



CHAPTER 2

Installing Cisco NAC Guest Server

This chapter contains the following sections:

- [Connecting the Cisco NAC Guest Server](#)
- [Command Line Configuration](#)
- [Re-Imaging the Appliance](#)

Connecting the Cisco NAC Guest Server

The Cisco NAC Guest Server runs on the following Cisco NAC Appliance hardware platform and comes preloaded with the Guest Server system image.

- NAC-3315
- NAC-3310



Note

Next generation Cisco NAC Appliance platform (NAC-3315) supports fresh installation of only Release 2.0.2 and later.



Note

The support for NAC-3310 has been dropped from NAC Guest Server Release 2.0.5.



Note

Releases 1.x.x can be installed only on Cisco NAC Appliance platform, NAC-3310.

When you receive the Guest Server, perform the initial configuration described in [Command Line Configuration, page 2-4](#). If you need to perform CD installation to re-image the appliance, refer to [Re-Imaging the Appliance, page 2-8](#) for instructions.

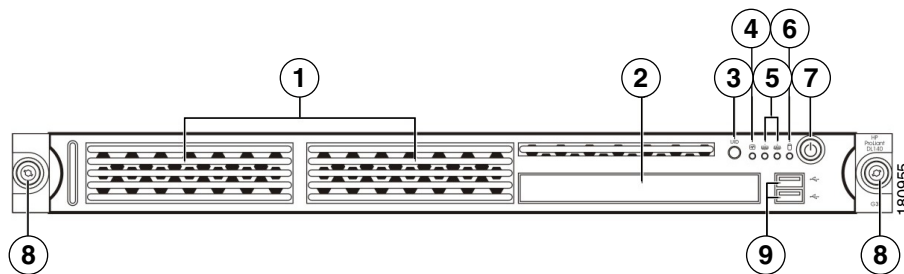
To perform initial configuration, you need to connect to your appliance and access its command line, as described below.

Step 1 You can access the Cisco NAC Guest Server command line in one of the following methods:

- a. Connect a monitor and keyboard directly to the machine via the keyboard/video monitor connectors on the back panel of the machine as shown in [Figure 2-2](#) for NAC-3310 and [Figure 2-4](#) for NAC-3315.

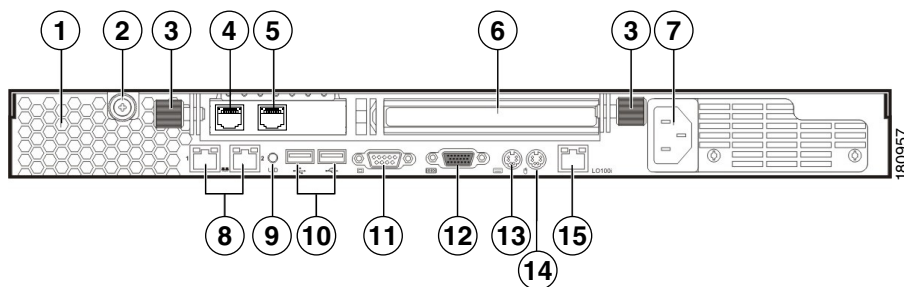
- b. Connect a null modem serial cable from a workstation (PC/laptop) to the serial port on the appliance. Open a serial connection on the workstation using terminal emulation software (such as HyperTerminal or SecureCRT) with settings set to 9600 baud, 8 data bits, no parity, 1 stop bit, no flow control.
- Step 2** Connect a straight-through Category 5 Ethernet cable to the eth0 (NIC1) 10/100/1000 Ethernet port on the back panel of the appliance and to your local area network.
- Step 3** Connect the AC power cord to the back panel of the appliance and to a grounded AC outlet, and power on the appliance as shown in [Figure 2-1](#) for NAC-3310 and [Figure 2-3](#) for NAC-3315.
- Step 4** Proceed to the instructions in [Command Line Configuration, page 2-4](#).

Figure 2-1 Cisco NAC Guest Server Front Panel (NAC-3310)



1	Hard disk drive (HDD) bay	6	HDD activity LED indicator (green)
2	CD-ROM/DVD drive	7	Power button with LED indicator (bicolor: green/amber)
3	UID (Unit identification) button with LED indicator (blue)	8	Thumbscrews for the front bezel
4	System health LED indicator (amber)	9	Front USB ports
5	Activity/link status LED indicators for NIC 1 (eth0) and NIC2 (eth1) (green)		

Figure 2-2 Cisco NAC Guest Server Rear Panel (NAC-3310)



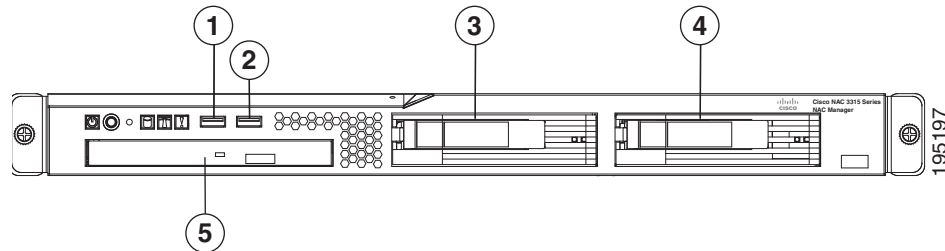
1	Ventilation holes	9	UID button with LED indicator (blue)
2	Thumbscrew for the top cover	10	Rear USB ports (black)
3	Thumbscrews for the PCI riser board assembly	11	Video port (blue)

4	NIC 3 (eth2) and NIC 4 (eth3) PCI Express GbE LAN (RJ-45) ports (Intel)	12	Serial port
		13	PS/2 keyboard port (purple)
6	Standard height/full-length PCI Express x16/PCI-X riser board slot cover	14	PS/2 mouse port (green)
		15	10/100 Mbps iLO LAN port for IPMI management (RJ-45)
7	Power supply cable socket		
8	NIC 1 (eth0) and NIC 2 (eth1) integrated GbE LAN (RJ-45) ports (Broadcom)		

**Note**

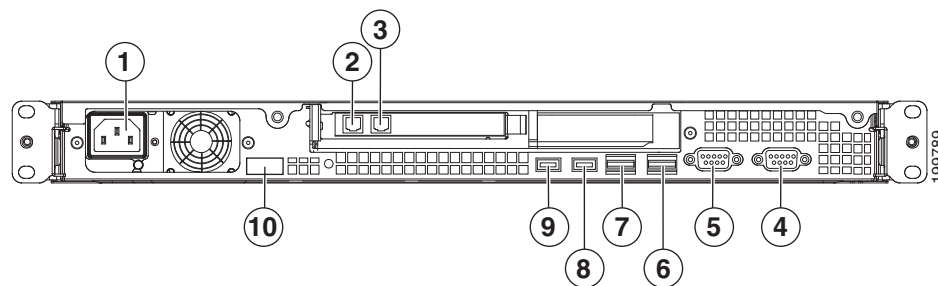
The three LAN ports each have their own LED indicators for activity/link status and network speed.

Figure 2-3 Cisco NAC Guest Server Front Panel (NAC-3315)



1	Front USB port 1	4	Hard disk drive (HDD) bay 2
2	Front USB port 2	5	CD-ROM/DVD drive
3	Hard disk drive (HDD) bay 0		

Figure 2-4 Cisco NAC Guest Server Rear Panel (NAC-3315)



1	Power supply cable socket	6	NIC 2 (eth1) GbE interface
2	NIC 3 (eth2) add-on card	7	NIC 1 (eth0) GbE interface
3	NIC 4 (eth3) add-on card	8	Rear USB port 4
4	Serial port	9	Rear USB port 3
5	Video port	10	Console port

Command Line Configuration

To configure the Cisco NAC Guest Server appliance, perform the following steps:

- [Configure IP Address and Default Gateway, page 2-5](#) so that the appliance can be accessed on the network.
- [Change Root Password, page 2-7](#).

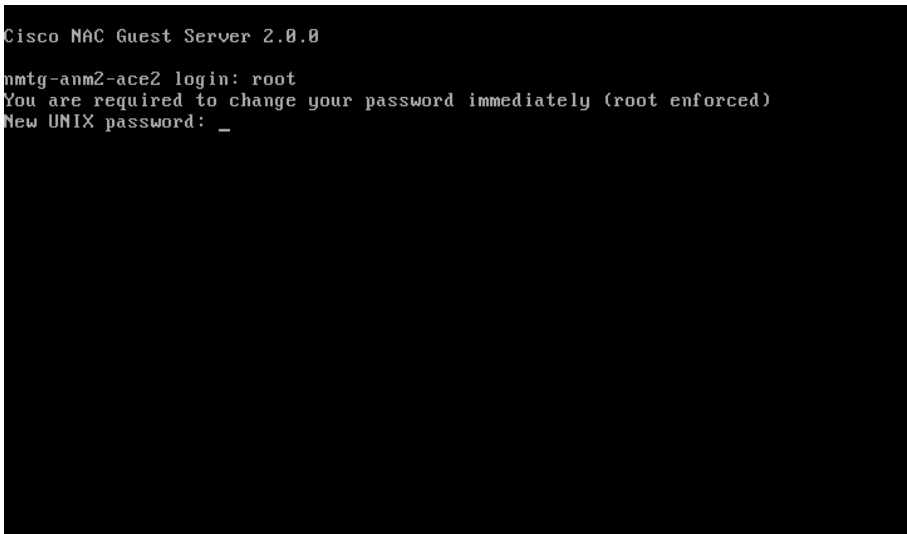
Initial Log In

When logging in for the first time after initial installation, or after re-imaging the appliance, you need to set up a password for the root user.

- Step 1** Connect to the command line interface using either keyboard and monitor connection to the appliance, or serial console connection.
- Step 2** Login as the root user. The login user name for the console is **root** as shown in [Figure 2-5](#).

Figure 2-5 Login as Root

```
Cisco NAC Guest Server 2.0.0
mmtg-anm2-ace2 login: root
You are required to change your password immediately (root enforced)
New UNIX password: _
```



- Step 3** Change the password at the root prompt. Type a password and then confirm the password by re-entering it at the prompt, as shown in [Figure 2-6](#).



Note Cisco recommends using a strong password that is not based on a dictionary word, has a minimum of 6 characters, and contains at least 5 different characters.

Figure 2-6 Changing Root Password

```

Cisco NAC Guest Server 2.0.0

nmtg-anm2-ace2 login: root
You are required to change your password immediately (root enforced)
New UNIX password:
Retype new UNIX password:
*****
*
* To configure the network settings please enter *
*
* system-config-network <ENTER> *
*
* when changed enter *
*
* reboot <ENTER> *
*
*****
[root@nmtg-anm2-ace2 ~]# _

```

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Configure IP Address and Default Gateway

To allow the appliance to be accessed on the network, you need to configure the IP address and default gateway for the first interface on the appliance (eth0 or NIC1). To configure these details, perform the following steps.

- Step 1** Using either a keyboard and monitor connection to the appliance, or serial console connection, authenticate to the command line interface, as shown in [Figure 2-7](#). The user name for the console is **root** and the password is the one you configured as described in [Initial Log In, page 2-4](#).

Figure 2-7 Authenticating to the Console

```

Cisco NAC Guest Server 2.0.0

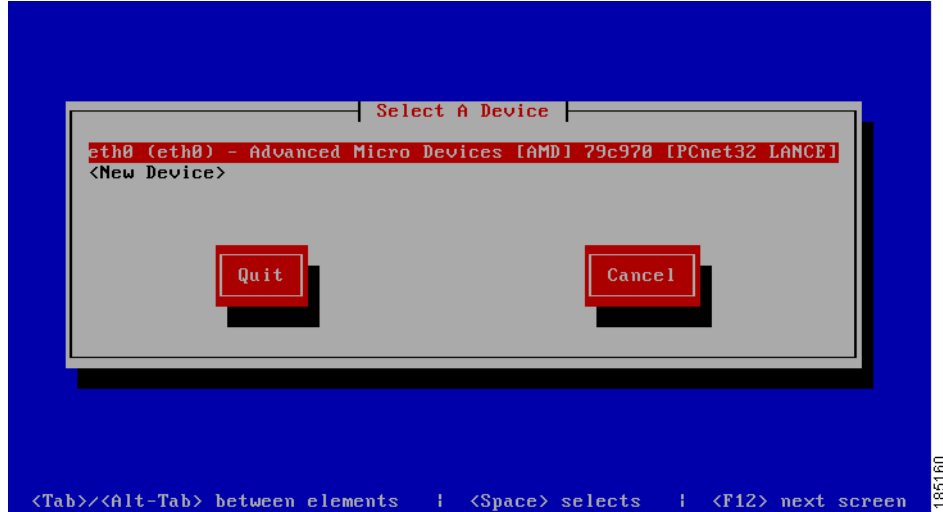
nmtg-anm2-ace2 login: root
Password:
Last login: Mon Oct 27 09:53:50 on tty1
*****
*
* To configure the network settings please enter *
*
* system-config-network <ENTER> *
*
* when changed enter *
*
* reboot <ENTER> *
*
*****
[root@nmtg-anm2-ace2 ~]#
[root@nmtg-anm2-ace2 ~]# _

```

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- Step 2** To configure the network settings, type the command **system-config-network** and press **<Enter>**. The **Select A Device** menu appears as shown in [Figure 2-8](#).

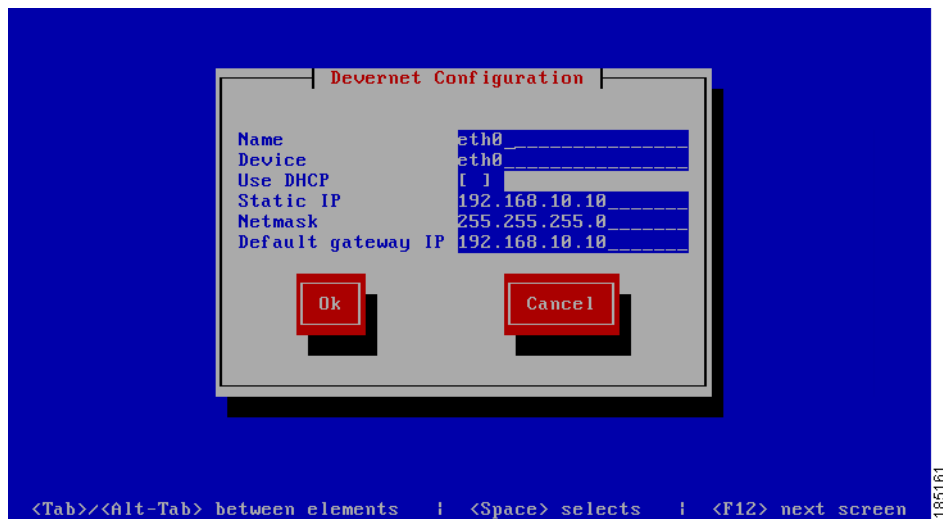
Figure 2-8 Choose eth0 Interface



Step 3 Select the eth0 interface from the list using the up and down arrow keys and press **<Enter>**.

Step 4 You can now enter all the correct network settings for the appliance as shown in Figure 2-9.

Figure 2-9 Change Network Configuration Details



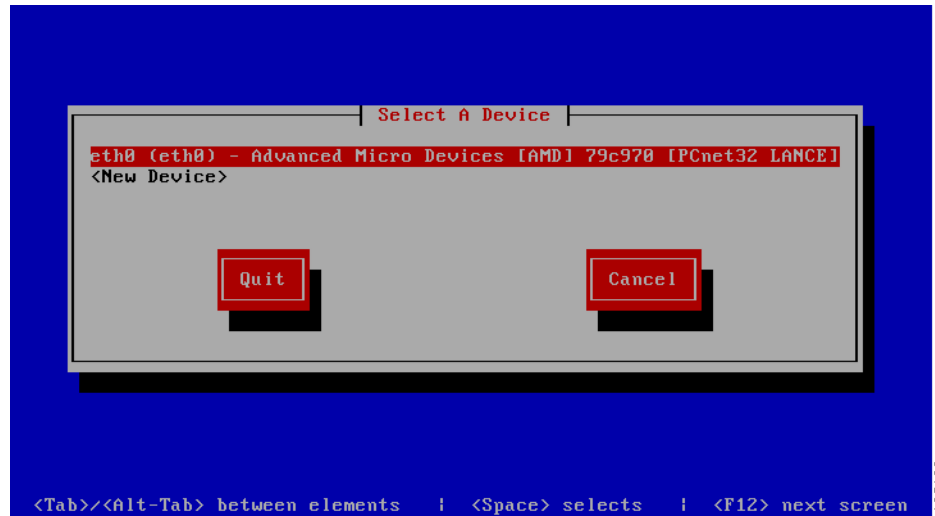
Type the following information:

- **Static IP**—The IP Address that you want to assign to the Cisco NAC Guest Server.
- **Netmask**—The corresponding subnet mask.
- **Default gateway IP**—The default gateway for the network.

You can use the Tab key, Arrow keys or **<Enter>** to move between fields. When finished, move to the **OK** button and press **<Enter>**.

Step 5 Exit the system-config-network by selecting Quit from the **Select A Device** as shown in Figure 2-10.

Figure 2-10 Quit the Utility



- Step 6** At the command line, either reboot the appliance by typing **reboot** and pressing **<Enter>**, or follow the instructions to [Change Root Password](#), page 2-7 before entering **reboot**.

Change Root Password



Note Cisco recommends using a strong password that is not based on a dictionary word, has a minimum of 6 characters, and contains at least 5 different characters.

- Step 1** From the command line, enter the command **passwd** and press **<Enter>**.
- Step 2** Enter the new password and press **<Enter>**.
- Step 3** Repeat the password and press **<Enter>**.

Next Steps

Continue to [Chapter 3, “System Setup”](#) to access and configure the admin console.

Re-Imaging the Appliance

When the Cisco NAC Guest Server is shipped, a default version of the system image is already preloaded on the unit, so imaging is not required. If you need to re-image the appliance to factory defaults, you can download the system image ISO from Cisco Secure Software Downloads on Cisco.com and burn this ISO file to a blank CD-ROM. Once you have the system image on a bootable CD, you can perform the following steps to install the system image onto the appliance.

Once you have the system image on a bootable CD, you can perform the following steps to install the system image onto the appliance. Refer to the latest version of the [Release Notes for Cisco NAC Guest Server, Release 2.0.5](#) for additional details.

**Caution**

Imaging the appliance deletes all data on the appliance. There is no method of recovery of data from the Guest Server after imaging has started. Make sure to backup any data that you need before starting this process.

-
- Step 1** Download the ISO image file from the Cisco NAC Guest Server download page. Log in with your Cisco.com user credentials to the Cisco Software Download Site at <http://www.cisco.com/cisco/web/download/index.html> and navigate to **Security >Network Admission Control > Cisco NAC Guest Server > Cisco NAC Guest Server 2.0**.
- Step 2** Burn this ISO file to a blank CD-ROM to create a bootable disk.
- Step 3** Decide whether to perform the installation using a keyboard and monitor connection or over a serial console.
- Connect either a keyboard and monitor to the back of the unit, or
 - Attach a null modem cable to the serial port on the back of the appliance. From the computer to which the serial cable is attached, run a terminal emulation program with settings set to: 9600 baud, 8 data bits, no parity, 1 stop bit, no flow control.
- Step 4** Once you have connected to the appliance, insert the bootable CD into the CD-ROM drive of the appliance.
- Step 5** Power on the appliance. If the appliance is already started, switch it off and then switch it on again.
- Step 6** The appliance should now boot from the CD-ROM drive and the initial install is displayed as shown in [Figure 2-11](#).

**Caution**

If your Cisco NAC Guest Server does not read the software on the CD ROM drive and instead attempts to boot from the hard disk, you need to change the appliance settings to boot from CD ROM as described in [Configuring Boot Settings on NAC-3310 / NAC-3315 Based Appliances, page 2-11](#).

Figure 2-11 Initial Install

```

Welcome to the Cisco NAC Guest Server 2.0 Installation Process
-----
- To install using keyboard/monitor enter 'install' then <ENTER>.
- To install using serial console enter 'installserial' and press <ENTER>.
- To upgrade using keyboard/monitor enter 'upgrade' and press <ENTER>.
- To upgrade using serial console enter 'upgradeserial' and press <ENTER>.

*****
*
* WARNING: Running "install" will remove all existing information from
* the hard disks in the computer. Please make sure there is nothing
* that you need from the hard disk before proceeding. There is no
* way of retrieving data after this process has run.
*
* UPGRADE: Running "upgrade" will upgrade an existing 1.x installation to 2.0
* Please perform a backup of the appliance through the administration
* interface before proceeding.
*
*****
boot: _

```

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- Step 7** At the Initial Installation, run the installation according to the method you are connected to the appliance:
- If directly connected using a keyboard and monitor, type `install` and press `<Enter>`.
 - If you are using a serial connection, type `installserial` at the boot prompt, then press `<Enter>`.
- Step 8** The system image is automatically installed on the hard disk as shown in [Figure 2-12](#).

Figure 2-12 Transferring Install Image

```

Welcome to Cisco NAC Guest Server

Copying File
Transferring install image to hard drive...

<Tab>/<Alt-Tab> between elements | <Space> selects | <F12> next screen

```

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- Step 9** When the install image is successfully transferred, the system reboots automatically as shown in [Figure 2-13](#).

Figure 2-13 Appliance Reboots

```

sending termination signals...done
sending kill signals...done
disabling swap...
/tmp/hda3
unmounting filesystems...
/mnt/runtime done
disabling /dev/loop0
/proc done
/dev/pts done
/sys done
/tmp/ramfs done
/selinux done
/mnt/sysimage/boot done
/mnt/sysimage/sys done
/mnt/sysimage/proc/sys/fs/binfmt_misc done
/mnt/sysimage/proc done
/mnt/sysimage/selinux done
/mnt/sysimage/dev done
/mnt/sysimage done
rebooting system

```

Step 10 The CD-ROM automatically ejects from the appliance.



Note Remove the CD and store it safely so that the appliance does not accidentally reboot from it at a later time.

Step 11 The Cisco NAC Guest Server appliance boots and runs the final setup of the image automatically. The imaging process is complete when the login is displayed as shown in [Figure 2-14](#).

Figure 2-14 Imaging Complete

```

Cisco NAC Guest Server 2.0.0
mmtg-anm2-ace2 login: _

```

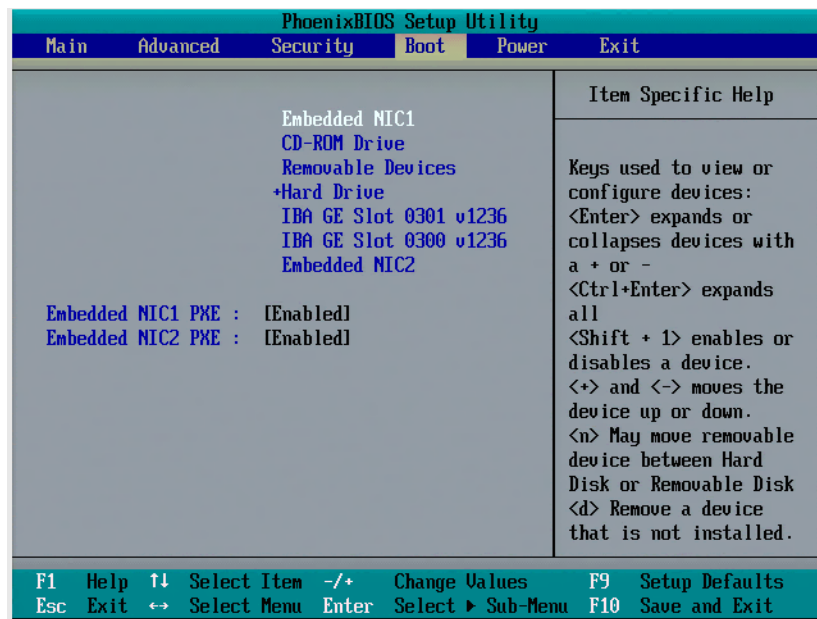
Step 12 Continue to the instructions in [Initial Log In, page 2-4](#) to complete the installation.

Configuring Boot Settings on NAC-3310 / NAC-3315 Based Appliances

If your appliance does not read the software on the CD ROM drive, and instead attempts to boot from the hard disk, use the following steps to configure the appliance to boot from CD ROM before attempting to re-image or upgrade the Cisco NAC Guest Server from CD.

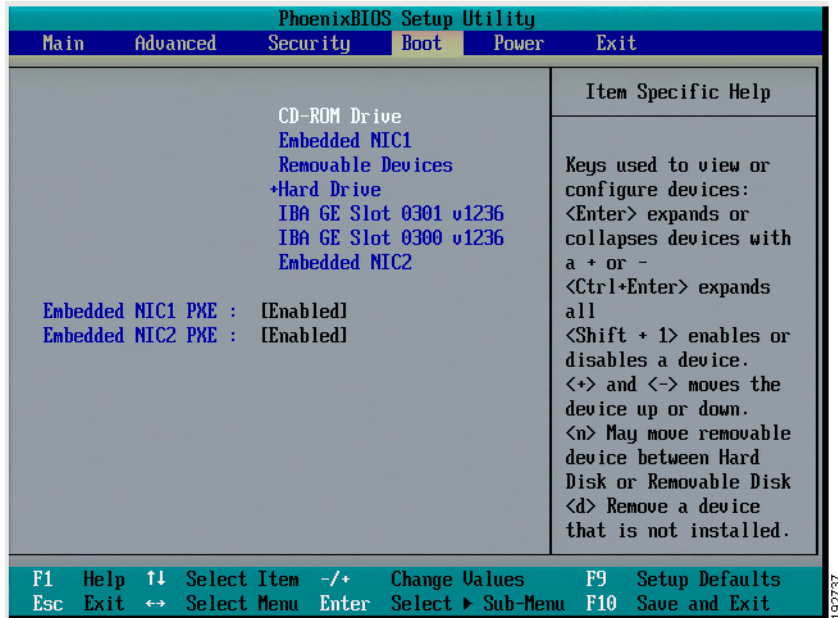
- Step 1** Press the F10 key while the system is booting.
- Step 2** Go to the Boot menu as shown in [Figure 2-15](#).

Figure 2-15 Boot Menu



- Step 3** Change the setting to boot from CD ROM by selecting **CD-ROM Drive** from the menu and pressing the plus (+) key as shown in [Figure 2-16](#).

Figure 2-16 Boot from CD-ROM Drive



Step 4 Press the **F10** key to Save and Exit.