



Configuring the Switch with the CLI-Based Setup Program

This appendix provides a CLI-based setup procedure for a Catalyst 3650 standalone switch or a switch stack. To set up the switch by using Express Setup, see the *Catalyst 3650 Switch Getting Started Guide*. Before connecting the switch to a power source, review the safety warnings thoroughly.

This chapter includes the following topics:

- [Accessing the CLI, page 3-1](#)
- [Entering the Initial Configuration Information, page 3-6](#)

Accessing the CLI

The following are the various ways in which the CLI can be accessed.

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 *Catalyst 3650 Switch Getting Started Guide* at

http://www.cisco.com/c/en/us/td/docs/switches/lan/catalyst3650/hardware/quick/guide/cat3650_gsg.html.

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 3-6.

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. However, you lose the Telnet connection after entering the **write memory** command.

For more information about using the CLI, see the *Cisco Catalyst 3650 Series Switches Command Reference Guides* at <http://www.cisco.com/c/en/us/support/switches/catalyst-3650-series-switches/products-command-reference-list.html>.

Accessing the CLI Through a Console Port

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

**Note**

If you have stacked Catalyst 3650 switches, connect to the 10/100/1000 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.

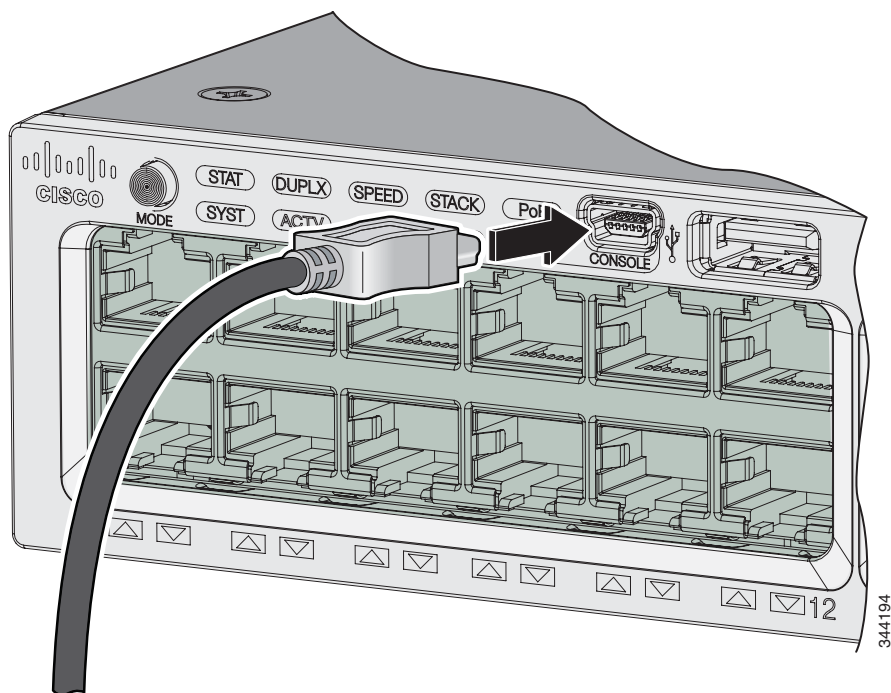
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- Step 1** Connect the RJ-45-to-DB-9 adapter cable to the 9-pin serial port on the PC. Connect the other end of the cable to the switch console port.
- Step 2** Start the terminal emulation program on the PC or the terminal. The program, frequently 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 the power to the switch.
- 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 3-6.
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USB Console Port

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

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- Step 1** If you are connecting the switch’s USB console port (see [Figure 3-1](#)) to a Windows-based PC for the first time, install the USB driver. See these sections for installation instructions:
- [“Installing the Cisco Microsoft Windows USB Device Driver”](#) section on page 3-4
 - [“Uninstalling the Cisco USB Driver for Microsoft Windows”](#) section on page 3-5

Figure 3-1 Connecting the USB Console Cable to the Catalyst 3650 Switch



- Step 2** Connect a USB cable to the PC USB port. Connect the other end of the cable to the switch's mini-B (5-pin-connector) USB console port. See [Figure 3-1](#).
- 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 the power to the switch.
- 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 3-6.

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.

To install the Microsoft Windows USB Device Driver:

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- Step 1** Obtain the Cisco USB console driver file from the Cisco.com web site and unzip it.
- Step 2** 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 is displayed. Follow the instructions to complete the driver installation.
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Uninstalling the Cisco USB Driver for Microsoft Windows

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

- [Uninstalling the Cisco USB Driver for Microsoft Windows Using the Add or Remove Programs Utility](#)
- [Uninstalling the Cisco USB Driver for Microsoft Windows Using the Setup.exe Program](#)

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

- [Uninstalling the Cisco Microsoft Windows XP USB Driver](#)
- [Uninstalling the Cisco Microsoft Windows Vista and Microsoft 7 USB Driver](#)

Uninstalling the Cisco Microsoft Windows XP USB Driver

**Note**

Disconnect the switch console terminal before uninstalling the driver.

- Step 1** Choose **Start > Control Panel > Add or Remove Programs**.
- Step 2** Select **Cisco Virtual Com** and click **Remove**.
- Step 3** When the **Program Maintenance** window is displayed, click the **Remove** radio button. Click **Next**.
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Uninstalling the Cisco Microsoft Windows Vista and Microsoft 7 USB Driver

**Note**

Disconnect the switch console terminal before uninstalling the driver.

- Step 1** Choose **Start > Control Panel > Uninstall or change a program**.
- Step 2** Select **Cisco Virtual Com** and click **Uninstall**.
- Step 3** When the **Programs and Features** window is displayed, click **Yes** to confirm.
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Uninstalling the Cisco USB Driver for Microsoft Windows Using the Setup.exe Program



Note

Disconnect the switch console terminal before uninstalling the driver.

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- Step 1** Run setup.exe for Windows 32-bit, or setup(x64).exe for Windows 64-bit, and click **Next**.
- Step 2** In the **InstallShield** wizard for Cisco Virtual Com that is displayed, click **Next**.
- Step 3** In the **Program Maintenance** window that is displayed, click the **Remove** radio button, and click **Next**.
- Step 4** In the **Remove the Program** window that is displayed, click **Remove**.



Note

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

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- Step 5** In the **InstallShield Wizard Completed** window that is displayed, click **Finish**.
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Entering the Initial Configuration Information

To set up the switch, 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 Device Manager or Cisco Network Assistant to configure and manage the switch.

IP Settings

You require the following information from your network administrator to configure the switch:

- 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 box is displayed on the console where you first press **Enter**.

To complete the setup program and the initial configuration for the switch:

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- 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 to 31 characters on a member switch. 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 a 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 To configure the country code, enter **yes** and press **Return**.

Do you want to configure country code? [no]: **yes**

Step 7 Enter the country code, and press **Return**.

Enter the country code[US]: **US**

Step 8 (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**

Step 9 Enter the interface name (physical interface or VLAN name) of the interface that connects to the management network, and press **Return**.

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

Step 10 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*

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 $1$U1q8$D1A/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 GigabitEthernet4/0/1
!
interface GigabitEthernet4/0/2

interface GigabitEthernet4/0/3
!
...<output abbreviated>
!

!
end
```

Step 11 After you complete the initial configuration of the switch, these choices are displayed:

```
[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

Step 12 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 the Cisco Network Assistant, or another management tool for further configuration.