C H A P T E R 1

Preparing to Install CiscoWorks Blue Maps

Before you install, configure, and validate CiscoWorks Blue Maps, make sure you have the following:

- Root user authority
- Hardware prerequisites for CiscoWorks Blue Maps
- Software prerequisites for CiscoWorks Blue Maps

Becoming the Root User

The user named *root* can perform functions restricted from normal users. To install and configure CiscoWorks Blue Maps, you must know the root user's password and log in to your system as the root user or become the root user by use of the **su** command.

Caution If you are a relatively inexperienced AIX user, limit your activities as the root user to the tasks described in this publication. As the root user, you can adversely affect your operating environment if you are unaware of the effects of the commands you use.

If you are not logged in, enter the following commands to log in as the root user:

```
login: root
Password: rootpassword
hostname#
```

If you are already logged in, but not as the root user, enter the following to change your login to root:

```
hostname% su
Password: rootpassword
hostname#
```

The prompt changes to a pound sign (#), indicating that you are logged in as the root user:

Hardware and Software Requirements

This section lists the workstation requirements and Cisco Internetwork Operating System (Cisco IOS) requirements for CiscoWorks Blue Maps.

Workstation Requirements

CiscoWorks Blue Maps can run on:

- IBM RISC System/6000 workstation, Model 370 or 37T or higher (any with Power Architecture), with AIX Version 3, Release 2.5, or Version 4, Release 1; plus NetView for AIX Version 3.1 or 4.1.

NetView for AIX is optional but recommended.

All platforms require:

- Color monitor

- PostScript-compatible printer (for printing window images)

- CD-ROM drive on the host system, or CD-ROM drive on an accessible remote host

- System software—X Window System Version 11, Release 5; Motif Version 1, Release 2

- Hard disk space—5 MB in the root partition, 35 MB in the */usr* filesystem, plus 300 MB in the filesystem where your Sybase database management system is installed

- RAM size—192 MB minimum (256 MB recommended)

- Swap space size—128 MB or more

Cisco Internetwork Operating System (Cisco IOS) Requirements

To be manageable by CiscoWorks Blue Maps applications, all routers must be running:

- for APPN—Cisco IOS Release 11.0(5.3) and above, or Cisco IOS Release 11.1(1.1)

- for RSRB—Cisco IOS Release 11.0 and above

- for DLSw—Cisco IOS Release 11.1 and above

Verifying Workstation Requirements

This section describes how to verify hardware and software requirements on an AIX system.

Verifying AIX Version

To ascertain the operating system level, log in as the root user and enter

```
hostname% oslevel
```

Output similar to the following appears:

```
Processing.....Please Wait.
<>4140
```

This output indicates Version 4, Release 1.4.

Verifying AIX System Software

To ascertain the version of NetView for AIX, log in as the root user and enter:

```
hostname% lslpp -m nv6000.base.obj
```

Output similar to the following appears:

```
Processing.....Please Wait.
nv6000.base.obj 3.1.0.0
    No Maintenance Level Applied.
```

This output indicates Version 3.1

Verifying Hard Disk Space on AIX

To find out how much disk space is available on your system, enter the following at the command prompt:

```
hostname% df -I
```

Output similar to the following appears:

```
Filesystem     Total KB     used     free %used Mounted on
/dev/hd4          16384    10008     6376   61% /
/dev/hd9var       32768     3756    29012   11% /var
/dev/hd2        1003520   871324   132196   86% /usr
/dev/hd3          16384      732    15652    4% /tmp
/dev/hd1           4096      240     3856    5% /home
/dev/hd10         16384      544    15840    3% /usr/sys
/dev/lv00       2002944   586868  1416076   29% /disk
```

The amount of disk space available in each filesystem is displayed. Note that 1,000 KB equal 1 MB. If you do not have sufficient space in the filesystem mounted on the */usr* directory, you must create a filesystem mounted on the */usr/cw-blue* directory.

> **Caution** CiscoWorks Blue Maps can be installed only in the */usr/cw-blue* directory. If you create a filesystem, its mount point must be */usr/cw-blue*.

The following overview summarizes the steps you follow to create a filesystem:

Step 1 Create an empty filesystem.

Step 2 Verify the integrity of the empty filesystem.

Step 3 Create a mount point directory.

Step 4 Configure the filesystem table and edit the */etc/filesystems* file.

Step 5 Mount the new filesystem.

For more information, refer to your IBM documentation or the manual (man) pages for the **mkfs**, **fsck**, **mkdir**, and **mount** commands. If you are unfamiliar with repartitioning disks or creating filesystems, contact a knowledgeable system administrator.

Verifying RAM Size on AIX

To find out how much RAM is available on your system, make sure you are logged in as the root user. (Refer to the section "Becoming the Root User" in this chapter.) Enter the following command at the AIX prompt:

```
hostname# lscfg | grep mem
```

Output similar to the following appears:

```
+ mem0              00-0B              32 MB Memory Card
+ mem1              00-0C              32 MB Memory Card
```

If your workstation does not have at least 64 MB of RAM, upgrade its memory.

Verifying Swap Space Size on AIX

Swap space requirements depend on such factors as the applications you run, the number of applications you run concurrently, and the number of network devices you manage with CiscoWorks Blue Maps. As a result, you might have to increase the swap space beyond the general minimum requirement.

To find out how much swap space is available on your system, make sure you are logged in as the root user. (Refer to the section "Becoming the Root User" in this chapter.) Enter the following command at the prompt:

```
hostname# lsps -a
```

Output similar to the following appears:

```
Page Space  Physical Volume  Volume Group   Size   %Used  Active  Auto
Type
paging00    hdisk1           external       160MB   17    yes     no    lv
hd6         hdisk0           rootvg          80MB   41    yes     yes   lv
```

Add the numbers in the *Size* column to determine your system's total swap space. In the previous example, the system's swap space is 240 MB.

If the swap space on your system is not sufficient, expand the swap space by following the instructions in your IBM documentation.