



CLI Reference Guide

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Preface

This guide is intended for network administrators and provides reference information for the Command Line Interface (CLI). The device referred to in this guide is the Omada Hardware Controller, which supports CLI access unless otherwise specified. Some models described in this guide may not be available in all countries or regions. For local sales information, visit <https://www.omadanetworks.com>.

Supported Omada Hardware Controller Models

The CLI function is supported only on certain hardware controller models; please refer to the release notes for your specific model. The list of Omada hardware controller models and firmware versions that support the CLI is subject to change without notice.

This guide uses OC400 V1.0 as an example to illustrate terminal command input and output.

Models: OC200, OC220, OC300, OC400.

Overview of this Guide

Chapter 1: Using the CLI

Introduces how to access and use the CLI, explains CLI command modes, and describes the conventions used throughout this guide.

Chapter 2: Utility Commands

Describes general-purpose commands for basic operations, such as viewing available commands.

Chapter 3: Device Information and System Management Commands

Covers commands for viewing device information, managing system-level settings and operations, and rebooting the device.

Chapter 4: Network Troubleshooting Commands

Provides commands used to diagnose and troubleshoot network connectivity and performance issues.

Chapter 5: CLI Login Settings Commands

Details commands for configuring CLI login parameters and access-related settings.

Chapter 6: Debug Commands

Explains commands used to monitor system behavior and assist in debugging and fault analysis.

Chapter 1 Using the CLI

1.1 Accessing the CLI

You can log on to the AP and access the CLI by the following two methods.

- (1) Via the serial port (requires the device to have a Console Port).
- (2) Via SSH.

1.1.1 Login via the Serial Port

The OC400 is equipped with a Console Port and supports CLI login via a serial connection. The steps are as follows:

- (1) Use a serial cable to connect the management PC to the Hardware Controller.
- (2) Open a terminal emulation program on the management PC (such as MobaXterm). As shown in Figure 1-1, click **Session** in the upper-left corner, select **Serial**, choose the corresponding Serial port, set Speed to 115200, and click **OK**. When logging in to the CLI for the first time, you need to set a Username and Password, as shown in Figure 1-2.

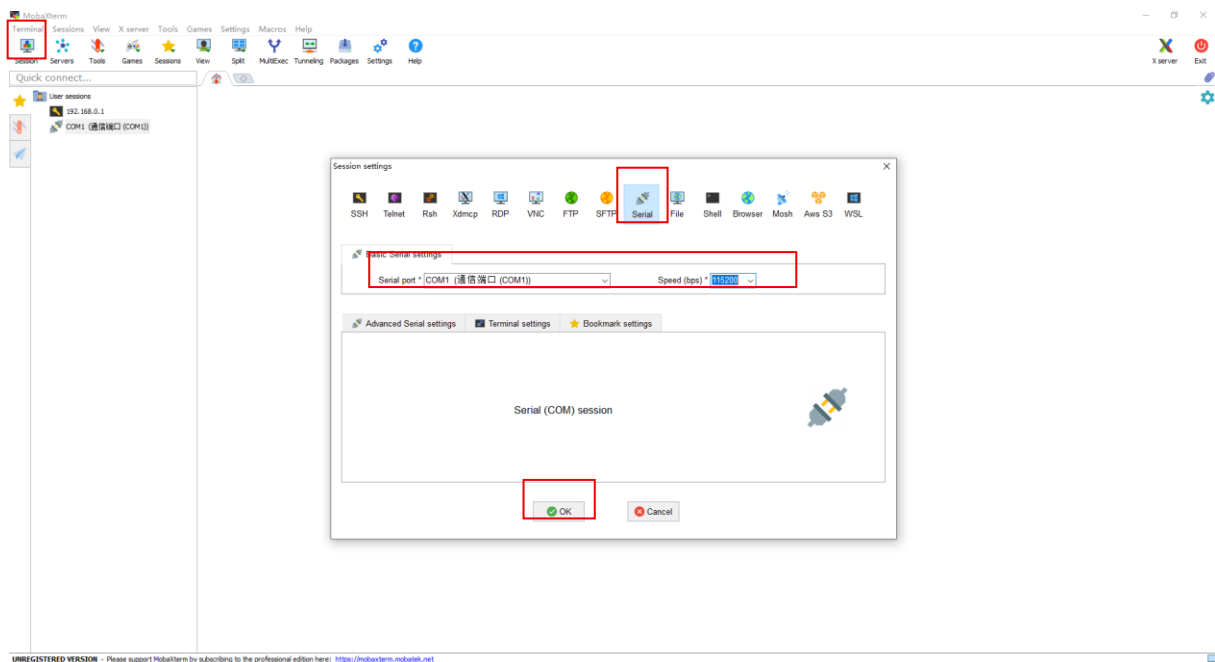


Figure 1-1 Logging in to the CLI via the serial port

```
First login, please change the user name and password
please input new name: admin
The user name should be between 6 and 32 visible characters.
please input new name: tplink
please input new password:
please input new password again:
flock: invalid option -- 'w'
BusyBox v1.24.2 () multi-call binary.

Usage: flock [-s|-u] FD[FILE [-c] PROG ARGS]
[Un]lock file descriptor, or lock FILE, run PROG

(default)      -s      Shared lock      -x      Exclusive lock
-u      Unlock FD
-n      Fail rather than wait
*** WARNING : deprecated key derivation used.
Using -iter or -pbkdf2 would be better.

user name and password changed succeed, please use the new name and password to login.
Username: tplink
Password:
```

Figure 1-2 Setting CLI credentials for the first login

1.1.2 Login via SSH

Before logging in to the Hardware Controller's CLI via SSH, SSH Login must be enabled on the Controller. It is recommended to use MobaXterm for the SSH connection, though other software that supports SSH connections can also be used.

To enable SSH Login on the Controller (as shown in Figure 1-3), enter

https://Hardware_Controller_IP in a browser to access the web management interface. After completing Quick Setup, go to **Global View > Network Tools > SSH**, enable **SSH Login**, and configure the username, password, and SSH Server Port (default: 22). (The Controller version shown below as an example is 6.0.0.33; layouts may vary across versions.)

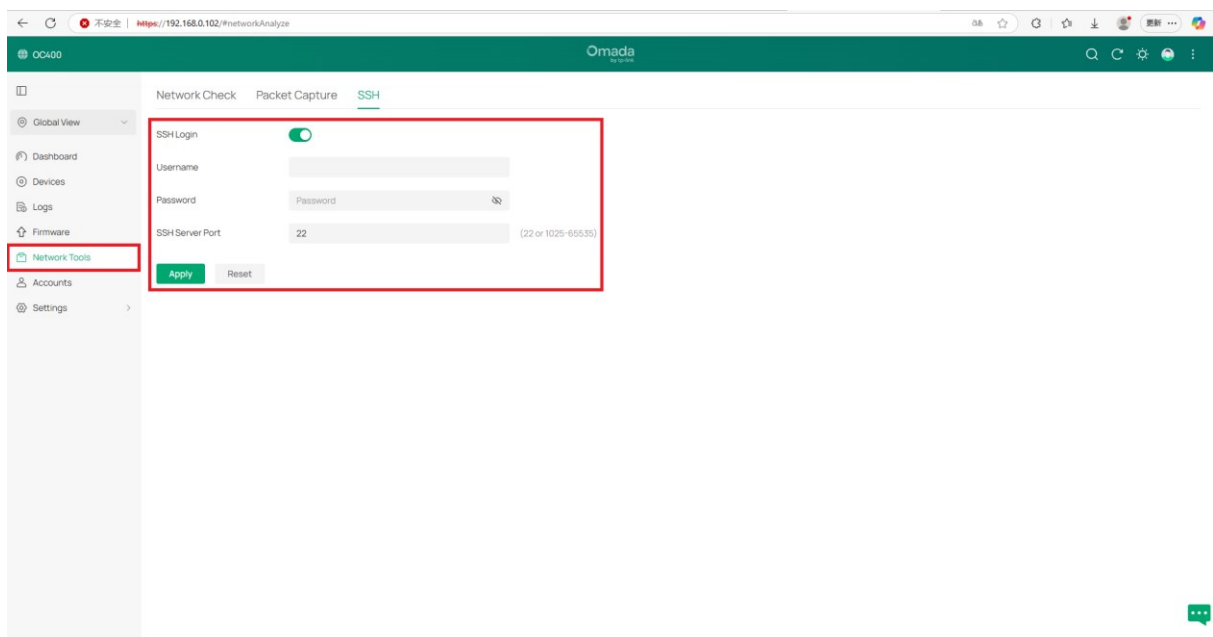


Figure 1-3 Enabling SSH Login on the Controller

After SSH is enabled, open MobaXterm. As shown in Figure 1-4, click **Session**, select **SSH**, enter the Hardware Controller's IP address in Remote host, enter the Port (default: 22), and then click **OK**. The MobaXterm interface after a successful SSH connection is shown in Figure 1-5. You will be prompted to enter the SSH credentials configured on the Controller. When logging in to the CLI for the first time, you will also need to set a Username and Password.

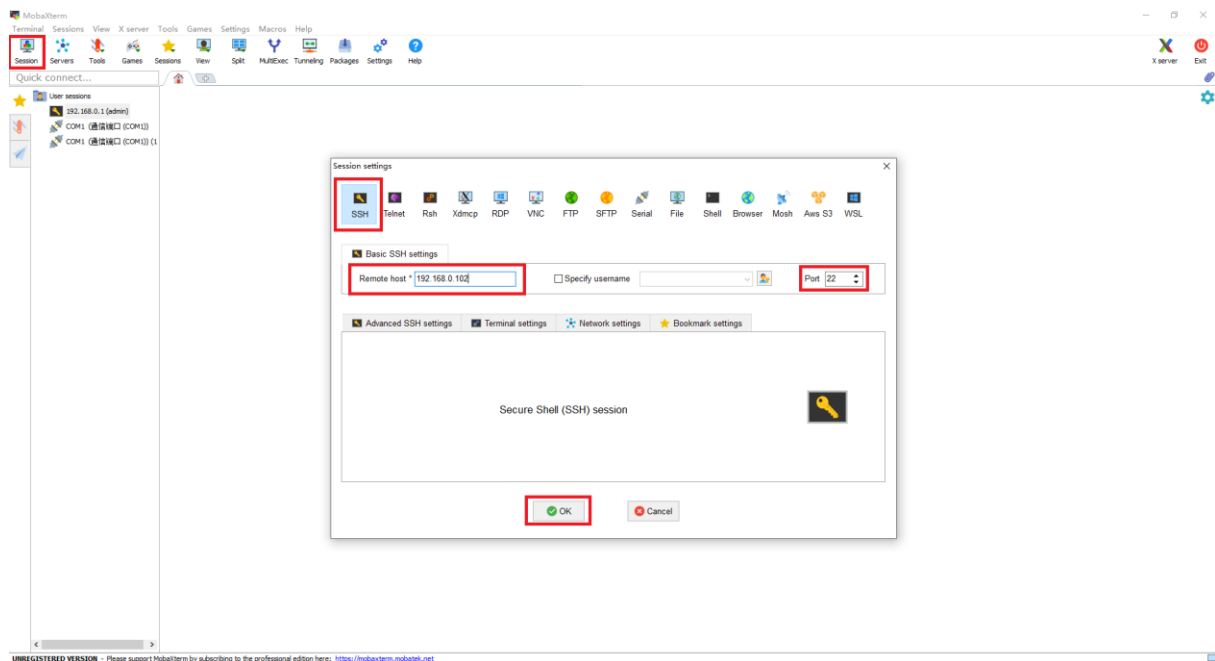


Figure 1-4 Establishing an SSH connection

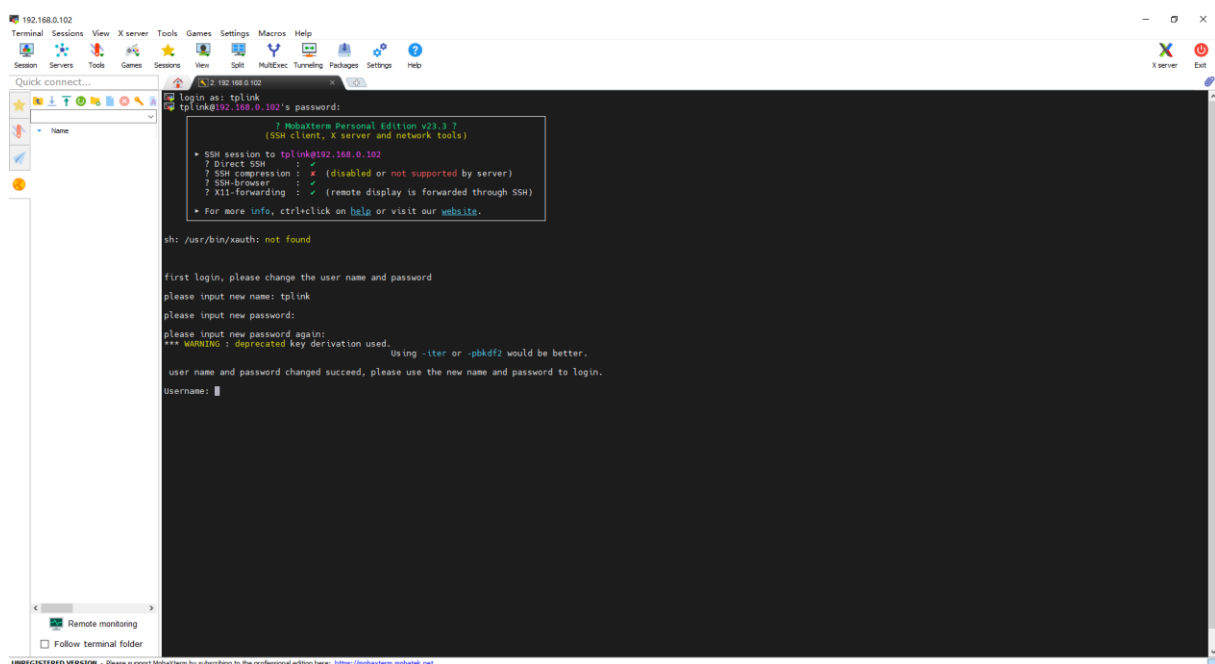


Figure 1-5 Login via SSH

1.2 CLI Command Modes

The CLI is divided into two main modes: **User EXEC Mode** and **Privileged EXEC Mode**.

For the main modes, the accessing path, prompt, and ways to log out or access the next mode are presented below:

Mode	Accessing path	Prompt	Logout or access the subsidiary mode
User EXEC Mode	Primary mode once you log in to the CLI interface.	>	No exit. Use the enable command to go to Privileged EXEC Mode.
Privileged EXEC Mode	Use the enable command to enter this mode from User EXEC Mode.	#	Enter the disable or the exit command to return to User EXEC Mode.



Note:

1. The user is automatically placed in User EXEC Mode after the connection between the PC and the Hardware Controller is established via an SSH connection or serial access.
2. Each command mode has its own set of specific commands. To configure certain commands, you should first enter the corresponding command mode.
3. Some commands can be executed in all modes.

1.3 Conventions

1.3.1 Command Conventions

- Some incomplete commands are supported. For example, input **en** and the system will execute the **enable** command:

```
>en
```

```
#
```

- The following keyboard shortcuts are supported in the CLI:

Key	Function
Ctrl+A	Move the cursor to the beginning of the line
Ctrl+E	Move the cursor to the end of the line.
Ctrl+P	Recall the previous command from the history.
Ctrl+N	Recall the next command from the history.

Ctrl+F / Right Arrow (→)	Move the cursor one character to the right.
Ctrl+B / Left Arrow (←)	Move the cursor one character to the left.
Ctrl+I / Tab	Auto-complete commands.
Ctrl+L	Redisplay the current line.
Ctrl+K	Clear the entire line from the cursor to the end.
Ctrl+U	Clear the entire command.
Ctrl+W	Delete a character string on the left side of the cursor.
Ctrl+H / Backspace	Delete the character to the left of the cursor.

Note:

These shortcuts (except Tab) are not supported if the CLI is accessed via the terminal services on the Omada Controller.

Chapter 2 Utility Commands

2.1 help

Description

The **help** command is used to display all commands available in the terminal.

Syntax

help

Command Mode

All

Example

When Privileged EXEC Mode is enabled:

```
>enable
```

```
#help
```

When User EXEC Mode is enabled:

```
>help
```

2.2 exit

Description

The **exit** command is used to return to the previous mode from the current mode.

Syntax

exit

Command Mode

All

Example

When Privileged EXEC Mode is enabled:

```
>enable
```

```
#exit
```

When User EXEC Mode is enabled:

```
>exit
```

2.3 enable

Description

The **enable** command is used to access Privileged EXEC Mode. After entering this command, run **help** to check whether additional commands are available.

Syntax

```
enable
```

Command Mode

User EXEC Mode

Example

Go to Privileged EXEC Mode from User EXEC Mode:

```
>enable  
#help
```

2.4 disable

Description

The **disable** command is used to disable Privileged EXEC Mode. After entering this command, run **help** to check whether the list of available commands is reduced.

Syntax

```
disable
```

Command Mode

Privileged EXEC Mode

Example

Return to User EXEC Mode from Privileged EXEC Mode:

```
#disable  
>help
```

2.5 show history

Description

The **show history** command is used to the history of executed commands.

Syntax

show history

Command Mode

All

Example

```
>show history
```

2.6 clear history

Description

The **clear history** command is used to clear the command history. After entering this command, run **show history** to verify whether the command history has been cleared.

Syntax

clear history

Command Mode

Privileged EXEC Mode

Example

```
#clear history
```

```
#show history
```

Chapter 3 Device Information and System Management Commands

3.1 show system-info

Description

The **show system-info** command is used to display basic information about the Hardware Controller, including the device model, MAC address, and IP address.

Syntax

show system-info

Command Mode

Privileged EXEC Mode

Example

Display the system information of the device:

```
#show system-info
```

3.2 reboot

Description

The **reboot** command is used to reboot the Hardware Controller.

Syntax

reboot

Command Mode

Privileged EXEC Mode

Example

```
#reboot
```

Chapter 4 Network Troubleshooting Commands

4.1 ping

Description

The **ping** command is used to test network connectivity between the Hardware Controller and a specified domain name or IP address.

Syntax

ping

Command Mode

Privileged EXEC Mode

Example

```
#ping www.baidu.com
```

```
#ping 192.168.0.1
```

4.2 tracert

Description

The **tracert** command is used to trace the path that packets take from the Hardware Controller to a destination host and to analyze the latency at each hop.

Syntax

tracert

Command Mode

Privileged EXEC Mode

Example

```
#tracert www.baidu.com
```

```
#tracert 192.168.10.1
```

Chapter 5 CLI Login Settings Commands

5.1 userSetName

Description

The **userSetName** command is used to change the username for CLI login.

Syntax

userSetName

Command Mode

Privileged EXEC Mode

Example

Set the username as tplink:

```
#userSetName tplink
```

5.2 userSetPassword

Description

The **userSetPassword** is used to change the password for CLI login.

Syntax

userSetPassword

Command Mode

Privileged EXEC Mode

Example

Set the password as Tplink123.

```
#userSetPassword Tplink123.
```

Chapter 6 Debug Commands

6.1 debug

Description

The **debug** command is used to enter debug mode. This mode is mainly used for testing purposes or for remotely troubleshooting customer issues.

Syntax

debug

Command Mode

Privileged EXEC Mode

Example

```
#debug
```