Configuring the Switch with the CLI-Based Setup Program

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

Before connecting the switch to a power source, review the safety warnings in

For installation procedures, see

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:

-

-

Removing the USB Mini-Type B Console Port Cover

To remove the cover from the USB mini-type B console port:

1. Use a Phillips screwdriver to loosen the captive screw on the USB mini-type B console port cover. See . Remove the screw and take off the cover.

Figure 21   USB Mini-Type B Console Port Cover

1	USB Mini-Type B Console Port Cover

RJ-45 Console Port

1. Connect the RJ-45-to-DB-9 adapter cable to the 9-pin serial port on the PC. Connect the other end of the cable to the switch console port.

2. 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.

Figure 22   Connecting the Console Cable

1	RJ-45 console port

3. 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)

4. Connect power to the switch as described in Connecting to Power, page 18.

5. The PC or terminal displays the bootloader sequence. Press **Enter** to display the setup prompt. Follow the steps in the Completing the Setup Program, page 50.

USB Mini-Type B Console Port

1. If you are connecting the switch USB-mini console port to a Windows-based PC for the first time, install a USB driver. See Installing the Cisco Microsoft Windows XP, 2000, Vista, 7, 8, and 10 USB Device Driver, page 48 for more information.

2. Connect a USB cable to the PC USB port. Connect the other end of the cable to the switch mini-B (5-pin-connector) USB-mini console port.

3. Identify the COM port assigned to the USB-mini console port:

      c. Choose **Start** > **Control Panel** > **Systems.**

      d. Click the **Hardware** tab and choose **Device Manager**. Expand the **Ports** section. The assigned COM port appears in parenthesis at the end of the line with this entry: Cisco USB System Management Console.

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

5. Configure the COM port.

6. 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)

7. Connect power to the switch as described in Connecting to Power, page 18.

8. The PC or terminal displays the bootloader sequence. Press **Enter** to display the setup prompt. Follow the steps in the Completing the Setup Program, page 50.

Installing the Cisco Microsoft Windows XP, 2000, Vista, 7, 8, and 10 USB Device Driver

A USB device driver must be installed the first time a Microsoft Windows-based PC is connected to the USB console port on the switch. Use this procedure to install the USB driver on Windows XP, Windows 2000, Windows Vista, Windows 7, Windows 8, and Windows 10.

1. Obtain the file Cisco_usbconsole_driver_3_1.zip from the Cisco.com website https://software.cisco.com/download/release.html?mdfid=282979369&softwareid=282855122&release=3.1

The file details are as follows:

- Description: Cisco_usbconsole_driver_3_1.zip

- Release: 3.1

- Release Date: 27/Nov/2014

- File Name: Cisco_usbconsole_driver_3_1.zip

- Size: 14.35 MB (15045453 bytes)

- MD5 Checksum: eff2e955edcdc70209e6f9c8f6bd59cd

2. Unzip the file and install the corresponding exe file.

3. Navigate to the **Device Manager** window by performing a search in WIndows for **Device Manager** and opening it.

4. Connect the USB cable from the Windows PC to the Cisco switch.

5. From the **Device Manager** page, expand **Ports (COM & LPT)**. Select **USB Serial Port**. Right-click and select **Update Driver Software ...**

6. In the Update Driver Software window, select **Browse my computer for driver software**. Then choose **Let me pick from a list of device drivers on my computer** and click **Next**.

7. Enable **Show compatible hardware** and choose **Cisco Serial** as the model. Click **Next**.

   After the update is completed, Windows displays **Windows has successfully updated your driver software**.

8. Click **Close**.

Uninstalling the Cisco Microsoft Windows XP, 2000, Vista, 7, 8, and 10 USB Driver

Note: Disconnect the switch console terminal before uninstalling the driver.

1. Run setup.exe for Windows 32-bit or setup(x64).exe for Windows-64bit.

2. Click **Next**.

3. When the InstallShield Wizard for Cisco Virtual Com appears, click **Next**.

4. When the Program Maintenance window appears, select the **Remove** radio button.

5. Click **Next**.

6. When the Remove the Program window appears, click **Remove**.

   If a User Account Control warning appears, click **Allow – I trust this program to proceed**.

7. When the InstallShield Wizard Completed window appears, click **Finish**.

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 Device Manager or Cisco Network Assistant to configure and manage the switch.

IP Settings

You need this 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

Completing the Setup Program

To complete the setup program and to create an initial configuration for the switch:

1. Enter **Yes** at these two prompts:

```
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
```

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

On a command switch, the hostname is limited to 28 characters; on a member switch, it is limited to 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
```

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
```

4. Enter an enable password, and press **Return**.

```
Enter enable password: enable_password
```

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
```

6. (Optional) Configure Simple Network Management Protocol (SNMP) by responding to the prompts. You can also configure SNMP later through the CLI, Device Manager, or the Cisco Network Assistant application. To configure SNMP later, enter **no**.

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

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.

```
Enter interface name used to connect to the
management network from the above interface summary: vlan1
```

8. Configure the interface by entering the switch IP address and subnet mask and pressing **Return**. The IP address and subnet masks shown here are examples.

```
Configuring interface vlan1:
Configure IP on this interface? [yes]: yes
IP address for this interface: 10.4.120.106
Subnet mask for this interface [255.0.0.0]: 255.0.0.0
```

9. Enter Y to configure the switch as the cluster command switch. Enter N to configure it as a member switch or as a standalone switch.

If you enter **N**, the switch appears as a candidate switch in the Cisco Network Assistant GUI. You can configure the switch as a command switch later through the CLI, Device Manager, or the Cisco Network Assistant application. To configure it later, enter **no**.

```
Would you like to enable as a cluster command switch? [yes/no]: no
```

You have now completed the initial configuration of the switch, and the switch displays its initial configuration script:

```
The following configuration command script was created:

hostname Switch
enable secret 5 $1$ZQRe$DPulYXyQLm77v/a4Bmu6Y.
enable password cisco
line vty 0 15
password cisco
no snmp-server
!
!
interface Vlan1
no shutdown
ip address 10.4.120.106 255.0.0.0
!
interface FastEthernet1/1
!
interface FastEthernet1/2
!
interface FastEthernet1/3
!
...(output abbreviated)
!
interface GigabitEthernet1/1
!
interface GigabitEthernet1/2
!
end
```

10. These choices appear:

```
[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.

If you want to save the configuration and use it the next time the switch reboots, save it in NVRAM by
selecting option 2.

Enter your selection [2]:2
```

Make your selection, and press **Return**.

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, use one of these tools:

- Command-line interface (CLI)

- Cisco Network Assistant (for one or more switches)

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 *Cisco IE 4000 Switch Software Configuration Guide*.

To use the Cisco Network Assistant, see the *Getting Started with Cisco Network Assistant* guide on Cisco.com.