Switch Configuration with the CLI Setup Program

Configuring the Switch with the CLI-Based Setup Program

This chapter provides a command-line interface (CLI)-based setup procedure for the switch.

Before connecting the switch to a power source, review the safety warnings in Warnings section of the Switch Installation chapter.
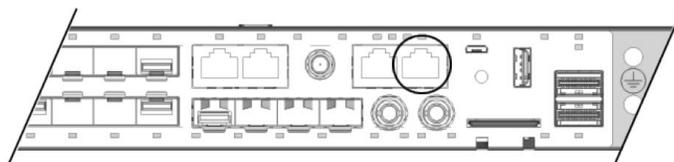
Accessing the CLI Through the Console Port

You can enter Cisco IOS commands and parameters through the CLI. Use one of these options to access the CLI:

RJ-45 Console Port

Complete the steps in this section to access the CLI through the RJ-45 console port. The following image shows the port on Cisco Catalyst IE9300 Rugged Series Switches.

Figure 1: RJ-45 Console Port

Procedure

Step 1   Connect one end of the console cable to your PC.

Doing so may require an adapter for USB to RJ45 or DB-9 to RJ-45.

Step 2   Connect the other end of the cable or adapter to the switch console port.

Step 3   Start the terminal-emulation program on the PC or the terminal.

The program, frequently a PC application such as HyperTerminal or ProcommPlus, makes communication between the switch and your PC or terminal possible.

Step 4   Configure the baud rate and character format of the PC or terminal to match the console port characteristics:

- 9600 baud

- 8 data bits

- 1 stop bit

- No parity

- None (flow control)

Step 5   Connect power to the switch as described in Wire the Power Source.
The PC or terminal displays the bootloader sequence.

Step 6   Press Enter to display the setup prompt.

Step 7   Complete the setup by following the steps in Complete the Setup Program, on page 4.

USB Micro-Type B Console Port

Complete the following steps to access the CLI through the USB Micro Type B console port.

Before you begin

If you are connecting the switch USB-mini console port to a Windows-based PC for the first time, complete the following steps to install the Silicon Labs Windows USB device driver.

1. Connect a USB cable to the PC USB port, and then connect the other end of the cable to the switch mini-B (5-pin-connector) USB console port.

2. Launch the Windows Update page by clicking on the **Update & Security** button on the Windows Settings.

3. Click **View optional updates**.

4. Expand **Driver updates** and select **Silicon Laboratories Inc. – Ports 10.x.x.x**.

5. Click the **Download and install** button.

After the driver installation is complete, disconnect the USB cable from the PC USB port and the switch.
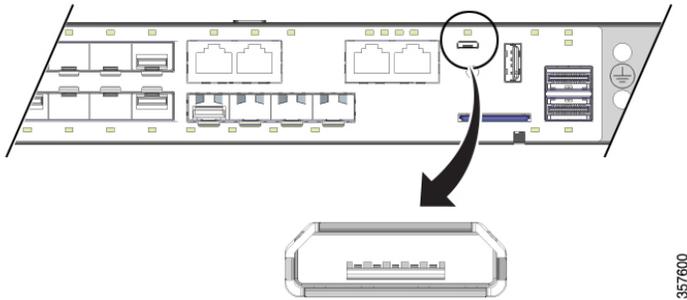
Note   Windows assigns different COM ports to the Silicon Labs USB device. To view the COM port assignment, see the Device Manager.

Procedure

Step 1   Connect a USB cable to the PC USB port, and connect the other end of the cable to the switch micro-B USB console port.

Figure 2: Micro-B USB Console Port

357600

Step 2   Identify the COM port that is assigned to the USB console port:

a) Choose **Start** > **Control Panel** > **Systems**.

b) Click the **Hardware** tab and then choose **Device Manager**.

c) Expand **Ports**.

The assigned COM port appears in parenthesis at the end of the line with this entry: Cisco USB System Management Console.

Step 3   Start the terminal-emulation program on the PC or the terminal.

The program, frequently a PC application such as HyperTerminal, ProcommPlus, or PuTTY, makes communication possible between the switch and your PC or terminal.

Step 4   Configure the COM port.

Step 5   Configure the baud rate and character format of the PC or terminal to match the console port characteristics:

   • 9600 baud

   • 8 data bits

   • 1 stop bit

   • No parity

   • None (flow control)

Step 6   Connect power to the switch as described in Wire the Power Source.

The PC or terminal displays the bootloader sequence.

Step 7   Press Enter to display the setup prompt.

Step 8   Complete the setup by following the steps in Complete the Setup Program, on page 4.

Entering the Initial Configuration Information

To set up the switch, you need to complete the setup program, which runs automatically after the switch is powered on. You must assign an IP address and other configuration information necessary for the switch to communicate with the local routers and the Internet. This information is also required if you plan to use Web UI to configure and manage the switch.

IP Settings

Make sure to get the following information from your network administrator before you complete the setup program:

- Switch IP address
- Subnet mask (IP netmask)
- Default gateway (router)
- Enable secret password
- Enable password
- Telnet password

Complete the Setup Program

Complete the following steps to complete the setup program and to create an initial configuration for the switch:

Procedure

Step 1   Enter **Yes** at these two prompts as shown in the following example:

```
Would you like to enter the initial configuration dialog? [yes/no]: yes
At any point you may enter a question mark '?' for help.
Use ctrl-c to abort configuration dialog at any prompt.
Default settings are in square brackets '[]'.
Basic management setup configures only enough connectivity
for management of the system, extended setup will ask you
to configure each interface on the system.
Would you like to enter basic management setup? [yes/no]: yes
```

Step 2   Enter a hostname for the switch, and press Return.

On a command switch, the hostname can have no more than 28 characters; on a member switch, it can have no more than 31 characters. Do not use -*n*, where n is a number, as the last character in a hostname for any switch.

```
Enter host name [Switch]: host_name
```

Step 3   Enter an enable secret password, and press Return.

The password can be from 1 to 25 alphanumeric characters, can start with a number, is case-sensitive, allows spaces, but ignores leading spaces. The secret password is encrypted, and the enable password is in plain text.

```
Enter enable secret: secret_password
```

Step 4   Enter an enable password, and press Return.

```
Enter enable password: enable_password
```

Step 5   Enter a virtual terminal (Telnet) password, and press Return.

The password can be from 1 to 25 alphanumeric characters, is case sensitive, allows spaces, but ignores leading spaces.

```
Enter virtual terminal password: terminal-password
```

Step 6   (Optional) Configure Simple Network Management Protocol (SNMP) by responding to the prompts.

You can also configure SNMP later through the CLI, Cisco Device Manager, or the Cisco Network Assistant application. To configure SNMP later, enter **no**.

```
Configure SNMP Network Management? [no]: no
```

Step 7   Enter the interface name (physical interface or VLAN name) of the interface that connects to the management network, and press Return.

For this release, always use vlan1 as that interface.

```
Current interface summary
Any interface listed with OK? value "NO" does not have a valid configuration
Interface IP-Address OK? Method Status Protocol
Vlan1 unassigned NO unset up down
GigabitEthernet1/0/1 unassigned YES unset down down
GigabitEthernet1/0/2 unassigned YES unset down down
GigabitEthernet1/0/3 unassigned YES unset down down
GigabitEthernet1/0/4 unassigned YES unset down down
GigabitEthernet1/0/5 unassigned YES unset down down
GigabitEthernet1/0/6 unassigned YES unset down down
GigabitEthernet1/0/7 unassigned YES unset down down
GigabitEthernet1/0/8 unassigned YES unset down down
GigabitEthernet1/0/9 unassigned YES unset down down
GigabitEthernet1/0/10 unassigned YES unset down down
Enter interface name used to connect to the
management network from the above interface summary: vlan1
Enter interface name used to connect to the
management network from the above interface summary: vlan1
```

Step 8   Configure the interface by entering the switch IP address and subnet mask and pressing Return.

The following IP address and subnet masks are examples.

```
Configuring interface Vlan1:
Configure IP on this interface? [yes]:
IP address for this interface: 10.1.1.2
Subnet mask for this interface [255.255.255.0] :
Class A network is 10.0.0.0, 8 subnet bits; mask is /24
```

The following summary appears:

```
Current interface summary

Interface IP-Address OK? Method Status Protocol
```

```
Vlan1 unassigned YES unset administratively down down
GigabitEthernet1/0/1 unassigned YES unset down down
GigabitEthernet1/0/2 unassigned YES unset down down
GigabitEthernet1/0/3 unassigned YES unset down down
GigabitEthernet1/0/4 unassigned YES unset down down
GigabitEthernet1/0/5 unassigned YES unset down down
GigabitEthernet1/0/6 unassigned YES unset down down
GigabitEthernet1/0/7 unassigned YES unset down down
GigabitEthernet1/0/8 unassigned YES unset down down
GigabitEthernet1/0/9 unassigned YES unset down down
GigabitEthernet1/0/10 unassigned YES unset down down
GigabitEthernet1/0/11 unassigned YES unset down down
GigabitEthernet1/0/12 unassigned YES unset down down
GigabitEthernet1/0/13 unassigned YES unset down down
GigabitEthernet1/0/14 unassigned YES unset down down
GigabitEthernet1/0/15 unassigned YES unset down down
GigabitEthernet1/0/16 unassigned YES unset down down
GigabitEthernet1/0/17 unassigned YES unset down down
GigabitEthernet1/0/18 unassigned YES unset up up
GigabitEthernet1/0/19 unassigned YES unset down down
GigabitEthernet1/0/20 unassigned YES unset down down
GigabitEthernet1/0/21 unassigned YES unset down down
GigabitEthernet1/0/22 unassigned YES unset up up
GigabitEthernet1/0/23 unassigned YES unset down down
GigabitEthernet1/0/24 unassigned YES unset down down
GigabitEthernet1/0/25 unassigned YES unset down down
GigabitEthernet1/0/26 unassigned YES unset down down
GigabitEthernet1/0/27 unassigned YES unset down down
GigabitEthernet1/0/28 unassigned YES unset down down
Ap1/0/1 unassigned YES unset up up

Enter interface name used to connect to the
management network from the above interface summary: % Error: The application: day0guestshell, does
 not exist
GigabitEthernet1/0/18

Configuring interface GigabitEthernet1/0/18:

The following configuration command script was created:

hostname Clarke_DUAL
enable secret 9 $9$AZAmDMsIKNr/D.$OL1hR8VYAamo3DBeaV1O9WVVw9Wust.HJM3Z3oOlWBw
enable password Iotg@123
line vty 0 15
password Iotg@12345
no snmp-server
!
no ip routing

!
interface Vlan1
shutdown
no ip address
!
interface GigabitEthernet1/0/1
!
interface GigabitEthernet1/0/2
!
interface GigabitEthernet1/0/3
!
interface GigabitEthernet1/0/4
!
interface GigabitEthernet1/0/5
!
```

```
interface GigabitEthernet1/0/6
!
interface GigabitEthernet1/0/7
!
interface GigabitEthernet1/0/8
!
interface GigabitEthernet1/0/9
!
interface GigabitEthernet1/0/10
!
interface GigabitEthernet1/0/11
!
interface GigabitEthernet1/0/12
!
interface GigabitEthernet1/0/13
!
interface GigabitEthernet1/0/14
!
interface GigabitEthernet1/0/15
!
interface GigabitEthernet1/0/16
!
interface GigabitEthernet1/0/17
!
interface GigabitEthernet1/0/18
no switchport
no shutdown
no ip address
!
interface GigabitEthernet1/0/19
!
interface GigabitEthernet1/0/20
!
interface GigabitEthernet1/0/21
!
interface GigabitEthernet1/0/22
!
interface GigabitEthernet1/0/23
!
interface GigabitEthernet1/0/24
!
interface GigabitEthernet1/0/25
!
interface GigabitEthernet1/0/26
!
interface GigabitEthernet1/0/27
!
interface GigabitEthernet1/0/28
!
interface AppGigabitEthernet1/0/1
!
end


[0] Go to the IOS command prompt without saving this config.
[1] Return back to the setup without saving this config.
[2] Save this configuration to nvram and exit.

Enter your selection [2]: 2
Building configuration...
[OK]
Use the enabled mode 'configure' command to modify this configuration.
```

```
Press RETURN to get started!
```

What to do next

After you complete the setup program, the switch can run the default configuration that you created. If you want to change this configuration or want to perform other management tasks, you can do so through the CLI.

To use the CLI, enter commands at the Switch > prompt through the console port by using a terminal emulation program or through the network by using Telnet. For configuration information, see the switch software configuration guides on Cisco.com.