



CiscoWorks Network Compliance Manager, 1.3 Upgrade Guide

This document includes important information regarding upgrading to CiscoWorks Network Compliance Manager (NCM), Release 1.3.



Note

All documentation, including this document and any or all of the parts of the CiscoWorks NCM documentation set, *might* be upgraded over time. Therefore, we recommend you access the CiscoWorks NCM documentation set using the Cisco.com URL:

http://www.cisco.com/en/US/products/ps6923/tsd_products_support_series_home.html

The **Docs** tab visible from within CiscoWorks NCM *might* not include links to the latest documents.

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Getting Started

The *CiscoWorks Network Compliance Manager, 1.3 Upgrade Guide* is intended for network engineers responsible for managing the CiscoWorks NCM application. This guide assumes that you have:

- A thorough understanding of the CiscoWorks NCM application
- Familiarity with database management or access to your database administrator

This guide provides information on:

- Backing up your CiscoWorks NCM database and CiscoWorks NCM files
- Installing CiscoWorks NCM 1.3
- Troubleshooting

For complete information on how to use CiscoWorks NCM, refer to the CiscoWorks NCM User's Guide.

In summary, the following steps must be done to ensure a successful upgrade from CiscoWorks NCM 1.2.x to CiscoWorks NCM 1.3:

1. Stop CiscoWorks NCM services
2. Backup the CiscoWorks NCM database
3. Backup CiscoWorks NCM files
4. Install CiscoWorks NCM 1.3



Note

If you are upgrading a High Availability Distributed Systems configuration, refer to the *High Availability Distributed System on Oracle Configuration Guide for CiscoWorks NCM* or the *High Availability Distributed System on Microsoft SQL Server Configuration Guide for CiscoWorks NCM* for instructions.

Stopping CiscoWorks NCM Services

To stop CiscoWorks NCM services, on a Windows platform, do the following:

- Step 1** Navigate **Start > Programs > Administrative Tools > Services**.
- Step 2** Under **TrueControl Management Engine**, click **Stop**.
- Step 3** Under **Start > Programs > CWNCM > FTP Server**, click **Stop**.
- Step 4** Under **TrueControl Syslog Server**, click **Stop**.

To stop the CiscoWorks NCM Services on a Linux or Solaris platform, do the following:

- Step 1** Login in as root and enter:

```
/etc/init.d/truecontrol stop
```
- Step 2** If you do not know the name of the existing CiscoWorks NCM database, before shutting down CiscoWorks NCM do the following.
 - a.** Under **Admin** on the menu bar, click **System Status**. The System Status page displays.
 - b.** In the Monitor Name column, locate **DatabaseMonitor**.

- c. Click the **View Details** option in the Actions column. The database information is displayed.
- Step 3** To check if all CiscoWorks NCM services have been stopped, enter: `/etc/init.d/truecontrol status`

Backing Up the CiscoWorks NCM Database

Although your data should be safe during the upgrade process, be sure that you have backed up all of the data in the database. For information on backing up your device software images and CiscoWorks NCM files, see the “[Backing up CiscoWorks NCM and Device Software Image Files](#)” section on page 4.



Note

When you enter a database name to identify the CiscoWorks NCM database, it must be in the identical case as the database name in the database application. For example, if you created your CiscoWorks NCM database as **NCMdb**, be sure to enter **NCMdb** when backing up and restoring the database.

SQL Server Backup Instructions

If you are using SQL Server, before running the upgrade, make sure that your CiscoWorks NCM database has enough disk space. It is recommended that you set **Unrestricted file growth** for **Data Files** and **Transaction Log** for your CiscoWorks NCM database.

To backup SQL Server databases:

- Step 1** Launch Enterprise Manager.
- Step 2** Connect to the MSSQL database server and navigate to your database.
- Step 3** Right click and select **All Tasks > Backup Database**.
- Step 4** Under **Destination**, if there are any entries, highlight them and click **Remove**.
- Step 5** Under **Destination**, click **Add**.
- Step 6** Open the file browser.
- Step 7** Under **File name**, enter a filename for your backup. Be sure to provide a new filename or you will overwrite any existing backups.
- Step 8** Click **OK** three times to start the backup procedure. Depending on the size of your database, this could take several minutes.

MySQL Backup Instructions

To backup MySQL databases used by CiscoWorks NCM:

-
- Step 1** From the command line prompt in the **mysql\bin** folder, enter the following command:
- ```
mysqldump -h<databaseserver> -u<username> -p<password> -r <YourFileName>.sql
<DatabaseName>
```
- Example: `mysqldump -hNCMDBServer -utc -ptc -rNCM_Backup_04_30_04.sql NCM`
- Step 2** Copy (or move) the file to a backup location.
- Step 3** Stop the MySQL service. Navigate **My Computer > Control Panel > Administrative Tools > Services**.
- Step 4** Locate the **mysql\data** folder. It should contain a large **ibdata** file. For a standard install, it is located in **c:\mysql\data**. Copy that entire data folder to a backup location.
- Step 5** Restart the MySQL service. Note that both of these operations can take 10 minutes or more for large databases.
- 

## Oracle Backup Instructions

Please see your Oracle DBA for information on backing up and restoring your Oracle database. The **license.bat** file is restored if you do not have a new license file.

## Backing up CiscoWorks NCM and Device Software Image Files

In an enterprise environment, system administrators are usually required to periodically backup essential software applications. It is recommended that you use a commercial backup/restore utility to backup and restore the entire hard disk of the server that hosts CiscoWorks NCM. This minimizes risks of missed, corrupted, or misplaced files.

Before running the CiscoWorks NCM upgrade, create a full copy of your CiscoWorks NCM folder. During the CiscoWorks NCM upgrade, the CiscoWorks NCM Setup program automatically backs up critical CiscoWorks NCM files to the following directory:

For Windows:

**C:\WINNT\Temp\Rendition**

or

**C:\WINDOWS\Temp\Rendition**

For Solaris and Linux:

**/var/Rendition/**

After upgrading to CiscoWorks NCM 1.3, the installer automatically restores the following files:

- Device software images from the backup directory are copied to `<Install_Directory>/server/images`.
- Summary reports from the backup directory are copied to `<Install_Directory>/addins`.
- CiscoWorks NCM Alert Center content files are copied to `<Install_Directory>/content`.
- The `site_options.rcx` and `adjustable_options.rcx` files from the backup directory are copied to `<Install_Directory>/jre`, if you selected the **use the previous administrative settings** option during installation.
- The SecurID token file is restored.
- The Gateway encryption key is restored.
- The SSL public key certificate is restored.
- The `license.dat` file is restored if you do not have a new license file.

The following files are backed up. However, they are not restored during the CiscoWorks NCM upgrade:

- Log files in `<Install_Directory>/server/log` folder. If you want to keep appending to saved log files, copy them to `<Install_Directory>/server/log`.
- All `.rcx` files in `<Install_Directory>/jre` folder. The `site_options.rcx` and `adjustable_options.rcx` files will be restored if you selected the **use the previous administrative settings** option during installation.
- The `<Install_Directory>/server/ext/jboss/server/default/conf/log4j.xml` file.
- Wrapper config files in `<Install_Directory>/server/ext/wrapper/conf`.

## Uninstalling CiscoWorks NCM 1.2

To uninstall CiscoWorks NCM 1.2 or 1.2.1 from the Windows platform perform the following:

- 
- Step 1** Click **Start > Programs > CWNCM > Uninstall CiscoWorks Network Compliance Manager**.
- The `Uninstall_CiscoWorks_Network_Compliance_Manager` screen displays.
- Step 2** Click **Uninstall**.
- When the uninstall starts, it backs up CiscoWorks NCM log files to a temporary folder before it deletes any files. This task might take up to several minutes depending on the size of the log files. Be sure to review the Uninstall window periodically to check the progress of the uninstall.
- Step 3** When the uninstall program is complete, the **Uninstall Complete** page displays. Click **Done**.
- Step 4** Be sure to manually delete any remaining files and subfolders in the CiscoWorks NCM folder.
- 

To uninstall CiscoWorks NCM 1.2 or 1.2.1 from the Solaris or Linux platform:

- 
- Step 1** Log on from the console as root.
- Step 2** Change the directory to `./<Install Directory>/UninstallerData`.
- Step 3** Enter `./Uninstall__CiscoWorks_Network_Compliance_Manager`.

**Step 4** Be sure to manually delete any remaining files and subfolders in the CiscoWorks NCM folder.

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## Installing CiscoWorks NCM 1.3

### System Requirements

Make sure you have the requisite equipment before installing CiscoWorks NCM:

- A standalone server. Refer to the “[Server Requirements](#)” section on page 14 for detailed server requirements.
- Manageable network devices and their CLI passwords and SNMP community strings.
- The CiscoWorks NCM version 1.3 CD compatible with your system.
- The **license.dat** file.

CiscoWorks NCM supports a variety of databases, including:

- Microsoft SQL Server 2000 and 2005
- MySQL 3.23 MAX with InnoDB type
- Oracle Enterprise Edition, versions 9.2 or 10.2.0.2 (32 bit)

Make sure you have the requisite database requirements before installing CiscoWorks NCM 1.3.



**Note**

The **Client Only** option on the **Choose Install Set** page of the Installation Wizard installs the CiscoWorks NCM command line client.

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### Installation Steps

Before starting the installation:

- Be sure to shutdown your anti-virus software (during setup only) before installing CiscoWorks NCM 1.3.
- For Windows, close all applications, including Windows Explorer and all Java applications.

If you are installing CiscoWorks NCM on a Windows server, insert the CiscoWorks NCM version 1.3 CD into your CD drive. The Install Anywhere Self Extractor opens.

If you are installing CiscoWorks NCM on a Linux server, enter the following commands to mount a CD drive. It is not mounted automatically. You must login as root.

```
#> mount /mnt/cdrom
#> cd /mnt/cdrom
#> cd linux
#> ./setup.bin
```

If you are installing CiscoWorks NCM on a Solaris server, first download the latest Solaris patches from the Sun Web site: <http://sunsolve.sun.com/pub-cgi/show.pl?target=patches/J2SE>

Enter the following commands to install CiscoWorks NCM manually. Be sure to change to the drive on which you want to install CiscoWorks NCM. At the shell prompt, enter:

```
su root [when prompted, enter the password]
cd /cdrom/rendition_7_0/solaris
sh setup.bin or ./setup.bin
```

Follow the instructions that appear on the screen.



**Note**

If you login remotely to run setup, you might see a message such as **Warning: Cannot convert string...** As long as you have root access, you can ignore this message and continue. If you see the message **It appears port 443 is in use...**, then you are not logged in to the root account. Exit setup, log out, try logging into the root account again, and run CiscoWorks NCM Setup when you are logged in as root.

Keep in mind that the CiscoWorks NCM host system needs 2x RAM SIZE in SWAP space. In your UNIX shell, enter **swap -l** to see your current swap setting (expressed as 1k blocks). Refer to your Solaris documentation for information on increasing swap space. If you are installing CiscoWorks NCM on Solaris 10 and have configured a Non-global Zone on the Solaris 10 host, refer to the Installing CiscoWorks NCM on Solaris 10 User's Guide.



**Note**

When you enter the name of an existing database, it must be in the identical case as the database name in the database application. For example, if you created your CiscoWorks NCM database as **NCMdb**, be sure to enter CiscoWorks NCM.

## Using MySQL Max 3.23

The following table guides you through the installation process if you are using MySQL Max 3.23.

**Table 1** CiscoWorks NCM Installation Using MySQL Max

| Step | Install Wizard Page | Action                                                                                                                                                                                                |
|------|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1    | Introduction        | Review the CiscoWorks NCM database requirements information and click <b>Next</b> . Keep in mind that you need to know the database server's hostname and port, as well as the username and password. |
| 2    | System Requirements | Confirm that you have met all system requirements and click <b>Next</b> .                                                                                                                             |
| 3    | License Agreement   | Review the CiscoWorks NCM License Agreement. Select the <b>I accept the terms of the License Agreement</b> option and click <b>Next</b> .                                                             |

Table 1 CiscoWorks NCM Installation Using MySQL Max (continued)

| Step | Install Wizard Page             | Action                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|------|---------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 4    | Choose Install Set              | Select the <b>Client and Server using MySQL Max</b> option and then click <b>Next</b> .<br><br><b>NOTE:</b> CiscoWorks NCM provides a performance monitor for the server upon which the application runs. It does not, however, monitor the database size and disk space if the database is installed on a second, separate server. If you install MySQL on a separate server, ensure that you have monitoring software that will alert you if disk space is running low or the database is running out of space.                                                                                                                                                                                                                                |
| 5    | MySQL Max Installation          | You are prompted as to whether you want to install MySQL Max with InnoDB type or use a previously installed version. Select the <b>Use existing MYSQL Max</b> option and then click <b>Next</b> . You are prompted to confirm that you are running the proper version of MySQL on the Important: MySQL Version Wizard page. If the version is correct, click <b>Next</b> . If the version is not correct, click <b>Previous</b> and click the <b>Install MySQL Max</b> option.                                                                                                                                                                                                                                                                   |
| 6    | Previous Installation Detected  | If a previous CiscoWorks NCM installation is detected, you are prompted as to whether you want to uninstall the previous CiscoWorks NCM installation. Click <b>Next</b> to uninstall the previous CiscoWorks NCM installation.<br><br><b>NOTE:</b> If you have already uninstalled the previous CiscoWorks NCM installation, go to Step 8. If you have not uninstalled the previous CiscoWorks NCM installation, but it is not detected, click <b>Cancel</b> and quit the current CiscoWorks NCM installation. Uninstall the previous CiscoWorks NCM installation and then restart the installation process. (Refer to the <a href="#">“Uninstalling CiscoWorks NCM”</a> section on page 20 for information on how to uninstall CiscoWorks NCM.) |
| 7    | Uninstall Previous Installation | Click <b>Uninstall</b> to uninstall the previous CiscoWorks NCM installation. After CiscoWorks NCM is uninstalled, select the <b>No, I will restart my system myself</b> option and click <b>Done</b> . You are returned to the Installation Wizard (Step 8 below).<br><br><b>NOTE:</b> Be sure to review the Uninstall window periodically to check the progress of the uninstall. The Installation Wizard does not monitor or reflect the progress of the uninstall process.                                                                                                                                                                                                                                                                   |
| 8    | Product License                 | Indicate the location of the <b>license.dat</b> file and click <b>Next</b> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 9    | Previous Admin Settings         | Click <b>Next</b> to use the previous Admin settings. (Yes is the default.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 10   | Choose Install Folder           | Choose a directory that does not contain existing files. The default is <b>C:\CWNCM</b> . Click <b>Next</b> .<br><br><b>NOTE:</b> Using the previous install folder is recommended.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

**Table 1** CiscoWorks NCM Installation Using MySQL Max (continued)

| Step | Install Wizard Page          | Action                                                                                                                                                                                                                                                                                                                           |
|------|------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 11   | Database Settings            | If the database software is installed on the local sever, select the <b>Database software is installed on this computer</b> option and click <b>Next</b> . If the database software is not installed on the local server, select <b>The database software is installed on another server</b> option and then click <b>Next</b> . |
| 12   | Configure Email              | For event notification, enter the name of the SMTP server and click <b>Next</b> . The default SMTP server is <b>mail</b> .                                                                                                                                                                                                       |
| 13   | Choose Shortcut Folder       | Click <b>Next</b> to accept the default location ( <b>In a new Program Group</b> ) for the product icons, or choose another location and click <b>Next</b> .                                                                                                                                                                     |
| 14   | Pre-Installation Summary     | Review the information for accuracy and click <b>Install</b> . Installation could take several minutes. The <b>Installing CiscoWorks NCM</b> page opens while the installation is in process.                                                                                                                                    |
| 15   | Database Admin Login         | Enter the hostname, database server port, the name of the database used by CiscoWorks NCM, and the login information for the database administrator, and then click <b>Next</b> . For example:<br><br>Hostname: MySQL1.cwncm.com<br><br>Port: 3306<br><br>Username: admin<br><br>Password: password                              |
| 16   | Configure Database           | Click the <b>Use existing CiscoWorks NCM database</b> option and click <b>Next</b> .                                                                                                                                                                                                                                             |
| 17   | Existing Database            | Enter the username and password CiscoWorks NCM uses to connect to the database, the name of the database to create, and click <b>Next</b> .<br><br><b>NOTE:</b> The user must have all privileges for the selected database.                                                                                                     |
| 18   | Confirm Database Settings    | Confirm the database settings and click <b>Next</b> .<br><br><b>NOTE:</b> This step could take up to a few hours depending on the size of the database.                                                                                                                                                                          |
| 19   | Install Complete             | Review the information regarding the installation and click <b>Done</b> .                                                                                                                                                                                                                                                        |
| 20   | Launch CiscoWorks NCM System | Be sure to wait at least three minutes before launching CiscoWorks NCM. To close the Installation Wizard, click <b>Done</b> .                                                                                                                                                                                                    |

## Using SQL Server 2000 or 2005

The following table guides you through the installation process if you are using SQL Server 2000 or 2005.

**Table 2** CiscoWorks NCM Installation Using SQL Server 2000 or 2005

| Step | Install Wizard Page            | Action                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|------|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1    | Introduction                   | Review the CiscoWorks NCM database requirements information and click <b>Next</b> . Keep in mind that you need to know the database server's hostname and port, as well as the username and password.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 2    | System Requirements            | Confirm that you have met all system requirements and click <b>Next</b> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 3    | License Agreement              | Review the CiscoWorks NCM License Agreement. Select the <b>I accept the terms of the License Agreement</b> option and click <b>Next</b> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 4    | Choose Install Set             | Select the <b>Client and Server using SQL Server 2000/2005</b> option and then click <b>Next</b> .<br><br><b>NOTE:</b> CiscoWorks NCM provides a performance monitor for the server upon which the application runs. It does not, however, monitor the database size and disk space if the database is installed on a second, separate server. If you install SQL Server on a separate server, ensure that you have monitoring software that will alert you if disk space is running low or the database is running out of space.                                                                                                                                                                                                                |
| 5    | License Agreement              | You are prompted to accept the Microsoft SQL Server 2005 JDBC Driver. Review the terms of the license agreement, click the <b>I accept the terms of the License Agreement</b> , and click <b>Next</b> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| 6    | Previous Installation Detected | If a previous CiscoWorks NCM installation is detected, you are prompted as to whether you want to uninstall the previous CiscoWorks NCM installation. Click <b>Next</b> to uninstall the previous CiscoWorks NCM installation.<br><br><b>NOTE:</b> If you have already uninstalled the previous CiscoWorks NCM installation, go to Step 8. If you have not uninstalled the previous CiscoWorks NCM installation, but it is not detected, click <b>Cancel</b> and quit the current CiscoWorks NCM installation. Uninstall the previous CiscoWorks NCM installation and then restart the installation process. (Refer to the <a href="#">“Uninstalling CiscoWorks NCM”</a> section on page 20 for information on how to uninstall CiscoWorks NCM.) |

Table 2 CiscoWorks NCM Installation Using SQL Server 2000 or 2005 (continued)

| Step | Install Wizard Page             | Action                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|------|---------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 7    | Uninstall Previous Installation | Click <b>Uninstall</b> to uninstall the previous CiscoWorks NCM installation. After CiscoWorks NCM is uninstalled, select the <b>No, I will restart my system myself</b> option and click <b>Done</b> . You are returned to the Installation Wizard (Step 8 below).<br><br><b>NOTE:</b> Be sure to review the Uninstall window periodically to check the progress of the uninstall. The Installation Wizard does not monitor or reflect the progress of the uninstall process. |
| 8    | Product License                 | Indicate the location of the <b>license.dat</b> file and click <b>Next</b> .                                                                                                                                                                                                                                                                                                                                                                                                   |
| 9    | Previous Admin Settings         | Click <b>Next</b> to use the previous Admin settings. (Yes is the default.)                                                                                                                                                                                                                                                                                                                                                                                                    |
| 10   | Choose Install Folder           | Choose a directory that does not contain existing files. The default is <b>C:\CWNCM</b> . Click <b>Next</b> .<br><br><b>NOTE:</b> Using the previous install folder is recommended.                                                                                                                                                                                                                                                                                            |
| 11   | Database Settings               | If the database software is installed on the local sever, select the <b>Database software is installed on this computer</b> option and click <b>Next</b> . If the database software is not installed on the local server, select <b>The database software is installed on another server</b> option and then click <b>Next</b> .                                                                                                                                               |
| 12   | Configure Email                 | For event notification, enter the name of the SMTP server and click <b>Next</b> . The default SMTP server is <b>mail</b> .                                                                                                                                                                                                                                                                                                                                                     |
| 13   | Choose Shortcut Folder          | Click <b>Next</b> to accept the default location ( <b>In a new Program Group</b> ) for the product icons, or choose another location and click <b>Next</b> .                                                                                                                                                                                                                                                                                                                   |
| 14   | Pre-Installation Summary        | Review the information for accuracy and click <b>Install</b> . Installation could take several minutes. The <b>Installing CiscoWorks NCM</b> page opens while the installation is in process.                                                                                                                                                                                                                                                                                  |
| 15   | Database Admin Login            | Enter the hostname, database server port, the name of the database used by CiscoWorks NCM, and the login information for the database administrator, and then click <b>Next</b> . For example:<br><br>Hostname: QA-MSSQL<br><br>Port: 1433<br><br>Username: admin<br><br>Password: password                                                                                                                                                                                    |
| 16   | Configure Database              | Click the <b>Use existing CiscoWorks NCM database</b> option and click <b>Next</b> .                                                                                                                                                                                                                                                                                                                                                                                           |

**Table 2** *CiscoWorks NCM Installation Using SQL Server 2000 or 2005 (continued)*

| Step | Install Wizard Page          | Action                                                                                                                                                                                                                       |
|------|------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 17   | Existing Database            | Enter the username and password CiscoWorks NCM uses to connect to the database, the name of the database to create, and click <b>Next</b> .<br><br><b>NOTE:</b> The user must have all privileges for the selected database. |
| 18   | Confirm Database Settings    | Confirm the database settings and click <b>Next</b> .<br><br><b>NOTE:</b> This step could take up to a few hours depending on the size of the database.                                                                      |
| 19   | Install Complete             | Review the information regarding the installation and click <b>Done</b> .                                                                                                                                                    |
| 20   | Launch CiscoWorks NCM System | Be sure to wait at least three minutes before launching CiscoWorks NCM. To close the Installation Wizard, click <b>Done</b> .                                                                                                |

## Using Oracle Enterprise 9.2 or 10.2.0.2

The following table guides you through the installation process if you are using Oracle Enterprise 9.2 or 10.2.0.2.

**Table 3** *CiscoWorks NCM Installation Using Oracle Enterprise 9.2 or 10.2.0.2*

| Step | Install Wizard Page | Action                                                                                                                                                                                                                                                            |
|------|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1    | Introduction        | Review the CiscoWorks NCM database requirements information and click <b>Next</b> . Keep in mind that you need to know the database server's hostname and port, as well as the username and password.                                                             |
| 2    | System Requirements | Confirm that you have met all system requirements and click <b>Next</b> .                                                                                                                                                                                         |
| 3    | License Agreement   | Review the CiscoWorks NCM License Agreement. Select the <b>I accept the terms of the License Agreement</b> option and click <b>Next</b> .                                                                                                                         |
| 4    | Product License     | Indicate the location of the <b>license.dat</b> file and click <b>Next</b> . Normally, you receive a <b>license.dat</b> file via email when you register CiscoWorks NCM. If you did not receive a <b>license.dat</b> file, please contact Cisco Customer Support. |

**Table 3** CiscoWorks NCM Installation Using Oracle Enterprise 9.2 or 10.2.0.2 (continued)

| Step | Install Wizard Page             | Action                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|------|---------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 5    | Choose Install Set              | Select the Client and Server using Oracle option and click <b>Next</b> .<br><br><b>NOTE:</b> CiscoWorks NCM provides a performance monitor for the server upon which the application runs. It does not, however, monitor the database size and disk space if the database is installed on a separate server. If you install the CiscoWorks NCM database on a second, separate server, ensure that you have monitoring software that will alert you if disk space is running low or the database is running out of space.                                                                                                                                                                                                                           |
| 6    | Previous Installation Detected  | If a previous CiscoWorks NCM installation is detected, you are prompted as to whether you want to uninstall the previous CiscoWorks NCM installation. Click <b>Next</b> to uninstall the previous CiscoWorks NCM installation.<br><br><b>NOTE:</b> If you have already uninstalled the previous CiscoWorks NCM installation, go to Step 8. If you have not uninstalled the previous CiscoWorks NCM installation, but it is not detected, click <b>Cancel</b> and quit the current CiscoWorks NCM installation. Uninstall the previous CiscoWorks NCM installation and then restart the installation process. (Refer to the “ <a href="#">Uninstalling CiscoWorks NCM</a> ” section on page 20 for information on how to uninstall CiscoWorks NCM.) |
| 7    | Uninstall Previous Installation | Click <b>Uninstall</b> to uninstall the previous CiscoWorks NCM installation. After CiscoWorks NCM is uninstalled, select the <b>No, I will restart my system myself</b> option and click <b>Done</b> . You are returned to the Installation Wizard (Step 8 below).<br><br><b>NOTE:</b> Be sure to review the Uninstall window periodically to check the progress of the uninstall. The Installation Wizard does not monitor or reflect the progress of the uninstall process.                                                                                                                                                                                                                                                                     |
| 8    | Previous Admin Settings         | Click <b>Next</b> to use the previous Admin settings.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 9    | Choose Install Folder           | Enter the CiscoWorks NCM installation location or accept the default location, <b>c:\CWNCM</b> by clicking <b>Next</b> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 10   | Database Settings               | If the database software is installed on the local sever, select <b>The database software is installed on this computer</b> option and click <b>Next</b> . If the database software is not installed on the local server, select <b>The database software is installed on another server</b> option and then click <b>Next</b> .                                                                                                                                                                                                                                                                                                                                                                                                                   |
| 11   | Configure Email                 | For event notification, enter the name of the SMTP server and click <b>Next</b> . The default SMTP server is <b>mail</b> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 12   | Choose Shortcut Folder          | Click <b>Next</b> to accept the default location ( <b>In a new Program Group</b> ) for the product icons, or choose another location and click <b>Next</b> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

**Table 3** CiscoWorks NCM Installation Using Oracle Enterprise 9.2 or 10.2.0.2 (continued)

| Step | Install Wizard Page          | Action                                                                                                                                                                                                                                                                                                                                                                                    |
|------|------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 13   | Pre-Installation Summary     | Review the information for accuracy and click <b>Install</b> . Installation could take several minutes. The <b>Installing CiscoWorks NCM</b> page opens while the installation is in process.<br><br><b>NOTE:</b> CiscoWorks NCM does not automatically build an Oracle database. Please see your Oracle DBA for assistance.                                                              |
| 14   | Database Admin Login         | Enter the Hostname, Port, Database Name, and the login information for the database administrator, and then click <b>Next</b> . (The user must have the following privileges: CREATE SEQUENCE, CREATE SESSION, CREATE TABLE, CREATE ANY PROCEDURE, and SELECT ANY DICTIONARY.) For example:<br><br>Hostname: QA-ORACLE<br><br>Port: 1521<br><br>Username: admin<br><br>Password: password |
| 15   | Configure Database           | Select the <b>An existing CiscoWorks NCM database to be upgraded</b> option and click Next. You are then asked if you have already run the upgrade script. Click <b>Next</b> (No).<br><br><b>NOTE:</b> This step might take up to a few hours depending on the size of the database.                                                                                                      |
| 16   | Install Complete             | Review the information regarding the installation and click <b>Done</b> .                                                                                                                                                                                                                                                                                                                 |
| 17   | Launch CiscoWorks NCM System | Be sure to wait at least three minutes before launching CiscoWorks NCM. To close the Installation Wizard, click <b>Done</b> .                                                                                                                                                                                                                                                             |

## Server Requirements

This section contains server requirement information for the following platforms:

- [Windows Server Requirements, page 15](#)
- [Linux Server Requirements, page 16](#)
- [Solaris Server Requirements, page 17](#)

## Windows Server Requirements

The following tables provide the recommended requirements when installing CiscoWorks NCM 1.3 on a Windows platform. Keep in mind that the application server and the database server can be configured together or separately depending on the size of the network.


**Note**

You must stop other network management applications, Web servers, databases, and Syslog/TFTP servers running on the same system before installing CiscoWorks NCM. Applications include anti-virus (during Setup only) and WWW Publishing Server applications.

**Table 4**      **Requirements for the Application Server on the Windows Platform**

|         |                                        |
|---------|----------------------------------------|
| OS      | Windows Server 2003 Enterprise Edition |
| CPU     | Intel Xeon or equivalent, 3.0+ GHz     |
| Memory  | 2 GB RAM                               |
| Disk    | 10 GB, Fast SCSI                       |
| Network | 100 Mbps Fast Ethernet, full duplex    |

**Table 5**      **Requirements for the Database Server on the Windows Platform**

|                     |                                                                                                                                                                                                                                                                    |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Supported Databases | One of the following: <ul style="list-style-type: none"> <li>• Microsoft SQL Server 2000 (SP 2)</li> <li>• Microsoft SQL Server 2005</li> <li>• MySQL Max 3.23 (included with CiscoWorks NCM)</li> <li>• Oracle 9.2</li> <li>• Oracle 10.2.0.2 (32 bit)</li> </ul> |
| CPU                 | Intel Xeon or equivalent, 3.0+ GHz                                                                                                                                                                                                                                 |
| Memory              | 2 GB RAM                                                                                                                                                                                                                                                           |
| Disk                | 18 GB, Single Channel RAID, Fast SCSI                                                                                                                                                                                                                              |
| Network             | 100 Mbps Fast Ethernet, full duplex                                                                                                                                                                                                                                |

**Table 6**      **Requirements for the Application and Database Server on the Same Server on the Windows Platform**

|          |                                                   |
|----------|---------------------------------------------------|
| OS       | Windows Server 2003 Enterprise Edition            |
| Database | MySQL Max 3.23 (included)                         |
| CPU      | Dual Processor Intel Xeon or equivalent, 3.0+ GHz |
| Memory   | 4 GB RAM                                          |
| Disk     | 28 GB, Dual Channel RAID, Fast SCSI               |
| Network  | 100 Mbps Fast Ethernet, full duplex               |

You will also need the following applications:

- Microsoft Internet Explorer version 5.5 or higher or Mozilla Firefox version 1.0 or higher
- Microsoft Excel 2000 or higher (for viewing Summary Reports)
- Adobe® Acrobat® Reader™ version 4.0 or higher

## Linux Server Requirements

The following tables provide the recommended server requirements when installing CiscoWorks NCM 1.3 on a Linux platform. Keep in mind that the application server and the database server can be configured together or separately.



**Note**

When installing CiscoWorks NCM 1.3 on Linux, the version of Nmap distributed with CiscoWorks NCM (Nmap 3.81) is required for Nmap scanning when running the Detect Network Devices task.

**Table 7 Requirements for the Application Server on the Linux Platform**

|            |                                                                                                                                                                                           |
|------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| OS         | One of the following: <ul style="list-style-type: none"> <li>• RedHat Linux AS 3.0, Update 2</li> <li>• RHAS 3</li> <li>• RHAS 4</li> <li>• SUSE Linux Enterprise 9.0 (32 bit)</li> </ul> |
| CPU        | Intel Xeon or equivalent, 3.0+ GHz                                                                                                                                                        |
| Memory     | 2 GB RAM                                                                                                                                                                                  |
| Swap Space | 4 GB Swap                                                                                                                                                                                 |
| Disk       | 14 GB, Fast SCSI                                                                                                                                                                          |
| Network    | 100 Mbps Fast Ethernet, full duplex                                                                                                                                                       |

**Table 8 Requirements for the Database Server on the Linux Platform**

|                     |                                                                                                                                                                                   |
|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Supported Databases | One of the following: <ul style="list-style-type: none"> <li>• MySQL Max 3.23 (included with CiscoWorks NCM)</li> <li>• Oracle 9.2</li> <li>• Oracle 10.2.0.2 (32 bit)</li> </ul> |
| CPU                 | Intel Xeon or equivalent, 3.0+ GHz                                                                                                                                                |
| Memory              | 2 GB RAM                                                                                                                                                                          |
| Swap Space          | 4 GB Swap                                                                                                                                                                         |
| Disk                | 22 GB, Single Channel RAID, Fast SCSI                                                                                                                                             |
| Network             | 100 Mbps Fast Ethernet, full duplex                                                                                                                                               |

**Table 9** Requirements for the Application and Database on the Same Server on the Linux Platform

|            |                                                                                                                                                                                   |
|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| OS         | One of the following: <ul style="list-style-type: none"> <li>RedHat Linux AS 3.0, Update 2</li> <li>RHAS 3</li> <li>RHAS 4</li> <li>SUSE Linux Enterprise 9.0 (32 bit)</li> </ul> |
| Database   | MySQL Max 3.23                                                                                                                                                                    |
| CPU        | Dual Processor Intel Xeon or equivalent, 3.0+ GHz                                                                                                                                 |
| Memory     | 4 GB RAM                                                                                                                                                                          |
| Swap Space | 8 GB Swap                                                                                                                                                                         |
| Disk       | 36 GB, Dual Channel RAID, Fast SCSI                                                                                                                                               |
| Network    | 100 Mbps Fast Ethernet, full duplex                                                                                                                                               |

You will also need the following applications:

- Mozilla Firefox 1.0+
- Adobe® Acrobat® Reader™ version 4.0 or higher

**Note**

You must stop other network management applications, Web servers, databases, and syslog/TFTP servers running on the same system before installing CiscoWorks NCM 1.3. Applications include Anti-virus (during Setup only) and WWW Publishing Server applications.

The Summary reports are generated in the Microsoft Excel XLS format. Excel does not run on Linux. You can either run the Summary reports from a Windows client computer connected to your CiscoWorks NCM server or you can use one of the following products that run on Linux and can open Excel files:

- Open Office ([www.openoffice.org](http://www.openoffice.org))
- GNUmeric ([www.gnumeric.org](http://www.gnumeric.org))
- Star Office ([www.sun.com/software/star/staroffice](http://www.sun.com/software/star/staroffice))

## Solaris Server Requirements

The following tables provide the recommended server requirements when installing CiscoWorks NCM 1.3 on a Solaris platform. Keep in mind that the application server and the database server can be configured together or separately.

**Note**

When installing CiscoWorks NCM 1.3 on Solaris, the version of Nmap distributed with CiscoWorks NCM (Nmap 3.81) is required for Nmap scanning when running the Detect Network Devices task.

**Table 10** *Requirements for the Application Server on the Solaris Platform*

|            |                                                                                                           |
|------------|-----------------------------------------------------------------------------------------------------------|
| OS         | One of the following: <ul style="list-style-type: none"> <li>• Solaris 9</li> <li>• Solaris 10</li> </ul> |
| CPU        | Dual UltraSPARC IIIi+, 1.3+ GHz (SunFire V240)                                                            |
| Memory     | 2 GB RAM                                                                                                  |
| Swap Space | 4 GB Swap                                                                                                 |
| Disk       | 14 GB, Fast SCSI                                                                                          |
| Network    | 100 Mbps Fast Ethernet, full duplex                                                                       |

**Table 11** *Requirements for the Database Server on the Solaris Platform*

|                     |                                                                                                                                                                                   |
|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Supported Databases | One of the following: <ul style="list-style-type: none"> <li>• MySQL Max 3.23 (included with CiscoWorks NCM)</li> <li>• Oracle 9.2</li> <li>• Oracle 10.2.0.2 (32 bit)</li> </ul> |
| CPU                 | Dual UltraSPARC IIIi+, 1.3+ GHz (SunFire V240)                                                                                                                                    |
| Memory              | 2 GB RAM                                                                                                                                                                          |
| Swap Space          | 4 GB Swap                                                                                                                                                                         |
| Disk                | 22 GB, Single Channel RAID, Fast SCSI                                                                                                                                             |
| Network             | 100 Mbps Fast Ethernet, full duplex                                                                                                                                               |

**Table 12** *Requirements for the Application and Database on the Same Server on the Solaris Platform*

|            |                                                                                                           |
|------------|-----------------------------------------------------------------------------------------------------------|
| OS         | One of the following: <ul style="list-style-type: none"> <li>• Solaris 9</li> <li>• Solaris 10</li> </ul> |
| Database   | MySQL Max 3.23 (included)                                                                                 |
| CPU        | Dual UltraSPARC IIIi+, 1.3+ GHz (SunFire V240)                                                            |
| Memory     | 4 GB RAM                                                                                                  |
| Swap Space | 8 GB Swap                                                                                                 |
| Disk       | 36 GB, Dual Channel RAID, Fast SCSI                                                                       |
| Network    | 100 Mbps Fast Ethernet, full duplex                                                                       |

You will also need the following applications:

- Mozilla Firefox 1.0+
- Adobe Acrobat Reader version 4.0 or higher

**Note**

You must stop other Web servers, databases, and Syslog/TFTP servers running on the same system before installing CiscoWorks NCM 1.3. You must also stop any Network Management, anti-virus (during Setup only) and WWW Publishing Server applications.

The Summary reports are generated in the Microsoft Excel XLS format. Excel does not run on Solaris. You can either run the Summary reports from a Windows client computer connected to your CiscoWorks NCM server or you can use one of the following products that run on Solaris and can open Excel files:

- Open Office ([www.openoffice.org](http://www.openoffice.org))
- GNUmeric ([www.gnumeric.org](http://www.gnumeric.org))
- Star Office ([www.sun.com/software/star/staroffice](http://www.sun.com/software/star/staroffice))

## Troubleshooting

The following sections contain troubleshooting information regarding CiscoWorks NCM 1.3.

### Installing CiscoWorks NCM

#### CiscoWorks NCM Installer Appears to Hang

In most cases, this occurs when you are uninstalling CiscoWorks NCM. Be sure to review the Uninstall window periodically to check the progress of the uninstall. The Installation Wizard does not monitor or reflect the progress of the uninstall process.

### Installation is Successful but CiscoWorks NCM Does Not Run

Be sure to check the following:

- **<Install\_Directory>/CiscoWorks\_NCM\_System\_InstallLog.log** file. If this file is truncated, this indicates that CiscoWorks NCM was not allocated enough disk space. Please refer to the “[Server Requirements](#)” section on page 14 and reallocate more disk space if necessary.
- The **<Install\_Directory>/jre** folder. If JRE is installed successfully, this folder should contain approximately 600 files. An installation failure will result in less than 100 files. This could occur if Windows Explorer was not closed or other applications were running during the CiscoWorks NCM upgrade. Please close Windows Explorer and all other applications before installing CiscoWorks NCM.

#### Installation Failed

If the CiscoWorks NCM installation failed, please check the following files for detailed error messages:

- **<Install\_Directory>/Opware\_Network\_Automation\_System\_InstallLog.log**
- All files in **<Install\_Directory>/server/log**

## Uninstalling CiscoWorks NCM

To uninstall CiscoWorks NCM from on a Windows platform:

1. Navigate **Start > Programs > CiscoWorks NCM > Uninstall CiscoWorks NCM**.
2. Click **Uninstall**. (NOTE: When the CiscoWorks NCM Uninstaller starts, it backs up CiscoWorks NCM log files to a temporary folder before it deletes any files. This task may take up to several minutes depending on the size of the log files. Be sure to review the Uninstall window periodically to check the progress of the uninstall.)
3. When the Uninstall program is complete, the Uninstall Complete page opens. Click **Done**.
4. Be sure to manually delete any remaining files and subfolders in the CiscoWorks NCM folder.

To uninstall CiscoWorks NCM on a Solaris or Linux platform:

1. Log on from the console as **root**.
2. Change directory to: `./<Install Directory>/UninstallerData` directory.
3. Enter: `./Uninstall_CiscoWorks_NCM` or `./Uninstall_CWNCM`, depending on which file exists.
4. Be sure to manually delete any remaining files and subfolders in the CiscoWorks NCM folder.

## Restoring Databases

### SQL Server

To restore SQL Server databases:

1. Make a backup of the database you are about to restore (see above).
2. Launch Enterprise Manager.
3. Connect to the SQL Server database server and navigate to your database.
4. Right click and navigate **All Tasks > Restore Database**.
5. Click **Restore: From Device**.
6. Click **Select Devices**.
7. Click **Add**.
8. Open the file browser under **File name** and select the filename you want to restore.
9. Click **OK** three times.
10. Click the **Options** tab.
11. Select **Force restore over existing database**.
12. Click **OK**. The database should be restored.

If you receive an error message, such as **Database is in use**, you need to either close the connection to that database (stop your JBoss server), or go to the **Options** tab and change the names of the physical files listed to a different name. If you are not using the **sa** login to connect to the database, you may need to change the database login.

To do this, launch **Query Analyzer** from Enterprise Manager. In the database you just restored, enter the following command:

**SQL command "sp\_change\_users\_login 'auto\_fix' 'username'"**

Where: **username** is the username that your JBoss is using to communicate to the SQL server.

## MySQL

To restore MySQL databases used by CiscoWorks NCM, there are two methods. To restore using the copied files restores all MySQL databases that were on the server at the time of the backup, not just the CiscoWorks NCM database. This method should only be used if CiscoWorks NCM is the only application using the database server.

1. Make a backup of the MySQL database (see above).
2. Stop the MySQL service. Navigate **My Computer > Control Panel > Administrative Tools > Service**.
3. Copy all of the files that were backed up from the **mysql\data** directory originally back into the directory.
4. Restart the MySQL service.

To restore MySQL databases using the **.sql** backup file:

1. Make a backup of the MySQL database (see above).
2. Edit the **.sql** file. Add the following line to the top of the file:

**SET FOREIGN\_KEY\_CHECKS=0;**



**Note** If you are restoring to a different database name, the foreign key constraints inside the dump file reference '**<Database\_Name>.RN\_DEVICE**' ('**DeviceID**'), including the database name. If you restore this to a different database name, in effect you are referencing the database **<Database\_Name>** for your FK checks. This is a bug in mysqldump and how it interacts with the InnoDB table types. The solution is to remove the **<Database\_Name>**.

3. Navigate to the **mysql\bin** directory and enter the following command to get to the mysql command interface:

**mysql -h<hostname> -u<username> -p<password>**

4. Enter the following commands in the mysql command interface. (Note that mysql needs forward slashes '/' in path names.)

```
drop database <DatabaseName>;
create database <DatabaseName>;
use <DatabaseName>;
source <BackupFileName>.sql;
grant all privileges on <DatabaseName>.* TO <username> identified by '<password>';
```

Where: *username* is the username that CiscoWorks NCM uses to connect to the database and *password* is the user's password.

```
grant all privileges on <DatabaseName>.* TO <username>@localhost identified by '<password>';
```

Where: *username* is the username that CiscoWorks NCM uses to connect to the database and *password* is the user's password.

## Oracle

Please see your Oracle DBA for information on backing up and restoring the databases.

## Re-running the CiscoWorks NCM Installation

To rerun the CiscoWorks NCM installation, be sure to:

1. Stop all CiscoWorks NCM services. Refer to [“Installation Steps” section on page 6](#).
2. Delete all of the files and subfolders in the **<Install\_Directory>**. If you need to contact Customer Support, please make a full copy of this folder before deletion.
3. Restore your database. Refer to [“Restoring Databases” section on page 20](#).
4. Run the CiscoWorks NCM installer.



### Note

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Previous administration setting are lost. You should customize any administrative settings after the install completes.

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## Port in Use

CiscoWorks NCM communicates with devices using a combination of protocols and ports. For a complete list of protocols and ports used by CiscoWorks NCM, refer to the “Protocols & Ports” section in Chapter 1 of the CiscoWorks NCM User’s Guide.

If any one of the ports is in use by another application or service, you must stop that application or service to ensure a successful CiscoWorks NCM upgrade.

# Accessing the CiscoWorks NCM Documentation Set

You can access the entire CiscoWorks Network Compliance Manager documentation set from the following Cisco.com URL:

[http://www.cisco.com/en/US/products/ps6923/tsd\\_products\\_support\\_series\\_home.html](http://www.cisco.com/en/US/products/ps6923/tsd_products_support_series_home.html)

From here you can navigate to any documentation for CiscoWorks NCM 1.3 you will need.

**Tip**

To cut and paste a two-line URL into the address field of your browser, you must cut and paste each line separately to get the entire URL without a break.

**Note**

All documentation, including this document and any or all of the parts of the CiscoWorks NCM documentation set, *might* be upgraded over time. Therefore, we recommend you access the CiscoWorks NCM documentation set using the Cisco.com URL:

[http://www.cisco.com/en/US/products/ps6923/tsd\\_products\\_support\\_series\\_home.html](http://www.cisco.com/en/US/products/ps6923/tsd_products_support_series_home.html)

The **Docs** tab visible from within Network Compliance Manager *might* not include links to the latest documents.

## Obtaining Documentation, Obtaining Support, and Security Guidelines

For information on obtaining documentation, obtaining support, providing documentation feedback, security guidelines, and also recommended aliases and general Cisco documents, see the monthly *What's New in Cisco Product Documentation*, which also lists all new and revised Cisco technical documentation, at:

<http://www.cisco.com/en/US/docs/general/whatsnew/whatsnew.html>

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