Configuring the Switch with the CLI-Based Setup Program

This appendix provides a CLI-based setup procedure for a Catalyst 3750-X and 3560-X standalone switch or a switch stack. To set up the switch by using Express Setup, see the *Cisco 3750-X and 3560-X Switch Getting Started Guide*. Before connecting the switch to a power source, review the safety warnings in Chapter 2, "Switch Installation."

Accessing the CLI

Accessing the CLI Through Express Setup

You can access the CLI on an unconfigured switch by placing the switch in Express Setup mode and then connecting a switch Ethernet port or the Ethernet management port to the Ethernet port of your PC or workstation. To put the switch into Express Setup mode, follow the steps described in the getting started guide for powering on the switch and using Express Setup.

When the switch is in Express Setup mode, open a Telnet session to the switch by entering the IP address *10.0.0.1*. Enter the **setup** user EXEC command. Enter the information described in the "Entering the Initial Configuration Information" section on page C-6.

After you have entered the configuration information for the switch, save it to flash memory by using the **write memory** privileged EXEC command.

Note While in Express Setup mode, the IP address 10.0.0.1 remains active on the switch until you enter the **write memory** command. You lose the Telnet connection after entering the **write memory** command.

For more information about using the CLI, see the command reference for this release.

Accessing the CLI Through a Console Port

You can enter Cisco IOS commands and parameters through the CLI.

Note If you have stacked Catalyst 3750-X switches, connect to the 10/100 Ethernet management port or console port of one of the stack switches. You can perform the initial configuration for the entire stack on any switch in the stack.

Use one of these options to access the CLI:

- RJ-45 Console Port
- USB Console Port

RJ-45 Console Port

The RJ-45 console port is on the rear panel of the switch.

Step 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.

Step 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.

Step 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)

Step 4 Connect power to the switch as described in Chapter 3, "Power Supply and Fan Module Installation."

Step 5 The PC or terminal displays the bootloader sequence. Press **Enter** to display the setup prompt. Follow the steps in the "Configuring the Setup Program" section on page C-6.

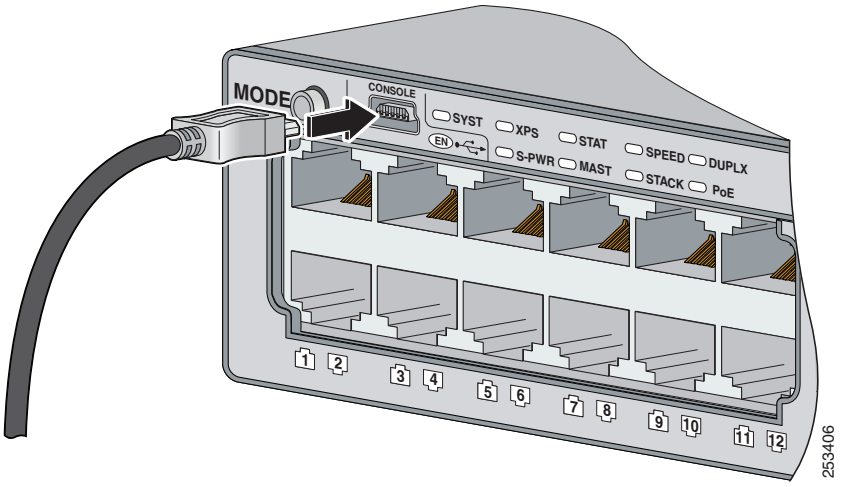
USB Console Port

The USB mini-Type B port is on the front panel of the switch.

Step 1 If you are connecting the switch USB console port (see Figure C-1) to a Windows-based PC for the first time, install the USB driver.

- "Installing the Cisco Microsoft Windows XP USB Driver" section on page C-4
- "Installing the Cisco Microsoft Windows 2000 USB Driver" section on page C-4
- "Installing the Cisco Microsoft Windows Vista and Windows 7 USB Driver" section on page C-4

Figure C-1 Connecting the USB Console Cable to the Catalyst 3750-X or 3560-X Switch



Step 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 console port. See Figure C-1.

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 default characteristics:

- 9600 baud
- 8 data bits
- 1 stop bit
- No parity
- None (flow control)

Step 5 Connect power to the switch as described in Chapter 3, "Power Supply and Fan Module Installation.".

Step 6 The PC or terminal displays the bootloader sequence. Press **Enter** to display the setup prompt. Follow the steps in the "Configuring the Setup Program" section on page C-6.

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.

- Installing the Cisco Microsoft Windows XP USB Driver
- Installing the Cisco Microsoft Windows 2000 USB Driver
- Installing the Cisco Microsoft Windows Vista and Windows 7 USB Driver

Installing the Cisco Microsoft Windows XP USB Driver

Step 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.

Step 2 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.

Step 3 The Cisco Virtual Com InstallShield Wizard begins.

Step 4 The Ready to Install the Program window appears. Click **Install**.

Step 5 The InstallShield Wizard Completed window appears. Click **Finish**.

Step 6 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.

Installing the Cisco Microsoft Windows 2000 USB Driver

Step 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.

Step 2 Double-click the setup.exe file.

Step 3 The Cisco Virtual Com InstallShield Wizard begins. Click **Next**.

Step 4 The Ready to Install the Program window appears. Click **Install**.

Step 5 The InstallShield Wizard Completed window appears. Click **Finish.**

Step 6 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.

Installing the Cisco Microsoft Windows Vista and Windows 7 USB Driver

Step 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.

Step 2 If using 32-bit Windows Vista or Windows 7, double-click the setup.exe file in the Windows_32 folder. if using 64-bit Windows Vista or Windows 7, double-click the setup(x64).exe file in the Windows_64 folder.

Step 3 The Cisco Virtual Com InstallShield Wizard begins. Click **Next**.

Step 4 The Ready to Install the Program window appears, Click **Install**.

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

Step 5 The InstallShield Wizard Completed window appears. Click **Finish**.

Step 6 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

Uninstalling the Cisco Microsoft Windows XP and 2000 USB Driver

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

Using the Add or Remove Programs utility

Note Disconnect the switch console terminal before uninstalling the driver.

Step 1 Click **Start** > **Control Panel** > **Add or Remove** Programs.

Step 2 Scroll to Cisco Virtual Com and click **Remove**.

Step 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.

Step 1 Run setup.exe for Windows 32-bit or setup(x64).exe for Windows-64bit. Click **Next**.

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

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

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

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

Uninstalling the Cisco Microsoft Windows Vista and Windows 7 USB Driver

Note Disconnect the switch console terminal before uninstalling the driver.

Step 1 Run setup.exe for Windows 32-bit or setup(x64).exe for Windows-64bit. Click **Next**.

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

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

Step 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.

Step 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 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 needed to use the device manager or Cisco Network Assistant to configure and manage the switch.

IP Settings

You need this information from your network administrator:

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

Configuring the Setup Program

If your switches are stacked and there are multiple console connections to individual switches in the stack, the initial setup dialog appears at the console where you first press **Enter**.

Completing the setup program and an initial configuration for the switch:

Step 1 Enter **Yes** at the following 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
```

Step 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
```

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, the device manager, or the 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.

```
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 IP address and subnet masks shown 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
```

Step 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 Network Assistant GUI. You can configure the switch as a command switch later through the CLI, the device manager, or the Network Assistant application. To configure it later, enter **no**.

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

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 GigabitEthernet1/0/1
!
interface GigabitEthernet1/0/2

interface GigabitEthernet1/0/3
!
...<output abbreviated>
!


interface GigabitEthernet1/0/23
!
end
```

Step 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, select option 2 to save it in nonvolatile RAM (NVRAM).

```
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. To change this configuration or to perform other management tasks, enter commands at the `Switch>` prompt or use Cisco Network Assistant, the Cluster Management Suite (CMS), or another management tool for further configuration.