

Installing and Configuring CiscoWorks Blue Maps on AIX

You use the System Management Interface Tool (SMIT), an IBM AIX system administration facility, to install and configure CiscoWorks Blue Maps from a local or remote CD-ROM drive. The example installation and configuration process described in this chapter uses the graphical user interface (GUI) version of SMIT; you can use the ASCII version called SMITTY, if you prefer. Refer to your IBM documentation for more information about SMIT and SMITTY.

In the process of installing and configuring CiscoWorks Blue Maps on AIX, you do the following:

- Use SMIT to mount the CiscoWorks Blue Maps CD-ROM on the local file system from a local or remote CD-ROM drive.
- Use SMIT to install CiscoWorks Blue Maps from CD-ROM.
- Use SMIT to configure the Sybase database on which all CiscoWorks Blue Maps applications depend.
- Unmount the CD-ROM and remove log files.

This chapter also contains sections on:

- De-Installing CiscoWorks Blue Maps
- CiscoWorks Blue Environment Variables

Note Refer to the *CiscoWorks Blue Maps on AIX Release Note* for cautionary statements about the installation and configuration process.

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 using 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:

Mounting from a Local or Remote CD-ROM Drive

You can install CiscoWorks Blue Maps from a CD-ROM drive attached to your system or from a CD-ROM drive connected to a remote system. You must first use SMIT to mount the local or remote device on the local AIX system.



Caution Avoid exposing the CiscoWorks Blue Maps CD-ROM to direct sunlight because it might harm the contents of the disk.

Mounting from a Local CD-ROM Drive

To mount the CD-ROM on the file system from a local CD-ROM drive, use SMIT to perform the following steps:

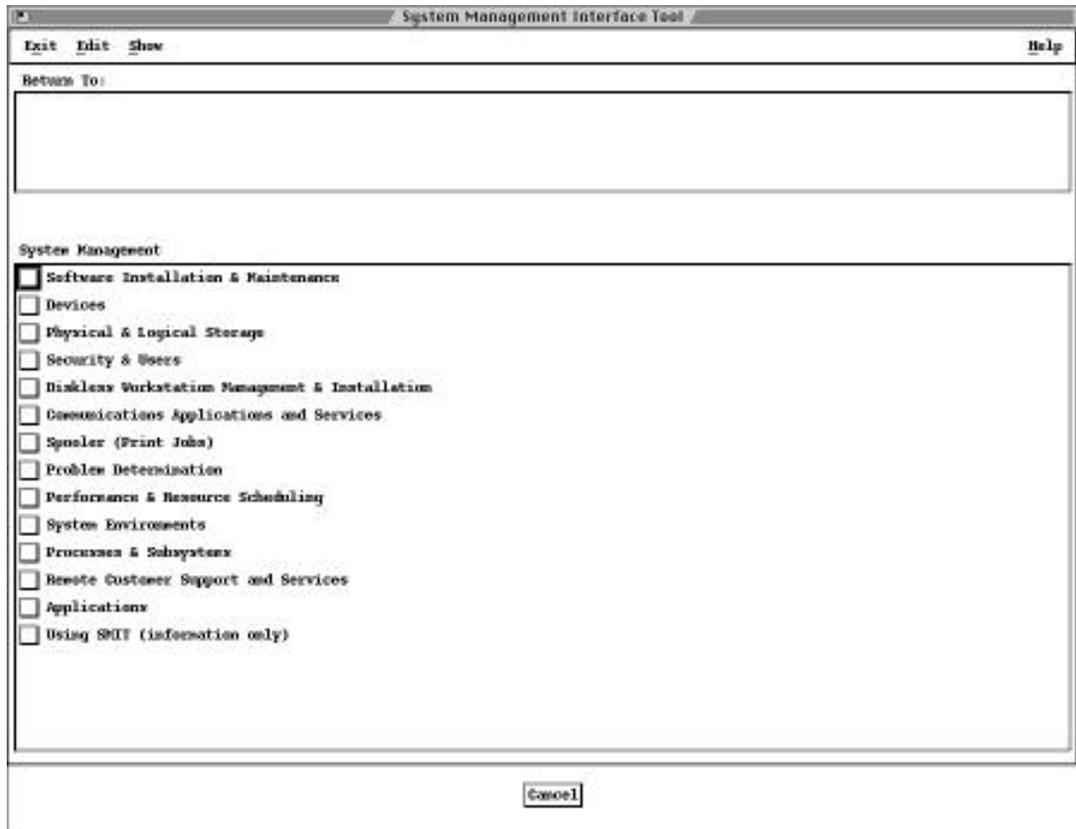
- Step 1** Place the CD-ROM into its caddy and insert it into the CD-ROM drive.
- Step 2** Log in as the root user. For details, see the section “Becoming the Root User.”
- Step 3** Start SMIT by entering the following at the command prompt:

```
hostname# smit
```

The main SMIT menu appears, as shown in Figure 2-1.

Mounting from a Local or Remote CD-ROM Drive

Figure 2-1 Main SMIT Menu



Step 4 From the System Management menu, click **Physical & Logical Storage**.

Step 5 Click **File Systems**.

Step 6 Click **Add / Change / Show / Delete File Systems**.

Step 7 Click **CDROM File Systems**.

Step 8 Click **Add a CDROM File System**.

Mounting from a Local or Remote CD-ROM Drive

- Step 9** Click the “DEVICE name” **List** button and select the device name (such as */dev/cd0*) from the list that appears.
- Step 10** Enter the name of a mount point directory (such as */cdrom*) in the “Mount point” field.
- Step 11** Click **Do** and read the output.
- If you have already performed this procedure, or if another device is already mounted on the mount point, the process will fail.
- Step 12** Click **Done**.
- Step 13** Terminate SMIT by pressing **F12** or by selecting **Exit SMIT** on the Exit menu.
- Step 14** Enter the following at the command prompt:
- ```
hostname# smit mountfs
```
- Step 15** Click the “FILE SYSTEM name” **List** button and select a device name (such as */dev/cd0*) from the list that appears.
- Step 16** In the “DIRECTORY over which to mount” field, enter the name of a mount point directory (such as */cdrom*).
- Step 17** Click the “TYPE of file system” **List** button and select **cdrfs** as the file system type.
- Step 18** Set the Mount as Read-Only System field to **yes**.
- Step 19** Click **Do**, read the output, and then click **Done**.
- Step 20** Terminate SMIT by pressing **F12** or by selecting **Exit SMIT** on the Exit menu.

## Mounting from a Remote CD-ROM Drive

Install software from a device on a remote system, you must have remote access rights to that system. Specifically, the *.rhosts* file (in the root directory) on the remote system must contain the local host name and your username to access the remote system. For more information, refer to the manual (man) page for *.rhosts*.

Installation of CiscoWorks Blue Maps does not require any disk space on the remote system. The software is copied across the network to the local workstation.

## Mounting from a Local or Remote CD-ROM Drive

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### On the Remote System

To mount the CD-ROM on the local file system from a remote CD-ROM drive, perform the following steps on the remote system:

**Step 1** Place the CD-ROM into its caddy and insert it into the CD-ROM drive.

**Step 2** Log in as the root user. For details, see the section “Becoming the Root User.”

**Step 3** Start SMIT by entering the following at the command prompt:

```
hostname# smit
```

The main SMIT menu appears, as shown in Figure 2-1.

**Step 4** From the System Management list, click **Physical & Logical Storage**.

**Step 5** Click **File Systems**.

**Step 6** Click **Add/Change/Show Delete File Systems**.

**Step 7** Click **CDROM File Systems**.

**Step 8** Click **Add a CDROM File System**.

**Step 9** Click the “DEVICE name” **List** button and select the device name (such as */dev/cd0*) from the list that appears.

**Step 10** Enter the name of a mount point directory (such as */cdrom*) in the “Mount point” field.

**Step 11** Click **Do** and read the output.

If you have already performed this procedure, or if another device is already mounted on the mount point, the process will fail.

**Step 12** Click **Done**.

**Step 13** Terminate SMIT by pressing **F12** or by selecting **Exit SMIT** on the Exit menu.

**Step 14** Enter the following at the command prompt:

```
hostname# smit mountfs
```

**Step 15** Click the “FILE SYSTEM name” **List** button and select a device name (such as */dev/cd0*) from the list that appears.

- Step 16** In the “DIRECTORY over which to mount” field, enter the name of a mount point directory (such as */cdrom*).
- Step 17** Click the “TYPE of file system” **List** button and select **cdrfs** as the file system type.
- Step 18** Set the Mount as Read-Only System field to **yes**.
- Step 19** Click **Do** and read the output, and then click **Done**.
- Step 20** Terminate SMIT by pressing **F12** or by selecting **Exit SMIT** on the Exit menu.
- Step 21** Enter the following at the command prompt:
- ```
hostname# smit mknfsexp
```
- Step 22** In the “PATHNAME of directory to export” field, enter the pathname of the directory (such as */cdrom*).
- Step 23** Use the arrow keys to change the Mode to Export Directory field to **read-only**.
- Step 24** Enter the appropriate information, if necessary, into any of the other fields.
- Step 25** Click **Do**, read the output, and then click **Done**.
- Step 26** Terminate SMIT by pressing **F12** or by selecting **Exit SMIT** on the Exit menu.

On the Local System

Perform the following steps on the local system:

- Step 1** Log in as the root user. For details, see the section “Becoming the Root User.”
- Step 2** Enter the following at the command prompt:

```
hostname# mount remote_hostname:remote_exported_filesystem_name  
local_mount_point
```

For example, to mount a remote file system named *zen*, enter the following at the prompt:

```
hostname# mount zen:/cdrom /cdrom
```

The CD-ROM is ready for installation of software.

Installing CiscoWorks Blue Maps

Installation is the transfer of software from the distribution medium to the AIX system.

Note Before performing these procedures, a local or remote CD-ROM must be mounted as described earlier.



Caution CiscoWorks Blue Maps should be installed in the */usr/cw-blue* directory. If you create a file system, its mount point must be */usr/cw-blue*.

Installing CiscoWorks Blue Maps Software Modules

To install CiscoWorks Blue Maps from a mounted CD-ROM drive, perform the following steps:

- Step 1** Place the CD-ROM into its caddy and insert it into the local or remote CD-ROM drive.
- Step 2** Log in as the root user. For details, see the section “Becoming the Root User.”
- Step 3** Set the CWBROOT environment variable to */usr/cw-blue*, and NMSROOT to */usr/nms*.

If you are using the Kshell, type the following on the command line.

```
hostname# export CWBROOT=/usr/cw-blue
hostname# export NMSROOT=/usr/nms
```

If you are using the Cshell or the TCshell, type the following on the command line.

```
hostname# setenv CWBROOT /usr/cw-blue
hostname# export CWBROOT
hostname# setenv NMSROOT /usr/nms
hostname# export NMSROOT
```

- Step 4** Start SMIT by entering the following at the command prompt:

```
hostname# smit
```

- Step 5** On the System Management menu, click **Software Installation & Maintenance**.

- Step 6** On the next menu, click **Install / Update Software**.
- Step 7** On the next menu, click **Install / Update Selectable Software (Custom Install)**.
- Step 8** On the next menu, click **Install Software Products at Latest Available Level**.
- Step 9** In the “Install Software Products at Latest Level” dialog, click the **List** button, then click the name of the CD-ROM device on which you loaded the CD-ROM in Step 1.
- Step 10** Click **Do**.

The “Install Software Products at Latest Available Level” dialog displays additional fields as shown in Figure 2-2.

Installing CiscoWorks Blue Maps

Figure 2-2 Install Software Products at Latest Available Level Dialog

System Management Interface Tool

Exit Edit Show Help

Return To:

- System Management
- Software Installation & Maintenance
- Install / Update Software
- Install / Update Selectable Software (Custom Install)

Install Software Products at Latest Available Level

* INPUT device / directory for software: /dev/rmt0.1

* SOFTWARE to install: [Empty] List

Automatically install PREREQUISITE software?: yes List ↴ /

COMMIT software?: yes List ↴ /

SAVE replaced files?: no List ↴ /

VERIFY software?: no List ↴ /

EXTEND file systems if space needed?: yes List ↴ /

REMOVE input file after installation?: no List ↴ /

OVERWRITE existing version?: no List ↴ /

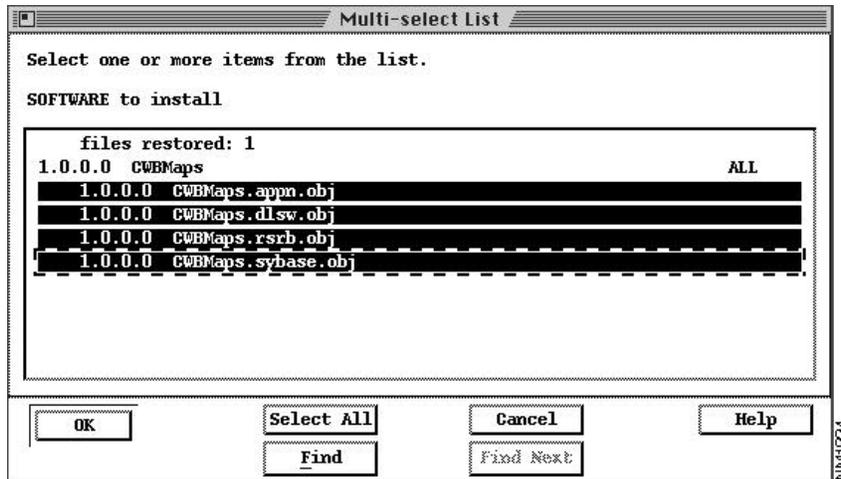
ALTERNATE save directory: [Empty]

Do Cancel

NM775

Step 11 Click the **List** button next to the “SOFTWARE to install” field. After a several-second delay, the Multi-Select List dialog appears, as shown in Figure 2-3.

Figure 2-3 Multi-Select List Dialog



Step 12 To install all CiscoWorks Blue Maps applications, click all modules in the list so that they are simultaneously highlighted, or click **CWBMaps ALL**.

- **CWBMaps.appn.obj**—The APPN Map application
- **CWBMaps.dlsw.obj**—The DLSw Map application
- **CWBMaps.rsrp.obj**—The RSRB Map application
- **CWBMaps.sybase.obj**— A tool for configuring an existing Sybase database management system to operate with CiscoWorks Blue Maps, not the Sybase system itself

To install the APPN Maps application only, click **CWBMaps.appn.obj**. To install the DLSw Maps application only, click **CWBMaps.dlsw.obj** and **CWBMaps.sybase.obj**. To install the RSRB Maps application only, click **CWBMaps.rsrp.obj** and **CWBMaps.sybase.obj**.

Step 13 Click **OK** and then click **Do**.

Step 14 In response to the “ARE YOU SURE?” prompt, click **OK** when you are sure you want to install the modules you just highlighted. An animated man appears on the screen.

Configuring CiscoWorks Blue Maps

While the animated man is running, SMIT is installing the selected modules in the *\$CWBROOT* directory. CiscoWorks Blue Maps modifies SMIT to allow subsequent configuration and de-installation of CiscoWorks Blue Maps.

If the man raises his hands and SMIT displays *OK*, the process has succeeded.

If the man falls on his face, installation has failed. If the reason for the failure is not apparent, read the installation log file *\$HOME/smit.log* or *\$CWBROOT/install/cwb_install.log* and supply it to a Cisco Technical Assistance Center (TAC) representative.

Step 15 Click **Done**.

Step 16 If Step 14 is successful, click the **Return to System Management** button and go to the following section, “Configuring CiscoWorks Blue Maps.”

If installation fails, terminate SMIT by pressing **F12** or by clicking **Exit SMIT** on the Exit menu.

Configuring CiscoWorks Blue Maps

Configuring CiscoWorks Blue Maps on AIX consists of configuring the Sybase database management system used by all CiscoWorks Blue Maps applications.

Note Before performing these procedures, you must have completed the installation process.

To configure the Sybase database management system for use with CiscoWorks Blue Maps, perform the following steps:

Step 1 Start SMIT if you have not already done so by entering the following:

```
hostname# smit
```

Step 2 On the initial SMIT menu, click **Communications Applications and Services**.

Step 3 On the next menu, click **Cisco Network Management Applications for AIX**.

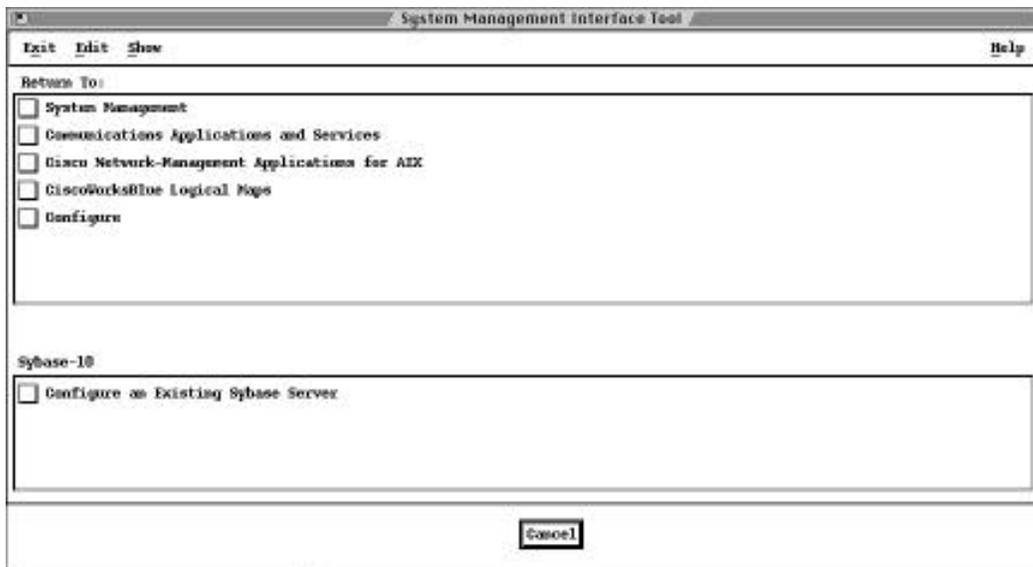
Step 4 On the next menu, click **CiscoWorksBlue Maps**.

Step 5 On the CiscoWorksBlue Maps menu, click **Configure**.

Step 6 On the Configure menu, click **Sybase**.

The Sybase menu appears, as shown in Figure 2-4.

Figure 2-4 Sybase 10 Menu



Step 7 Click **Configure an Existing Sybase Server** (because this installation of CiscoWorks Blue Maps will utilize an existing Sybase server).

Cleaning Up after Using SMIT

- Step 8** Accept the defaults or enter new values into the fields of the dialog that appears.
- Sybase Home Directory—Path name of the Sybase 10 database management system.
 - Sybase Server-name—Name of the Sybase 10 server program.
 - Sybase Server SA password—Sybase 10 system administrator's password for access to the server.
 - CW Blue 'SNA' database name—Name of the database in which CiscoWorks Blue Maps applications store data collected from network devices.
 - CW Blue database size—Size in megabytes of the Sybase database for CiscoWorks Blue Maps applications.
- Step 9** Click **Do** and read the output.
- Step 10** Click **Done**, and then click **Cancel** twice.
- Step 11** Terminate SMIT by pressing **F12** or by selecting **Exit SMIT** on the Exit menu.

Cleaning Up after Using SMIT

Perform these steps after installation and configuration of CiscoWorks Blue Maps.

- Unmount the CD-ROM.
- Remove the log files created during installation.

Unmounting the CD-ROM

Unmount the CD-ROM by logging in as the root user and entering the following at the local or remote workstation where it is mounted:

```
hostname# cd /  
hostname# umount /cdrom
```

AIX unmounts the CD-ROM device from the */cdrom* directory. Remove the CD-ROM caddy from the drive.

Removing Log Files

During installation and configuration, log files are created to track the installation process and provide diagnostic information if a problem arises. When you are satisfied that CiscoWorks Blue Maps is properly installed and operating, you can remove these files. To remove these files from your system, log in as the root user and enter the following command:

```
hostname# rm /tmp/cwb_install.log cwb_config.log $CWBROOT/install
```

Unless an error message appears, the log files are removed.

De-Installing CiscoWorks Blue Maps

If you must de-install all files related to CiscoWorks Blue Maps, perform these steps:

Step 1 Log in as the root user. For details, see the section “Becoming the Root User.”

Step 2 Start SMIT by entering the following at the command prompt:

```
hostname# smit
```

Step 3 On the System Management menu, click **Communications Applications and Services**.

Step 4 On the next menu, click **Cisco Network-Management Applications for AIX**.

Step 5 On the next menu, click **CiscoWorks Blue Maps**.

Step 6 On the next menu, click **De-install CiscoWorks Blue Maps**.

Step 7 In the De-install dialog, click the “De-install” **List** button.

Step 8 In the Multi-select List dialog, select all object names associated with the Blue Map applications you want to de-install, or click CWBMaps.sybase.obj to de-install the Sybase configuration tools and your Maps database, then click **OK**.

Step 9 Click **Do**.

Step 10 In response to the “ARE YOU SURE?” prompt, click **OK**. An animated man appears on the screen.

While the animated man is running, SMIT is de-installing all files related to the selected applications.

CiscoWorks Blue Environment Variables

If the man raises his hands and SMIT displays *OK*, the de-installation process has succeeded.

If the man falls on his face, de-installation has failed. If the reason for the failure is not apparent, read the log file *\$HOME/smit.log* and supply it to a Cisco Technical Assistance Center (TAC) representative.

Step 11 Terminate SMIT by pressing **F12** or by clicking **Exit SMIT** on the Exit menu.

CiscoWorks Blue Environment Variables

The environment variables in Table 2-1 are set automatically by the CiscoWorks Blue Maps applications. The table is for technical reference only.

Table 2-1 CiscoWorks Blue Maps Environment Variables

Variable	RSRB	DLSw	APPN	Required Value
CWBROOT	yes	yes	yes	/usr/cw-blue
NMSROOT	yes	yes	yes	/usr/nms
XAPPLRESDIR	yes	yes	yes	\$CWBROOT/Xdefaults
SYBASE	yes	yes		\$NMSROOT/sybase10
DSQUERY	yes	yes		the name of the Sybase database server, such as CW_SYBASE
HHHOME	yes	yes	yes	\$NMSROOT/help
HHPATH	yes	yes	yes	\$NMSROOT/hyperhelp/bin
DBNAME	yes	yes		If you specify any database name other than the default SNA during configuration of CiscoWorks Blue Maps, such as SNA-2, you must set this variable identically before starting a Map application.