



# Configuring the Switch with the CLI-Based Setup Program

---

This appendix provides a command-line interface (CLI)-based setup procedure for a standalone switch. This chapter contains these sections:

- [Methods for Accessing the CLI, page C-1](#)
- [Taking Out What You Need, page C-2](#)
- [Connecting to a Power Source, page C-3](#)
- [Connecting to the Console Port, page C-3](#)
- [Connecting to a Power Source, page C-3](#)
- [Entering the Initial Configuration Information, page C-5](#)
- [Completing the Setup Program, page C-6](#)
- [Where to Go Next, page C-8](#)

## Methods for Accessing the CLI

You can access the CLI by these methods:

- [Accessing the CLI Through Express Setup \(Unconfigured Switch Only\), page C-1](#)
- [Accessing the CLI Through the Console Port, page C-2](#)

## Accessing the CLI Through Express Setup (Unconfigured Switch Only)

You can access the CLI on an unconfigured switch by placing the switch in Express Setup mode and then connecting an Ethernet port of the switch 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.

After the switch is in Express Setup mode, telnet to the switch by using the IP address **10.0.0.1**, and enter the **setup** user EXEC command. See these sections in this chapter to then configure the switch by using the CLI:

- [Entering the Initial Configuration Information, page C-5](#)
- [Completing the Setup Program, 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.

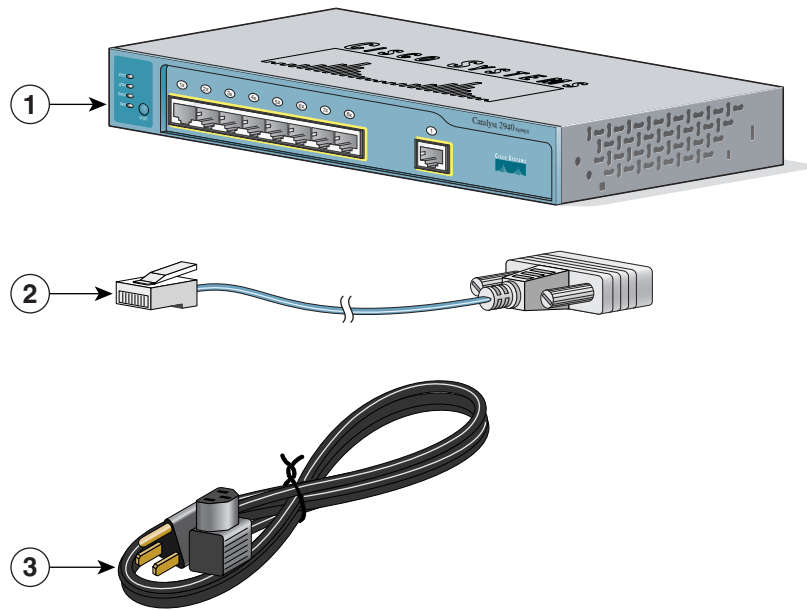
## Accessing the CLI Through the Console Port

You can access the CLI by connecting the console port of the switch to the serial port on your PC or workstation and access the switch through a Telnet session. To access the switch through the console port, follow the steps in the rest of this chapter, beginning with the “[Taking Out What You Need](#)” section on page C-2.

## Taking Out What You Need

Remove the items from the shipping container, as shown in [Figure C-1](#).

**Figure C-1 Catalyst 2940 Switch, Console Cable, and AC Power Cord**



|          |               |          |               |
|----------|---------------|----------|---------------|
| <b>1</b> | Switch        | <b>3</b> | AC power cord |
| <b>2</b> | Console cable |          |               |

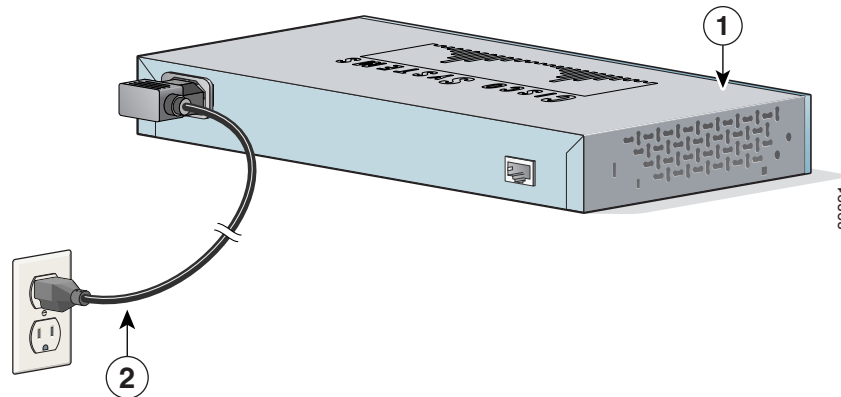
88890

## Connecting to a Power Source

Follow these steps to connect to a power source:

- Step 1** Connect one end of the supplied AC power cord to the power connector on the switch rear panel, as shown in [Figure C-2](#).

**Figure C-2** Connecting Switch to AC Power



|   |               |
|---|---------------|
| 1 | Switch        |
| 2 | AC power cord |

- Step 2** Connect the other end of the power cable to a grounded AC outlet.
- As the switch powers on, it begins the power-on self-test (POST), a series of tests that run automatically to ensure that the switch functions properly. If POST fails, see [Chapter 3, “Troubleshooting,”](#) to determine a course of action.

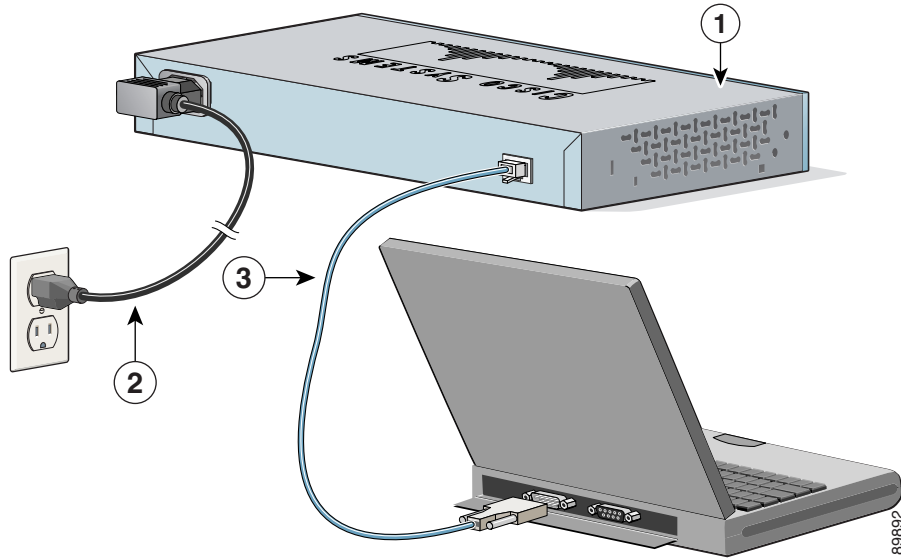
## Connecting to the Console Port

You can use the console port to perform the initial configuration. To connect the switch console port to a PC, use the supplied RJ-45-to-DB-9 adapter cable.

Follow these steps to connect the PC or terminal to the switch:

- Step 1** Using the supplied RJ-45-to-DB-9 adapter cable, insert the RJ-45 connector into the console port on the rear of a switch, as shown in [Figure C-3](#).

Figure C-3 Connecting a Switch to a PC



|   |               |   |                                       |
|---|---------------|---|---------------------------------------|
| 1 | Switch        | 3 | RJ-45-to-DB-9 adapter (console) cable |
| 2 | AC power cord |   |                                       |

- Step 2** Attach the DB-9 female DTE of the adapter cable to the serial port of a PC, or attach an appropriate adapter to the terminal.

## Starting the Terminal Emulation Software

Before you connect to and power on the switch, start the terminal-emulation session so that you can see the output display from the POST.

The terminal-emulation software—frequently a PC application such as Hyperterminal or ProcommPlus—makes communication between the switch and your PC or terminal possible.



### Note

If you started the terminal-emulation program before you powered on your switch, the PC or terminal displays the bootloader sequence. You need to press **Enter** to display the setup program prompt.

Follow these steps to start a terminal-emulation session:

- Step 1** Launch your terminal-emulation program if you are using a PC or terminal.
- Step 2** Begin a terminal-emulation session.

- Step 3** Configure the baud rate and character format of the PC or terminal to match these console port default characteristics:
- 9600 baud
  - 8 data bits
  - 1 stop bit
  - No parity
  - None (flow control)
- Step 4** Press the **Enter** key. This prompt appears:
- ```
Switch>
```
- 

## 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 up. 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 the Network Assistant to configure and manage the switch.

## IP Settings

You will 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

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

---

**Step 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**

**Step 2** Enter a host name for the switch, and press **Return**.

On a command switch, the host name is limited to 28 characters; 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**. These  
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 later configure the switch as a command switch through the CLI or Network Assistant interface. 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. This is an example of that output:

The following configuration command script was created:

```
hostname host_name
enable secret 5 $1$Max7$Qgr9eXBhtcBJw3KK7bc850
enable password my
line vty 0 15
password my_password
snmp-server community public
!
no ip routing
!
interface Vlan1
no shutdown
ip address 172.20.139.145 255.255.255.224
!
interface Vlan2
shutdown
no ip address
!
interface FastEthernet0/1
!
interface FastEthernet0/2
!
...<output abbreviated>
!!!
interface GigabitEthernet0/1
!
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, save it in nonvolatile RAM (NVRAM) by selecting option 2.

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

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

---

## Where to Go Next

After you complete the setup program, the switch can run the default configuration that you created.

- For product overview information, see [Chapter 1, “Overview.”](#)
- For detailed installation procedures on mounting your switch on or under a desk or on a wall, or connecting to the small form-factor pluggable (SFP) modules, see [Chapter 2, “Installation.”](#) To complete this setup procedure, your PC must not be configured with a fixed IP address.

If you want to change the configuration or want to perform other management tasks, use one of these tools:

- CLI
- Device manager from your browser (for one switch)
- 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 a telnet session. For configuration information, see the switch software configuration guide or the switch command reference.

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