b5a84546/servers/4f06****_****_****_****_****04dd856a"
  },
  {
    "rel": "bookmark",
    "href": "https://ecs.ap-southeast-1.myhuaweicloud.com/0dd8cb*****19b5a84546/servers/4f06****_****_****_****_****04dd856a"
  }
],
"OS-EXT-STS:power_state": 4,
"id": "4f06****_****_****_****_****04dd856a",
"os-extended-volumes:volumes_attached": [
  {
    "id": "aed9****_****_****_****_****0e3219cf"
  }
],
"OS-EXT-SRV-ATTR:host": "51f41ce46*****38b69b7aa4ea2a8",
"image": {
  "links": [
    {
      "rel": "bookmark",
      "href": "https://ecs.ap-southeast-1.myhuaweicloud.com/0dd8cb*****19b5a84546/images/67f4****_****_****_****_****38539e09"
    }
  ],
  "id": "67f4****_****_****_****_****38539e09"
},
"OS-SRV-USG:terminated_at": null,
"accessIPv4": "",
"accessIPv6": "",
"created": "2022-05-10T12:56:36Z",
"hostId": "51f41ce46*****38b69b7aa4ea2a8",
"OS-EXT-SRV-ATTR:hypervisor_hostname": "cf199aaba*****bed586126e6f57",
"flavor": {
  "links": [
    {
      "rel": "bookmark",
      "href": "https://ecs.ap-southeast-1.myhuaweicloud.com/0dd8cb*****19b5a84546/flavors/s6.medium.2"
    }
  ],
  "id": "s6.medium.2"
},
"key_name": null,
"security_groups": [
  {
    "name": "Sys-*****"
  }
],
"OS-EXT-STS:vm_state": "stopped",
"user_id": "b4d561*****346deaf79e",
"OS-EXT-SRV-ATTR:instance_name": "instance-*****",
"name": "ecs-*****",
"OS-SRV-USG:launched_at": "2022-05-10T12:56:53.000000",
"updated": "2022-05-13T08:05:17Z",
"status": "SHUTOFF"
}
}
```



 NOTE

- When using KooCLI to call APIs, you can [obtain example CLI commands on API Explorer](#).
- KooCLI automatically obtains the account ID and project ID of an IAM user based on the user authentication information during API calling. The user does not need to specify **cli-region** in the command if it has already been specified in the configuration information.

- If a parameter value in the command is incorrect, an error message is displayed as follows:

```
hcloud ECS ShowServer --project_id="0dd8cb*****19b5a84546" --cli-region="ap-southeast-1" --server_id="abc"
```

```
{  
  "error": {  
    "message": "Instance[abc] could not be found.",  
    "code": "Ecs.0114"  
  }  
}
```

For details, go to the API Error Center at '<https://console-intl.huaweicloud.com/apiexplorer/#/errorcenter?keyword=Ecs.0114&product=ECS>'.

----End

# 6 Modifying an Initialized Profile

---

KooCLI supports the following authentication parameters in profiles: [access key \(permanent AK/SK\)](#) and [temporary security credentials \(temporary AK/SK and SecurityToken\)](#).

Temporary security credentials (temporary AK/SK and SecurityToken) have limited validity.

During initialization, the profile name is **default**, and only a pair of permanent AK/SK can be configured. To use another authentication mode or modify parameters in the initialized profile, run the **hcloud configure set --cli-profile=default --key1=value1...** command. For details, see [Adding or Modifying a Profile](#).