Configuring with the Command-Line Interface

This chapter describes how to use the Cisco IOS software command-line interface (CLI) to configure basic Cisco VG224 functionality.

This chapter presents the following major topics:

- Configuring the Host Name and Password, page 3-2
- Configuring Fast Ethernet Interfaces, page 3-4
- Saving Configuration Changes, page 3-5
- Where to Go Next, page 3-5

Follow the procedures in this chapter to configure the Cisco VG224 manually or, if you want to, change the configuration after you have run the setup command facility (see “Using the setup Command” section on page 2-2).

This chapter does not describe every configuration possible—only a small portion of the most commonly used configuration procedures. For advanced configuration topics, refer to the Cisco IOS configuration guide and command reference publications. See “Obtaining Documentation” section on page x.

Note

If you skipped the previous chapter, Chapter 2, “Using the setup Command,” and you have never configured a Cisco VG224, go back to that chapter and read it now. The chapter contains important information you need to configure your Cisco VG224 successfully.
Configuring the Host Name and Password

One of the first configuration tasks you might want to do is to configure the host name and set an encrypted password. Configuring a host name allows you to distinguish multiple Cisco VG224s and routers from each other. Setting an encrypted password allows you to prevent unauthorized configuration changes.

<table>
<thead>
<tr>
<th>Command</th>
<th>Purpose</th>
</tr>
</thead>
</table>
| **Step 1** | Router> *enable*  
Password: *password*  
Router# | Enters enable mode. Enter the password.  
You have entered enable mode when the prompt changes to Router#. |
| **Step 2** | Router# *configure terminal*  
Enter configuration commands, one per line.  
End with CNTL/Z.  
Router(config)# | Enters global configuration mode. You have entered global configuration mode when the prompt changes to Router(config)#. |
| **Step 3** | Router(config)# *hostname VG224*  
Router(config)# | Changes the name of the Cisco VG224 to a meaningful name. Substitute your host name for Router. |
| **Step 4** | Router(config)# *enable secret guessme* | Enters an enable secret password. This password provides access to privileged EXEC mode. When you enter *enable* at the user EXEC prompt (Router>), you must enter the enable secret password to gain access to configuration mode. Substitute your enable secret password for guessme. |
| **Step 5** | Router(config)# *line con 0*  
Router(config-line)# *exec-timeout 0 0*  
Router(config-line)# *exit*  
Router(config)# | Enters line configuration mode to configure the console port. When you enter line configuration mode, the prompt changes to Router(config-line)#.  
Prevents the Cisco VG224’s EXEC facility from timing out if you do not type any information on the console screen for an extended period.  
Exits back to global configuration mode. |
Verifying the Host Name and Password

To verify that you configured the correct host name and password:

---

**Step 1**
Enter the `show config` command:

```
Router(config)# show config
```

Using 1888 out of 126968 bytes
!
version XX.X
.
.
!
hostname VG224
!
enable secret 5 $1$60L4$X2JYowODc0.kgalloO/w8/
.
.
.

Check the host name and encrypted password displayed near the top of the command output.

---

**Step 2**
Exit global configuration mode and attempt to reenter it using the new enable password:

```
Router# exit
.
.
Router con0 is now available
Press RETURN to get started.
Router> enable
Password: guessme
Router#
```

---

**Tip**
If you are having trouble, ensure the following:

- Caps Lock is off.
- You entered the correct passwords. Passwords are case sensitive.
Configuring Fast Ethernet Interfaces

To configure a Fast Ethernet interface, use the configuration software provided with your Cisco VG224 or network module, if any. Otherwise, for greatest power and flexibility, use configuration mode (manual configuration).

**Note**
Before you begin, disconnect all WAN cables from the Cisco VG224 to keep it from trying to run the AutoInstall process. The Cisco VG224 tries to run AutoInstall whenever you power it on if there is a WAN connection on both ends and the Cisco VG224 does not have a valid configuration file stored in NVRAM (for instance, when you add a new interface). It can take several minutes for the Cisco VG224 to determine that AutoInstall is not connected to a remote TCP/IP host.

This section describes basic configuration, including enabling the interface and specifying IP routing. Depending on your own requirements and the protocols you plan to route, you might also need to enter other configuration commands.

Before you begin configuring the interfaces, make sure to do the following:
- Connect a console to the Cisco VG224.
- Power on the Cisco VG224.

<table>
<thead>
<tr>
<th>Command</th>
<th>Purpose</th>
</tr>
</thead>
</table>
| Step 1  | Router> enable  
Password: password  
Router# | Enters enable mode. Enter the password. 
You have entered enable mode when the prompt changes to Router#. |
| Step 2  | Router# configure terminal  
Enter configuration commands, one per line.  
End with CNTL/Z.  
Router(config)# | Enters global configuration mode. You have entered global configuration mode when the prompt changes to Router(config)#. |
| Step 3  | Router# ip routing  
Router# ipx routing | Enables routing protocols as required for your global configuration. This example uses IP routing and Internetwork Packet Exchange (IPX) routing. |
| Step 4  | Router(config)# interface fastethernet 0/0  
Router(config-if)# | Enters interface configuration mode. You have entered interface configuration mode when the prompt changes to Router(config-if)#. |
| Step 5  | Router(config-if)# ip address 172.16.74.3  
255.255.255.0 | Assigns an IP address and subnet mask to the interface. |
| Step 6  | Router(config-if)# ipx network B005 | Configures routing protocols on the interface. You must have previously enabled these protocols as part of global configuration. In this example, IPX is being configured on the interface. |
Chapter 3    Configuring with the Command-Line Interface

Saving Configuration Changes

To prevent the loss of the Cisco VG224 configuration, save it to NVRAM:

<table>
<thead>
<tr>
<th>Command</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 7</strong></td>
<td>Router(config-if)# exit</td>
</tr>
<tr>
<td></td>
<td>Exits back to global configuration mode. Repeat Step 4 through Step 6 if your Cisco VG224 has more than one interface that you need to configure.</td>
</tr>
<tr>
<td><strong>Step 8</strong></td>
<td>Router(config-if)# Ctrl-z</td>
</tr>
<tr>
<td></td>
<td>When you finish configuring interfaces, returns to enable mode.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Command</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1</strong></td>
<td>Router&gt; enable</td>
</tr>
<tr>
<td></td>
<td>Enters enable mode. Enter the password. You have entered enable mode when the prompt changes to Router#.</td>
</tr>
<tr>
<td></td>
<td>Password: <em>password</em></td>
</tr>
<tr>
<td></td>
<td>Router#</td>
</tr>
<tr>
<td><strong>Step 2</strong></td>
<td>Router# copy running-config startup-config</td>
</tr>
<tr>
<td></td>
<td>Saves the configuration changes to NVRAM so that they are not lost during resets, power cycles, or power outages.</td>
</tr>
<tr>
<td><strong>Step 3</strong></td>
<td>Router(config-if)# Ctrl-z</td>
</tr>
<tr>
<td></td>
<td>Returns to enable mode.</td>
</tr>
<tr>
<td></td>
<td>Router#</td>
</tr>
<tr>
<td></td>
<td>%SYS-5-CONFIG_I: Configured from console by console</td>
</tr>
<tr>
<td></td>
<td>This message is normal and does not indicate an error.</td>
</tr>
</tbody>
</table>

Where to Go Next

At this point you can proceed to the following:

- The Cisco IOS software configuration guide and command reference publications for more advanced configuration topics. These publications are available on Cisco.com or on the Documentation CD-ROM, or you can order printed copies.
- *Cisco System Error Messages, Release 12.3(4)T*, and *Cisco Debug Command Reference, Release 12.3(4)T* provide troubleshooting information. For these and other documents, see *Obtaining Documentation, page x*. 