Using the setup Command

This chapter describes how to use the setup command facility to configure your Cisco VG224. The setup command facility prompts you to enter information needed to start a router functioning quickly. The facility steps you through a basic configuration, including LAN and WAN interfaces.

This chapter presents the following major topics:

If you prefer to configure the router manually or you wish to configure a module or interface that is not included in the setup command facility, proceed to "Chapter 3, "Configuring with the Command-Line Interface," for step-by-step instructions.

Before Starting Your Cisco VG224

Before you power on your Cisco VG224 and begin to use the setup command facility, make sure to follow these steps:

Step 1 Set up the hardware as described in the installation documents for your Cisco VG224.

Step 2 Configure your PC terminal emulation program for 9600 baud, 8 data bits, no parity, and 1 stop bit.

Step 3 Determine which network protocols you are supporting.

Step 4 Determine the addressing plan for each network protocol.

Using the setup Command

The setup command facility is displayed in your PC terminal emulation program window.

To create a basic configuration for your Cisco VG224, do the following:

* Complete the steps in "Configuring Global Parameters" section on page 2-2.
* Complete the steps in "Configuring Controller and Interface Parameters" section on page 2-5.
* Complete the steps in "Completing the Configuration" section on page 2-6.

Note If you make a mistake while using the setup command facility, you can exit and run the facility again. Press **Ctrl-C**, and type setup at the enable mode prompt (`Router#`).

Configuring Global Parameters

Step 1 Power on the Cisco VG224. The power switch is on the rear panel of the Cisco VG224, at the lower-right corner, near the power cord.

Messages begin to appear in your terminal emulation program window.

Caution *Do not press any keys on the keyboard until the messages stop*. Any keys pressed during this time are interpreted as the first command typed when the messages stop, which might cause the Cisco VG224 to power off and start over. It takes a few minutes for the messages to stop.

The messages look similar to the following:

Note Much of the following example is largely for a Cisco VG224. The messages vary, depending on the Cisco IOS software release, interface modules in place in your Cisco VG224, and feature set you select. In addition, the word "Router" is the default prompt, and may appear elsewhere; interpret this word as meaning "Cisco VG224." The screen displays in this section are for reference only and might not exactly reflect the messages on your console.

```
System Bootstrap, Version 12.3(20030210:192652) [INT-mcebu_sb.wk.0.3.2 102], DEVELOPMENT
SOFTWARE
Copyright (c) 1986-2003 by cisco Systems, Inc.

FPGA readonly version:0015001C
FPGA upgrade version :001A001E
Upgrade FPGA currently running
cvg224 processor with 131072 Kbytes of main memory
Main memory is configured to 64 bit mode with parity disabled


Upgrade ROMMON initialized
rommon 1 > dir slot0:
program load complete, entry point:0x80008000, size:0xa0e0
Directory of slot0:

2     9711556   -rw-    vg224-i6s-mz-swell_2.0.4.1
9486   10051540  -rw-    vg224-i6s-mz.pi3_dhcp
rommon 2 > b slot0:vg224-i6s-mz-swell_2.0.4.1
```

```
program load complete, entry point:0x80008000, size:0xa0e0

program load complete, entry point:0x8001f000, size:0x942e80
Self decompressing the image
:################################################################################
######################### [OK]

Smart Init is enabled
smart init is sizing iomem
  ID             MEMORY_REQ                TYPE
00045B          0X004A528C 24 Analog FXS's, 2 FE
                0X000F3BB0 public buffer pools
                0X00211000 public particle pools
TOTAL:          0X007A9E3C


If any of the above Memory Requirements are
"UNKNOWN", you may be using an unsupported
configuration or there is a software problem and
system operation may be compromised.
Rounded IOMEM up to:8Mb.
Using 12 percent iomem. [8Mb/64Mb]


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(c) of the Commercial Computer Software - Restricted
Rights clause at FAR sec. 52.227-19 and subparagraph
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Software clause at DFARS sec. 252.227-7013.


          cisco Systems, Inc.
          170 West Tasman Drive
          San Jose, California 95134-1706



Cisco Internetwork Operating System Software
IOS (tm) vg224 Software (vg224-I6S-M), Version 12.3(swell_2.0.4.1), CISCO DEVELOPMENT TEST
VERSION
Copyright (c) 1986-2003 by cisco Systems, Inc.
Compiled Tue 15-Jul-03 00:31 by lcheungb
Image text-base:0x6001F8F4, data-base:0x61044000


cisco VG224 (R527x) processor (revision 3.0) with 57344K/8192K bytes of memory.
Processor board ID FHK0720U00G
R527x CPU at 225Mhz, Implementation 40, Rev 3.1
Bridging software.
1 On-Board Twenty-Four FXS Analog Voice Module
2 FastEthernet/IEEE 802.3 interface(s)
DRAM configuration is 64 bits wide with parity disabled.
63K bytes of non-volatile configuration memory.
System fpga version is 230024
System readonly fpga version is 20001E
Option for system fpga is 'system'.
31360K bytes of ATA Slot0 CompactFlash (Read/Write)

System is running with system fpga version 230024 (upgrade)
Option set for fpga is 'system'.


Press RETURN to get started!

          --- System Configuration Dialog ---
```

```
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 '[]'.
```

Step 2   When the following message appears, enter **yes** to begin the initial configuration dialog:

```
Would you like to enter the initial configuration dialog? [yes/no]:
```

> ✎
>
> **Note**   If you answer **no** to this message, you are prompted to terminate AutoInstall. AutoInstall is a procedure that configures a new Cisco VG224 based on the configuration of an existing Cisco VG224.
>
>   If you terminate AutoInstall, you enter the Cisco IOS software CLI.

> ✎
>
> **Note**   The number of interfaces shown depends on the Cisco VG224.

Step 3   When the following message appears, press **Return** to see the current interface summary:

```
First, would you like to see the current interface summary? [yes]:

Any interface listed with OK? value "NO" does not have a valid configuration

Interface       IP-Address      OK? Method Status          Protocol
FastEthernet0/0 unassigned      NO  unset  up              down
```

Step 4   Enter a host name for the Cisco VG224:

```
Configuring global parameters:

  Enter host name [Router]: VG224
```

```
The enable secret is a password used to protect access to privileged EXEC and
configuration modes. This password, after entered, becomes encrypted in the configuration.
```

Step 5   Enter an enable secret password. This password is encrypted (more secure) and cannot be seen when viewing the configuration.

```
    Enter enable secret: xxxx
```

```
The enable password is used when you do not specify an enable secret password, with some
older software versions, and some boot images.
```

Step 6   Enter an enable password that is different from the enable secret password. This password is *not* encrypted (less secure) and can be seen when viewing the configuration.

```
    Enter enable password: guessme
```

```
The virtual terminal password is used to protect access to the router over a network
interface.
```

Step 7   Enter the virtual terminal password, which prevents unauthenticated access to the router through ports other than the console port:

```
    Enter virtual terminal password: guessagain
```

Step 8   Respond to the following prompts as appropriate for your network:

```
Configure SNMP Network Management? [yes]:
```

```
        Community string [public]:
Configure LAT? [no]:
Configure IP? [yes]:
    Configure IGRP routing? [yes]:
      Your IGRP autonomous system number [1]: 1
```

> **Note** If you answer **no** to IGRP, you are prompted to configure RIP.

```
Configure bridging? [no]:
```

Step 9 (Optional) Configure CHAP:

```
All users dialing in through the PRI will need to be
  authenticated using CHAP. The username and password are
  case sensitive.
  Do you want to enter username and passwords for PPP authentication ? [no]:
```

Step 10 Configure the ISDN switch type for PRI.

```
The following ISDN switch types are available:
        [0] none............If you do not want to configure ISDN
        [1] primary-4ess....AT&T 4ESS switch type for US and Canada
        [2] primary-5ess....AT&T 5ESS switch type for US and Canada
        [3] primary-dms100..Northern Telecom switch type for US and Canada
        [4] primary-net5....European switch type for NET5
        [5] primary-ni......National ISDN Switch type for the U.S
        [6] primary-ntt.....Japan switch type
        [7] primary-qsig....QSIG switch type
        [8] primary-ts014...Australian switch type
  Choose ISDN PRI Switch Type [2]:
```

> **Note** BRI is not currently supported.

Configuring Controller and Interface Parameters

From this point on in the setup process, the prompts you see vary depending on the interface cards installed in your Cisco VG224. The following sections provide examples of the setup steps for card. Refer to the sections appropriate to your Cisco VG224.

Configuration examples include the following:

- Configuring Fast Ethernet and Serial Interface Parameters, page 2-5
- Configuring Fast Ethernet and Serial Interface Parameters, page 2-5

When you complete the setup steps for your interface modules, go to Completing the Configuration, page 2-6 for directions on saving your configuration.

Configuring Fast Ethernet and Serial Interface Parameters

This section illustrates the following:

• Fast Ethernet Interface Configuration

Fast Ethernet Interface Configuration

This section contains a sample configuration for the Fast Ethernet interface. Enter the values appropriate for your Cisco VG224 and network. The messages you see may vary.

```
Do you want to configure FastEthernet0/0 interface [yes]:
 Use the 100 Base-TX (RJ-45) connector? [yes]:
 Operate in full-duplex mode? [no]:
 Configure IP on this interface? [no]: yes
 IP address for this interface: 6.0.0.1
 Number of bits in subnet field [0]:
 Class A network is 6.0.0.0, 0 subnet bits, mask is /8
Configure IPX on this interface? [yes]:
    IPX network number [1]:
    Need to select encapsulation type
            [0] sap (IEEE 802.2)
            [1] snap (IEEE 802.2 SNAP)
            [2] arpa (Ethernet_II)
            [3] novell-ether (Novell Ethernet_802.3)
    Enter the encapsulation type [2]:
```

Completing the Configuration

When you have provided all the information prompted for by the setup command facility, the configuration appears.

Note   For sample configurations, see Appendix A, "Cisco VG224 Configuration Example."

To complete your configuration, do the following:

Step 1   A setup command facility prompt asks if you want to save this configuration, with the following options:

```
[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 answer **0**, the configuration information you entered is *not* saved, and you return to the Cisco VG224 enable prompt (Router#). Type **setup** to return to the System Configuration Dialog.

If you answer **1**, you return to setup without saving the configuration.

If you answer **2**, the configuration is saved and you are returned to the user EXEC prompt (Router>).

Step 2   When the messages stop appearing on your screen, press **Return** to get the Router> prompt.

Step 3   The Router> prompt indicates that you are now at the command-line interface (CLI) and you have just completed a basic Cisco VG224 configuration. However, this is *not* a complete configuration. At this point you have two choices:

• Run the setup command facility again and create another configuration. Enter the following:

```
Router> enable
Password: password
Router# setup
```

- Modify the existing configuration or configure additional features with the CLI as described in Chapter 3, "Configuring with the Command-Line Interface."

Where to Go Next

At this point you can proceed to the following:

- "Chapter 3, "Configuring with the Command-Line Interface," to learn how to use the CLI to configure additional features.

- The Cisco IOS software configuration guide and command reference publications for more advanced configuration topics. These publications are available on Cisco.com and the Documentation CD-ROM, or you can order printed copies. For more information, refer to "Obtaining Documentation" section on page x.