CISCO

Configuring the Switch with the CLI-Based Setup Program

This section 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 Switch Installation, page 29

For installation procedures for mounting your switch, connecting to the switch ports, or connecting to the small form-factor pluggable (SFP) modules, see Switch Installation, page 29

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, page 94
- USB Mini-Type B Console Port, page 95

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 Figure 61 on page 94.
- 2. Remove the cover.

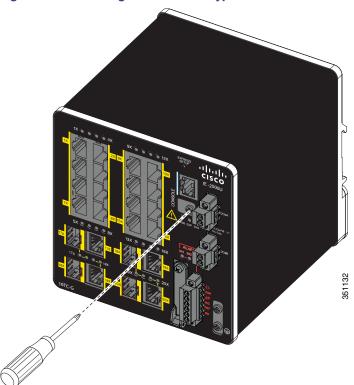


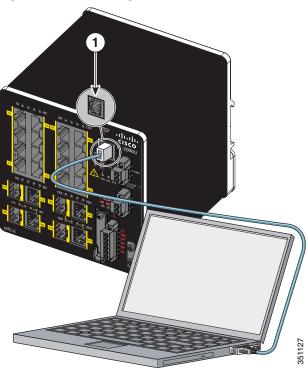
Figure 61 Removing the USB Mini-Type B Console Port Cover

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 62 Connecting the Console Cable



- 1 RJ-45 console port
- 2 Console cable (RJ-45-to-DB-9 adapter cable)
- 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 Switch Installation, page 29

The PC or terminal displays the bootloader sequence.

- 5. Press Enter to display the setup prompt.
- 6. Follow the steps in the Completing the Setup Program, page 99.

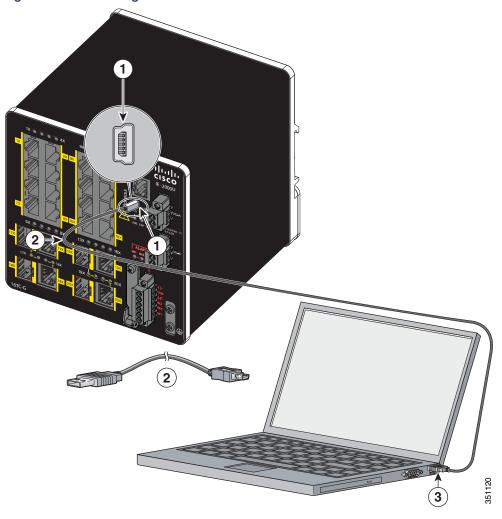
USB Mini-Type B Console Port

If you are connecting the switch USB console port (see Figure 63 on page 96) to a Windows-based PC for the first time, install the USB driver. For installation instructions, see the Installing the Cisco Microsoft Windows USB Device Driver, page 97.

To connect the switch to the USB console port:

1. Connect an USB cable to the PC USB port. See Figure 63 on page 96.

Figure 63 Connecting the USB-Mini Console Cable



- 1 USB-mini console port
- 3 USB port on the PC
- 2 USB cable
- 2. 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:
 - a. Choose Start > Control Panel > Systems.
 - **b.** 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 Switch Installation, page 29

The PC or terminal displays the bootloader sequence.

- 8. Press Enter to display the setup prompt.
- 9. Follow the steps in the Completing the Setup Program, page 99.

Installing the Cisco Microsoft Windows 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.

To install the Microsoft Windows USB Device driver:

1. Obtain the Cisco USB console driver file from the Cisco.com web site and unzip it.

Note: You can download the driver file from the Cisco.com site for downloading the switch software.

- 2. Follow the documentation included with the driver.
- 3. Connect the USB cable to the PC and the switch console port.

The USB console port LED turns green, and the Found New Hardware Wizard appears. Follow the instructions to complete the driver installation.

Uninstalling the Cisco Microsoft Windows USB Driver

Use the Windows Add or Remove Programs utility or the setup.exe file:

- Uninstalling the Cisco Microsoft Windows USB Driver Using the Add or Remove Programs Utility, page 97
- Uninstalling the Cisco Microsoft Windows USB Driver Using the Setup.exe Program, page 98

Uninstalling the Cisco Microsoft Windows USB Driver Using the Add or Remove Programs Utility

- Uninstalling the Cisco Microsoft Windows XP USB Driver, page 98
- Uninstalling the Cisco Microsoft Windows Vista and 7 USB Driver, page 98

Uninstalling the Cisco Microsoft Windows XP USB Driver

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

- 1. Click Start > Control Panel > Add or Remove Programs.
- 2. Scroll to Cisco Virtual Com, and click Remove.
- 3. When the Program Maintenance window appears, select the **Remove** radio button.
- 4. Click Next.

Uninstalling the Cisco Microsoft Windows Vista and 7 USB Driver

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

- 1. Click Start > Control Panel > Uninstall or change a program.
- 2. Select Cisco Virtual Com and click Uninstall.
- 3. When the Programs and Features window appears, click **Yes** to confirm.

Uninstalling the Cisco Microsoft Windows USB Driver Using the Setup.exe Program

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

- 1. Run setup.exe for Windows 32-bit or setup(x64).exe for Windows 64-bit.
- 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. Click Next.
- 5. When the Remove the Program window appears, click **Remove**.

Note: For Windows Vista or 7, if a User Account Control warning appears, click **Allow - I trust this program** to proceed.

6. 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 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 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.

Note: 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
```

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.

You can configure the switch as a command switch later through the CLI. 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
1
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
1
end
```

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
```

10. Enter 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 the Command-line interface (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 *Cisco Connected Grid Switches System Management Software Configuration Guide*.