Configuring the Switch with the CLI Setup Program

This appendix provides a command-line interface (CLI) setup procedure for a standalone switch. To set up the switch by using Express Setup, see the *Cisco IE 3010 Switch Getting Started Guide*. Before connecting the switch to a power source, review the safety warnings in Switch Installation, page 17 and Power Supply Installation, page 47

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 81

- USB Console Port, page 82

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 64   Connecting the Console Cable
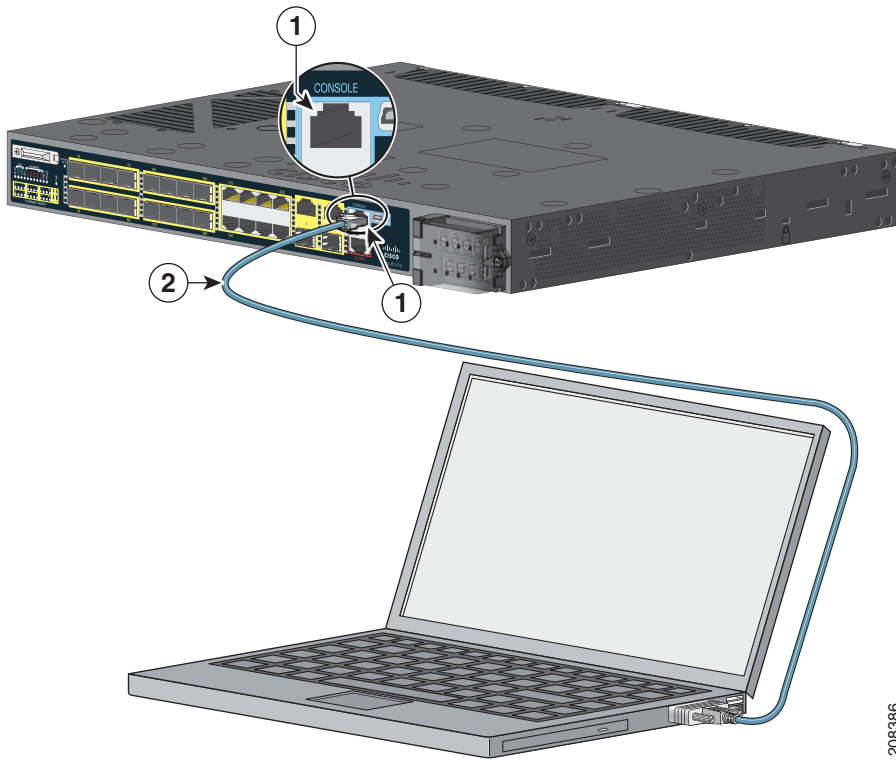
1	RJ-45 console port	2	Console cable (RJ-45-to-DB-9 adapter cable)

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 Power Supply Installation, page 47

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 86.
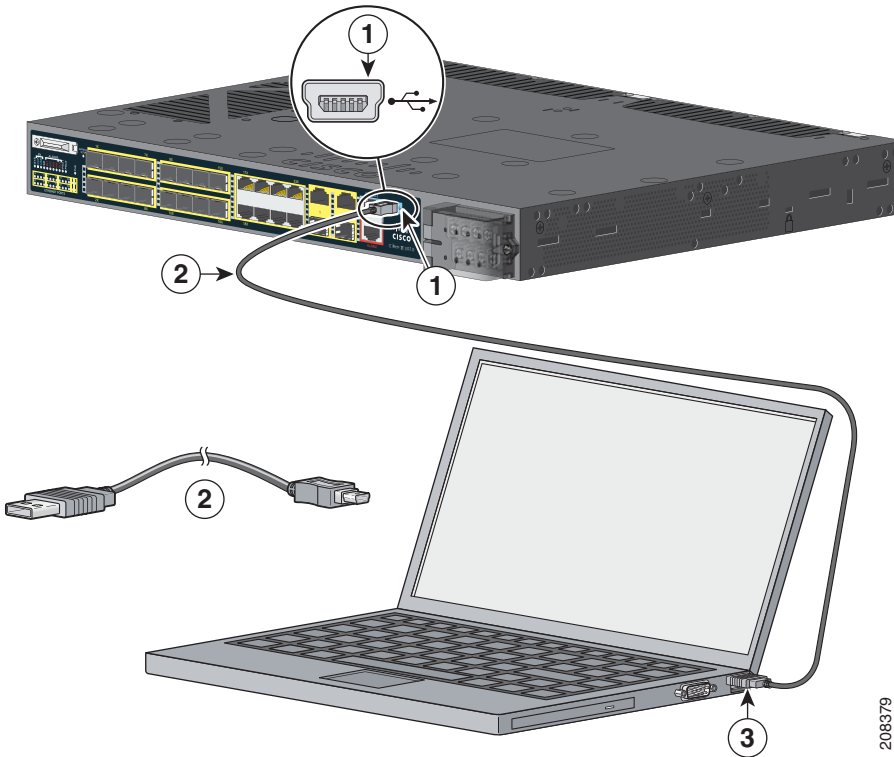
USB Console Port

1. If you are connecting the switch USB console port to a Windows-based PC for the first time, install a USB driver. See Figure 65 on page 83.

■ Installing the Cisco Microsoft Windows XP USB Driver, page 84

■ Installing the Cisco Microsoft Windows 2000 USB Driver, page 84

■ Installing the Cisco Microsoft Windows Vista USB Driver, page 85

Figure 65   Connecting the USB Console Cable

1	USB console port	3	USB port on the PC
2	USB cable		

2. Connect an USB cable to the PC USB port, and connect the other end of the cable to the switch mini-B (5-pin-connector) USB console port. See Figure 65 on page 83.

3. To identify the COM port assigned to the USB console port:

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

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

   c. 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

   The PC or terminal displays the bootloader sequence.

8. Press **Enter** to display the setup prompt.

9. Follow the steps in the .

Installing the Cisco Microsoft Windows USB Device Drivers

Installing the Cisco Microsoft Windows XP USB Driver

1. Obtain the file Cisco_usbconsole_driver.zip from Cisco.com, and unzip it.

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

   - – If using 32-bit Windows XP, **double-click the setup.exe** file in the Windows_32 folder.

   - – If using 64-bit Windows XP, **double-click the setup(x64).exe file** in the Windows_64 folder.

   The Cisco Virtual Com InstallShield Wizard begins.

   The Ready to Install the Program window appears.

2. Click **Install**.

   The InstallShield Wizard Completed window appears.

3. Click **Finish**.

4. Connect the USB cable to the PC and to the switch console port.

   The USB console port LED turns green, and the Found New Hardware Wizard appears.

5. Follow the instructions to complete the driver installation.

Installing the Cisco Microsoft Windows 2000 USB Driver

1. Obtain the file Cisco_usbconsole_driver.zip from Cisco.com, and unzip it.

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

2. Double-click the setup.exe file.

   The Cisco Virtual Com InstallShield Wizard begins.

3. Click **Next**.

   The Ready to Install the Program window appears.

4. Click **Install**.

   The InstallShield Wizard Completed window appears.

5. Click **Finish.**

6. Connect the USB cable to the PC and to the switch console port.

   The USB console port LED turns green, and the Found New Hardware Wizard appears.

7. Follow the instructions to complete the driver installation.

Installing the Cisco Microsoft Windows Vista USB Driver

1. Obtain the file Cisco_usbconsole_driver.zip from Cisco.com, and unzip it.

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

2. Start the Cisco Virtual Com InstallShield Wizard:

   – If using 32-bit Windows Vista, **double-click the setup.exe** file in the Windows_32 folder.

   – If using 64-bit Windows Vista, **double-click the setup(x64).exe** file in the Windows_64 folder.

   The Cisco Virtual Com InstallShield Wizard begins.

3. Click **Next**.

   The Ready to Install the Program window appears.

4. Click **Install**.

   Note: If a User Account Control warning appears, click *Allow - I trust this program*.

   The InstallShield Wizard Completed window appears.

5. Click **Finish**.

6. Connect the USB cable to the PC and to the switch console port.

   The USB console port LED turns green, and the Found New Hardware Wizard appears.

7. Follow the instructions to complete the driver installation.

Uninstalling the Cisco Microsoft Windows USB Drivers

Uninstalling the Cisco Microsoft Windows XP and 2000 USB Driver

The driver can be removed with the Windows Add or Remove Programs utility or with the setup.exe file.

Using the Add or Remove Programs Utility

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

1. Choose **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. Click **Next**.

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. Click **Next**.

2. The InstallShield Wizard for Cisco Virtual Com appears. Click **Next**.

3. When the Program Maintenance window appears, select the **Remove** radio button. Click **Next**.

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

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

Uninstalling the Cisco Microsoft Windows Vista 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. Click **Next**.

2. The InstallShield Wizard for Cisco Virtual Com appears. Click **Next**.

3. When the Program Maintenance window appears, select the **Remove** radio button. Click **Next**.

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

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

5. 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 powers on. You must assign an IP address and other configuration information necessary for the switch to communicate with the local routers and the Internet.

IP Settings

You need this information:

- Switch IP address

- Subnet mask (IP netmask)

- Default gateway (router)

- Enable secret password

- Enable password

- Telnet password

Completing the Setup Program

Follow these steps to complete the setup program and to create an initial configuration for the switch:

1. Enter **Yes** at the following 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 host name for the switch, and press **Return**.

   On a command switch, the host name is limited to 28 characters and on a member switch to 31 characters. Do not use *-n*, where *n* is a number, as the last character in a host name 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. 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 below 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 enter **N** to 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
```

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You have completed the initial configuration of the switch, and the switch displays its configuration. This is an example of the configuration output:

```
The following configuration command script was created:
hostname switch1
enable secret 5 $1$Ulq8$DlA/OiaEbl90WcBPd9cOn1
enable password enable_password
line vty 0 15
password terminal-password
no snmp-server
!
no ip routing

!
interface Vlan1
no shutdown
ip address 10.4.120.106 255.0.0.0
!
interface FastEthernet1/0/1
!
interface FastEthernet1/0/2

interface FastEthernet1/0/3
!
...<output abbreviated>
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.
```

To save the configuration and use it the next time the switch reboots, select option 2 to save it in NVRAM.

```
Enter your selection [2]:2
```

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

After you complete the setup program, the switch can run the default configuration that you created. To change this configuration or to perform other management tasks, enter commands at the `Switch>` *prompt*.