



QUICK START GUIDE



Cisco Monitor Director 1.1.2

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1 Supplemental License Agreement

SUPPLEMENTAL LICENSE AGREEMENT FOR CISCO SYSTEMS NETWORK MANAGEMENT SOFTWARE: CISCO MONITOR DIRECTOR

IMPORTANT-READ CAREFULLY: This Supplemental License Agreement ("SLA") contains additional limitations on the license to the Software provided to Customer under the End User License Agreement between Customer and Cisco. Capitalized terms used in this SLA and not otherwise defined herein shall have the meanings assigned to them in the End User License Agreement. To the extent that there is a conflict among any of these terms and conditions applicable to the Software, the terms and conditions in this SLA shall take precedence.

By installing, allowing to be installed, downloading, accessing or otherwise using the Software or using the equipment that contains this Software, Customer agrees to be bound by the terms of this SLA. If Customer does not agree to the terms of this SLA, Customer may not install, download, access or otherwise use the Software. When used below, the term "server" refers to a central processor unit owned or leased by Customer or otherwise embedded in equipment provided by Cisco.

1. ADDITIONAL LICENSE RESTRICTIONS

- Cisco hereby grants Customer a non-exclusive worldwide, perpetual, irrevocable, nontransferable object code license (without sublicense rights) in the Software to install and use the Software in connection with the license and use of Cisco Monitor Manager.
- **Installation and Use.** The Software components are provided to Customer solely to install, update, supplement, or replace existing functionality of the applicable Network Management Software product. Subject to the terms and condition of the End User License Agreement and this SLA, Customer may install and use on a single server, one (1) copy of the following software components, in object code form only, as included in, and for use solely with, the Software:
 - MySQL Pro 5.0: Customer will be solely responsible for licensing or otherwise acquiring MySQL Pro 5.0 for use with its external database feature. Cisco will provide application level support, but Customer will be responsible for any external database related support issues, and should procure a support contract for such support directly from MySQL.AB.
- **Number of Supported Instances of Cisco Monitor Manager.** For each Cisco Monitor Director License granted, Customer may install and use the Software on a single server to manage up to hundred (100) concurrent instances of the Cisco Monitor Manager software product Cisco Monitor Manager. Customer must separately obtain Cisco Monitor Manager Licenses to install and run the Cisco Monitor Manager software product. Customers whose requirements exceed the number of instances of Cisco Monitor Manager must purchase additional Cisco Monitor Director Licenses. Cisco Monitor Director License restrictions are enforced by license registration. An external database is required in the event of supporting more than 50 instances of Cisco Monitor Manager.

- Cisco Monitor Director 1.1.2 is interoperable with Cisco Monitor Manager 1.1.2 only.
- **Using Software to Provide Managed Services.** Customer may use the Software to collect and analyze information from the Cisco Monitor Manager to provide network monitoring services to third parties.
- **Reproduction and Distribution.** Customer may not reproduce nor distribute Software.
- Data migration is not supported during the upgrade from Cisco Monitor Director 1.1 to Cisco Monitor Director 1.1.2 with external database.

2. FEES.

- **Fees.** Cisco may charge customer additional fees for upgrades of the Software.
- **Payment Terms.** Customer will pay to Cisco the Fees in advance, and will make the Fee payment as specified in the Purchase Order. All Fees are nonrefundable.
- **Effect of Termination.** Upon termination or expiration of this Agreement, Customer will promptly cease all use of the Software and destroy all copies of all or any part of the Software in its possession. Any payment obligations incurred prior to termination or expiration of this Agreement will survive such termination or expiration.

3. DESCRIPTION OF OTHER RIGHTS AND LIMITATIONS

Cisco is not responsible for the accuracy or completeness of the content, information, or data provided in connection with any reports provided to Customer, or the reliability of any advice, opinion, statement, or other content, information, or data displayed or provided in connection with such reports. Cisco does not control in any respect any information, products, or services offered by service providers or third parties in connection with the Monitor Director software. Cisco assumes no responsibility for and makes no warranty or representation as to the accuracy, completeness, reliability, or usefulness of any advice, opinion, statement, or other content, materials, products or services distributed or made available by service providers or third parties. Please refer to the Cisco Systems, Inc. End User License Agreement for additional information and other rights and limitations.

2 Cisco Monitor Director Overview



Cisco Monitor Director is a remote network monitoring and management application that works with one or more instances of Cisco Monitor Manager to provide seamless, centralized network management across multiple customer sites. Cisco Monitor Director stores network fault data received from associated Cisco Monitor Manager instances and uses this data (which can be selectively filtered) to create monthly reports that summarize a network's health. It also provides the capability to specify that only issues of a certain severity or type generate notification messages, ensuring that the network administrator is notified of issues as quickly as possible.

The following summarizes the Cisco Monitor Director features:

- Central dashboard
- Secure communication between customer and reseller
- Data and voice inventory reports
- Alert notification and escalation
- Performance, network summary, and device health reports
- Scheduled and on-demand summary reports

In this document you will find:

- Hardware and software requirements for optimal performance
- Detailed installation and post-installation instructions
- Pointers to relevant documentation


3 System Requirements

To ensure the proper installation and operation of Cisco Monitor Director on your machine, verify that all of the requirements listed in the following table are met before proceeding.



Note Unless otherwise indicated, these requirements apply to clients (machines that will access a Cisco Monitor Director instance installed on another machine), servers (machines on which Cisco Monitor Director is installed), and machines on which a remote database resides.

Component	Requirement
Available disk space	40 GB Note the following: <ul style="list-style-type: none">• During installation, files are unzipped into your machine's default temp directory (the directory specified by the TMP user environment variable).• Verify that there is at least an additional 1 GB of free disk space available to ensure that Cisco Monitor Director is installed properly.
RAM	<ul style="list-style-type: none">• 2 GB (server/remote database)• 512 MB (client)
CPU processor	<ul style="list-style-type: none">• Intel Pentium IV 2 GHz or newer (server/remote database)• Intel Pentium IV 1 GHz or newer (client)

Component	Requirement
Monitor resolution	1024 x 768 pixels or higher
Bandwidth	100 Mbps  Note This refers to the bandwidth of the connection between a Cisco Monitor Director server and a remote database.
Browser	One of the following: <ul style="list-style-type: none"> • Internet Explorer 6.0 or later • Firefox 2.0 or later • Netscape Navigator 7.2
Adobe Flash Player	Version 9.0.47 or later
Operating System	One of the following: <ul style="list-style-type: none"> • Windows XP Professional Service Pack 2 • Windows Server 2003 R2 (Standard or Enterprise Edition)

Component	Requirement
Protocols	<p data-bbox="444 212 1247 272">Enable HTTPS on your machine and verify that port 443 is not already used by another application.</p> <p data-bbox="444 277 1247 342">If you want to use a port other than port 443 for HTTPS, you will need to do the following:</p> <ol data-bbox="444 347 1247 1034" style="list-style-type: none"> <li data-bbox="444 347 1247 444">1. Launch the Cisco Monitor Director Administration Console (Start > All Programs > Cisco Monitor Director > Launch AdminTool). <li data-bbox="444 449 1247 482">2. Click Server from the Administration Console toolbar. <li data-bbox="444 487 1247 628">3. In the HTTPS Port field, enter the port number Cisco Monitor Director will use for HTTPS service, and then click Apply. A message appears, indicating that the port has been changed successfully. <li data-bbox="444 633 1247 730">4. Click OK to close this message. Another message appears, indicating that the Cisco Monitor Director service will be restarted. <li data-bbox="444 735 1247 768">5. Click OK. <li data-bbox="444 773 1247 805">6. Launch Cisco Monitor Manager. <li data-bbox="444 810 1247 979">7. In the Cisco Monitor Manager Options dialog box (Administration > Options > Cisco Monitor Director), enter the same port you specified in the previous step in the Reseller Console Address field, formatted as follows: <i>IP address:port number</i>. <li data-bbox="444 984 1247 1034">8. Click Apply, and then click OK.

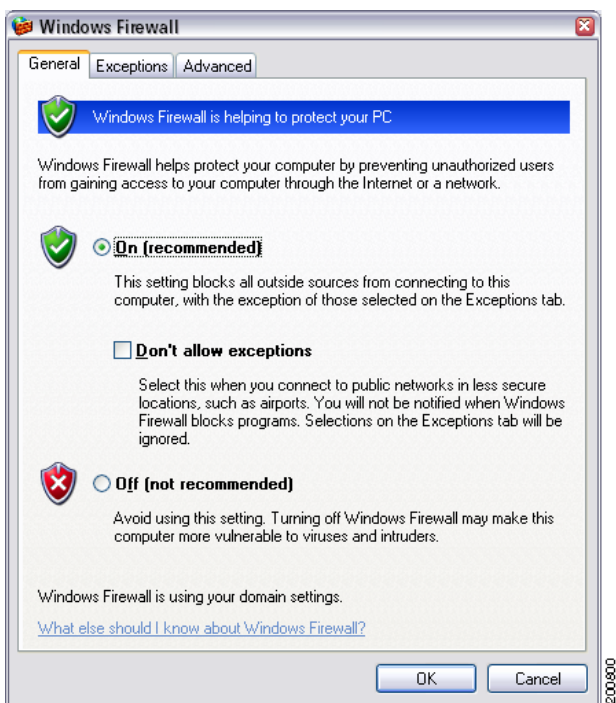
Note the following:

- If Cisco Security Agent is installed on your machine, you might need to disable it before you install Cisco Monitor Director.
- We recommend that you do not install both Cisco Monitor Manager and Cisco Monitor Director on the same machine.
- Cisco Monitor Director can manage a maximum of 50 customers when using a local database and 100 customers when using a remote database. If you are running the evaluation version of Cisco Monitor Director, you can manage a maximum of 5 customers.
- We recommend that you have administrator privileges on the machine on which you will install Cisco Monitor Director.

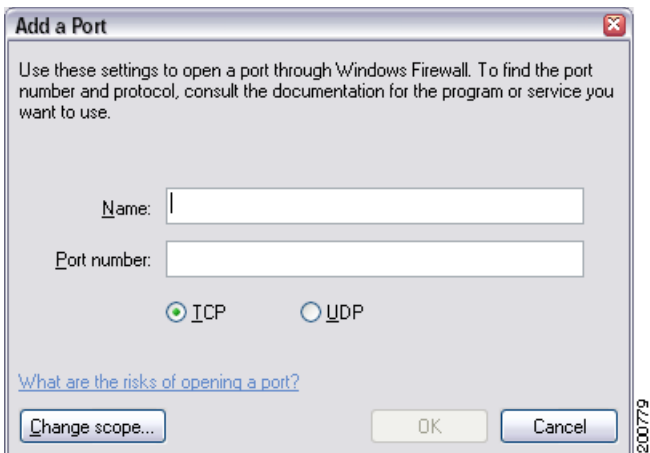
- The Secure Socket Layer (SSL) certificates used by Cisco Monitor Director to provide secure communication are created and self-signed by Cisco Systems, Inc. If you prefer to use customized SSL certificates, see the “Creating Customized SSL Certificates” online help topic.
- By default, Windows Firewall is enabled on Windows XP machines. As a result, Cisco Monitor Manager instances cannot communicate with a Cisco Monitor Director instance installed on a Windows XP machine until you open the HTTPS port on that Windows XP machine through the firewall.

To open the port:

Step 1 From the machine Cisco Monitor Director is installed on, select **Start > Control Panel > Windows Firewall**. The Windows Firewall dialog box appears.



Step 2 Click the **Exceptions** tab and then click **Add Port....** The Add a Port dialog box appears.



Step 3 Enter the name and number of the port used for HTTPS (the default port is 443).

Step 4 Ensure that the **TCP** radio button is selected and then click **OK**.



Note

If Cisco Monitor Director is installed on a machine with an application that already uses port 443, the port might be assigned to that application instead of to Cisco Monitor Director after a machine restart. If this happens, Cisco Monitor Director will state that the port is already being used. You must use the Administration Console to configure another port for HTTPS service. For more information on the Administration Console, see the Cisco Monitor Director 1.1.2 online help.

- After you have installed Cisco Monitor Director on a machine that also has McAfee VirusScan Enterprise installed, you will not be able to send e-mail from Cisco Monitor Director until you unblock port 25. To do so:
 - a. Launch the VirusScan Console window.
 - b. Right-click the Access Protection task and then select **Properties**.
 - c. In the Port Blocking tab, uncheck the Prevent mass mailing worms from sending mail check box and then click **Apply**.
 - d. Click **OK**.

4 Before You Begin

The following section describes the preliminary tasks you must complete before you install Cisco Monitor Director 1.1.2.



Note Steps 1 and 2 are applicable only if you are upgrading from Cisco Monitor Director 1.1. If you are not performing an upgrade, begin with Step 3 instead.

Step 1 Back up the Cisco Monitor Director 1.1 database.

- a. Launch the Services window (**Start > Control Panel > Administrative Tools > Services**) and verify that the Cisco Monitor Director Service is running. If the service is not running, start it.
- b. On the machine Cisco Monitor Director is installed on, launch a command prompt.
 - From the Windows taskbar, select **Start > Run...** The Run dialog box appears.
 - Enter the following command and then click **OK**: `cmd`
- c. Navigate to the directory that contains your database information. For example, assuming that Cisco Monitor Director is installed in C:\Program Files, you would enter:
`cd C:\Program Files\Cisco Systems\CiscoSMB\Cisco Monitor Director\Database\Data`
- d. Back up your database by entering the following command:
`backup_CiscoMD.cmd <backup directory>`

For example, if you want to back up your database information in a folder named “10082007” on your D: drive, you would enter:

```
backup_CiscoMD.cmd D:\10082007
```

The files CiscoPNM.db and CiscoPNM.log, which contain your network's database information, are now available in the backup directory you specified.



Note Backing up your database is a CPU-intensive operation. It will take longer than usual to launch an application window until the database backup completes.

- e. Verify that the size of these two files is identical to the size of CiscoPNM.db and CiscoPNM.log, located here:
`<Cisco Monitor Director installation directory>\database\data\.`

Step 2 (Optional) If you plan to migrate data from Cisco Monitor Director 1.1, shut down the Cisco Monitor Director Service from the Services window (**Start > Control Panel > Administrative Tools > Services**).

Step 3 Obtain a runtime license.

- a. Determine the MAC address of the machine you will install Cisco Monitor Director on by opening a command prompt and entering the following command: `ipconfig /all`

The value displayed in the Physical Address field is the MAC address of your machine.



Note

If your machine has multiple MAC addresses, you can use any of them to obtain a runtime license. It is recommended that you use a MAC address that is not associated with a remote VPN adapter or a module you might remove in the future. If you later decide to run Cisco Monitor Director on a different machine, or you remove the hardware that corresponds to the MAC address you registered Cisco Monitor Director under, you will need to contact Cisco for a new license.

- b. Obtain a Product Authorization Key (PAK) from either your reseller or your Cisco sales representative.
- c. Launch the following URL:
<https://tools.cisco.com/SWIFT/Licensing/PrivateRegistrationServlet>

The Authentication Required dialog box appears.



- d. Enter the username and password you use to log into Cisco.com and then click **OK**. Note that you may be prompted to enter your username and password a second time. The Product License Registration wizard launches.

Support
Product License Registration

1 Enter a PAK Number > 2 Validate Features > 3 Designate Licensee > 4 Finish and Submit >

Licenses Not Requiring a PAK

If you do not have a Product Authorization Key (PAK), please click [here for available licenses](#).

Available licenses include Evaluation Licenses, Cisco ASA 3DES/AES, PIX Firewall 3DES/AES and DES Encryption, Cisco Services for IPS, and Cisco CallManager Version Upgrade licenses.

Product Authorization Key (PAK)

Enter the Product Authorization Key (PAK) below exactly as it appears on the label that accompanied the Cisco Information Packet.

Product Authorization Key (PAK):*

Enter one value at a time including dashes.
 Example 1: 4XCD#V####
 Example 2: UNITY-2X-SJ-XXXXXX
 Example 3: CRS-3X-CQ-XXXXXX

.....

[Go Back](#) [SUBMIT](#)

RMA Catalyst 3560E/3750E License

Click on following link to obtain Catalyst 3560E/3750E RMA License.

[Register for an RMA License](#)

- e. In the Product Authorization Key (PAK) field, enter the appropriate PAK and then click **SUBMIT** to proceed to the Validate Features wizard page.

Support
Product License Registration

1 Enter a PAK Number > 2 Validate Features > 3 Designate Licensee > 4 Finish and Submit >

Your product information is shown below. Displayed is the product name and associated features and quantity.

PAK: 1451JBEDA69			
Product SKU	Option SKU	Description	Quantity
DIR-1.2-SW-K9		DIR-1.2-SW-K9: Cisco Monitor Director 1.1.2, Single SW, Perpetual License	1

If the information is incorrect, for a prompt response, please open a Service Request using the [TAC Service Request Tool](#). Please have your valid Cisco.com user id and password available. As an alternative you may also call our main Technical Assistance Center at 800-553-2447. If you would like to enter a different PAK, please use your browser's back button to return to the form.

[Go Back](#) [Continue](#)

- f. Verify that the correct product SKU for the Cisco Monitor Director version you purchased is displayed and then click **Continue** to proceed to the Designate Licensee wizard page.

Support

Product License Registration



Small Business Network Management

Cisco Monitor Manager
Cisco Monitor Director

Please complete the registration information below to register your Cisco Monitor Manager (Cisco MM) or Cisco Monitor Director (Cisco MD) product. Registration of your Cisco Monitor Manager/Director software is required for you to obtain a license file that will be necessary to complete the software installation. Please ensure that you enter your email address correctly as your license file will be emailed to you.

Note: Partners registering on behalf of a customer must check the licensee check box in the End user section.

A "*" denotes a required field

Please enter below the MAC Address of the server hardware that you will be installing your Cisco Monitor Manager or Cisco Monitor Director software on. Enter HEX characters only, no punctuation.

MAC Address*

Example: 001122123456

About your License Key

Your Cisco License key will be sent via email within 1 hour to the email address specified.

- g. Do the following and then click **Continue** to proceed to the last wizard page:
- In the MAC Address field, enter the MAC address (dashes omitted) of the machine you will install Cisco Monitor Director on.
 - After reading the End-User License Agreement, select the Agreement check box to accept its conditions.

- Enter the appropriate contact information in the Registrant Information section of the page.
- If you are not the end-user of this Cisco Monitor Director installation, select the Licensee (End-User) check box and enter the appropriate contact information in the End User Information section of the page.

Support

Product License Registration

1 Enter a PAK Number > 2 Validate Features > 3 Designate Licensee > 4 Finish and Submit

Summarized Information

Please review information below and confirm that it's complete and accurate.

Licensee Information

<p>Registrant Profile Edit Details</p>	<p>Full Name: Joe Writer Job Title: Technical Writer Company: CISCO SYSTEMS Business Address: 10 WEST TASMAN DRIVE SAN JOSE , CA 95134 USA Phone: +1 408 123 4567 Fax:</p> <p>Email: jwriter@cisco.com</p>
<p>End User Profile Edit Details</p>	<p>Full Name: Joe Writer Job Title: Technical Writer Company: CISCO SYSTEMS Business Address: 10 WEST TASMAN DRIVE SAN JOSE , CA 95134 USA Phone: +1 408 123 4567</p>

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- h. Verify that the information provided is accurate and then click **Submit**.
The wizard page will indicate when registration is complete. Your runtime license will be sent to the e-mail address specified during the registration process. If you do not receive a license within one hour, open a service request using the [TAC Service Request Tool](#).
- i. Save the runtime license onto your machine.

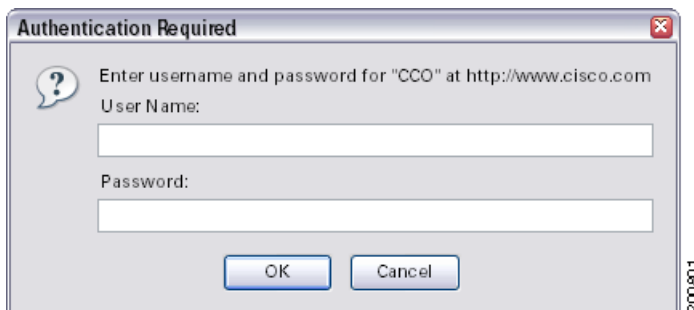
Step 4 Download the Cisco Monitor Director installer file from Cisco.com.



Note If you have the Cisco Monitor Director installation CD, skip this step and proceed to the installation instructions.

- a. Launch the following URL:
<http://www.cisco.com/cgi-bin/tablebuild.pl/CiscoMD-crypto>

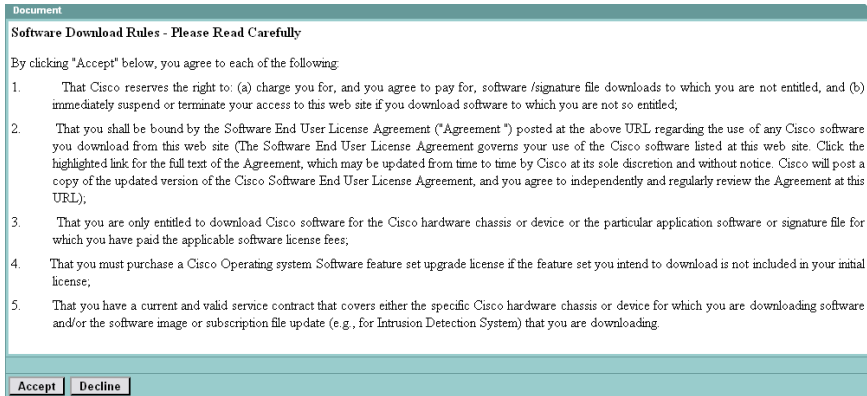
The Authentication Required dialog box appears.



- b. Enter the username and password you use to log into Cisco.com and then click **OK**.
The Software Download page appears.
- c. Click the `cisco-monitor-director-1_1_2-win32-k9.exe` link.
The Software Download page updates, displaying details for the software you will download.

d. Click **Next**.

The rules that apply to the download are displayed.



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e. After reading through the rules, click **Accept** to accept their conditions.

The Authentication Required dialog box appears.



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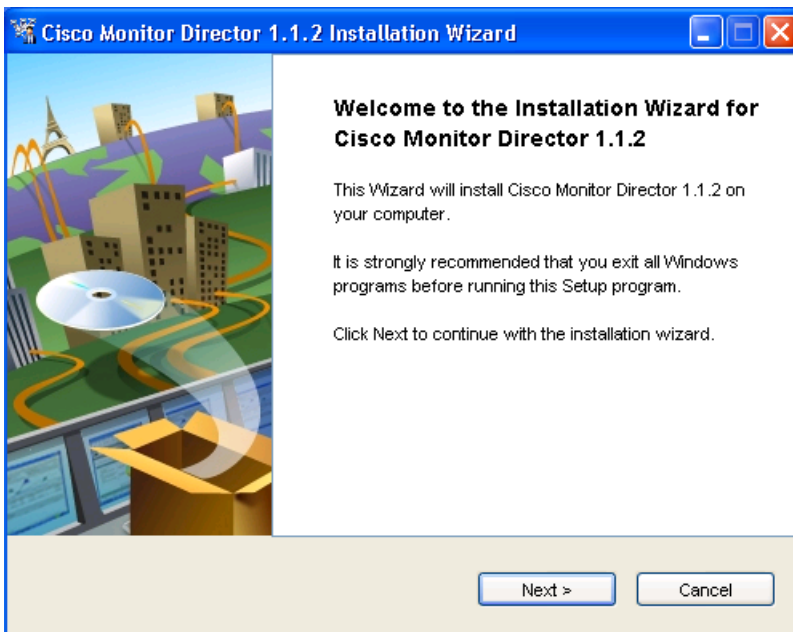
f. Enter the username and password you use to log into Cisco.com and then click **OK**.

g. Save the Cisco Monitor Director installer file onto your machine.

5 Upgrading from Cisco Monitor Director 1.1

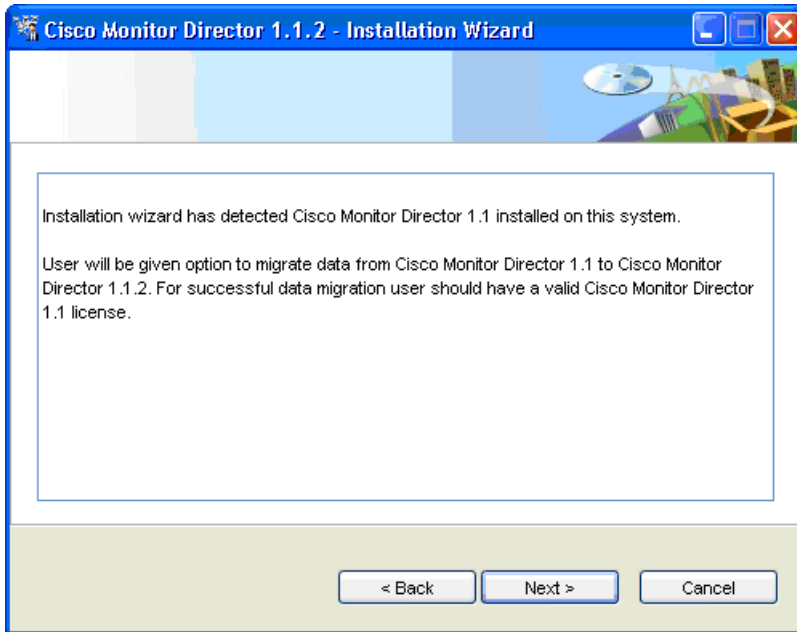
Step 1 On your machine, navigate to and double-click `cisco-monitor-director-1_1_2-win32-k9.exe` to launch the installation wizard.

The first wizard screen appears.



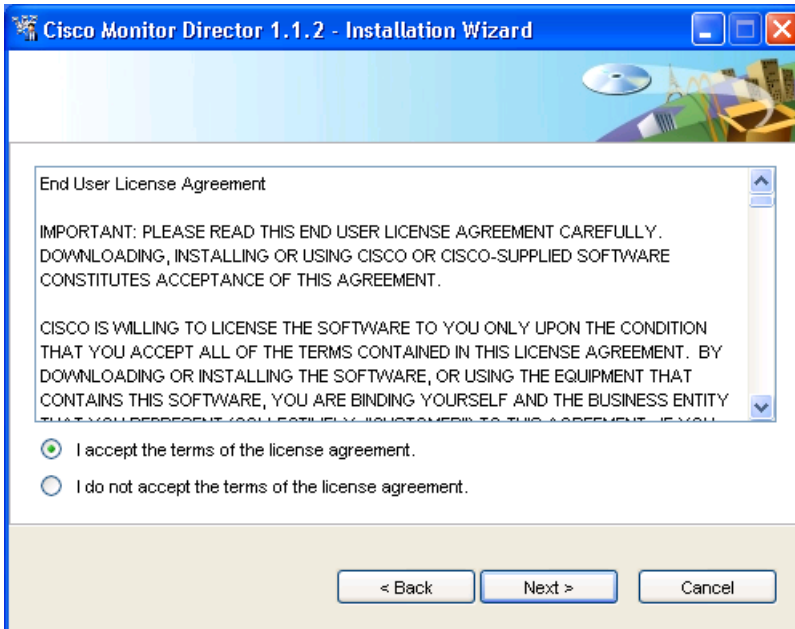
Step 2 Click Next.

The next wizard screen appears, indicating that Cisco Monitor Director 1.1 is already installed on this machine.



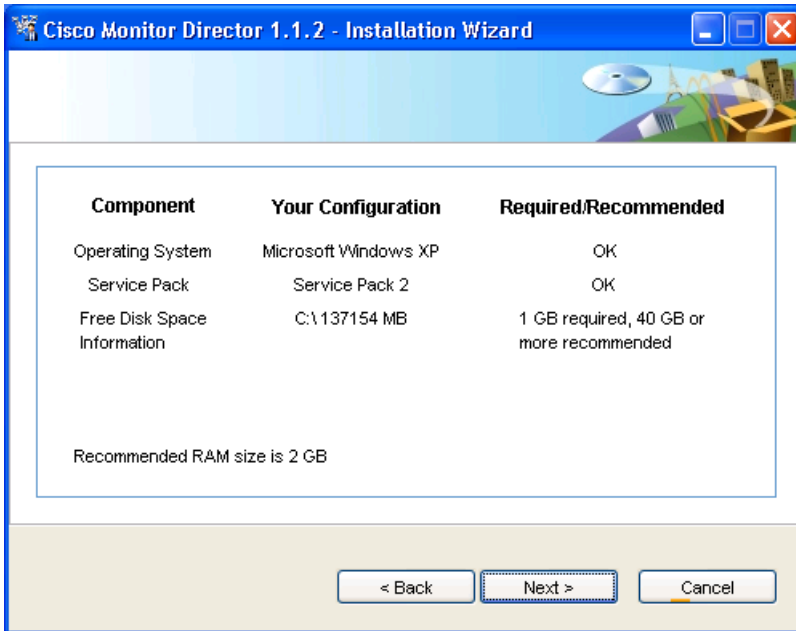
Step 3 Click Next.

The next wizard screen appears, displaying the End User License Agreement.



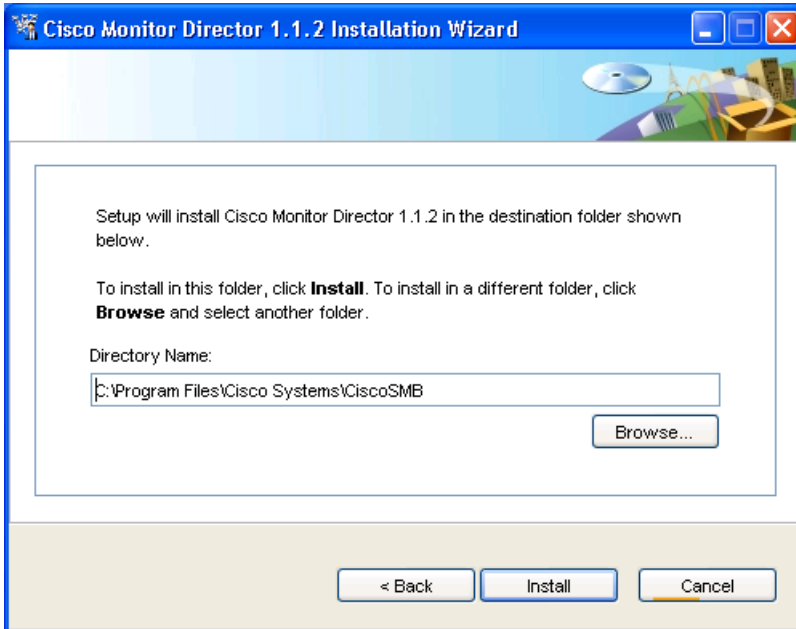
Step 4 After reading through the license agreement, click the **I accept the terms of the license agreement** radio button and then click **Next**.

The next wizard screen appears, indicating the minimum amount of disk space and RAM required to proceed with the installation.



Step 5 Verify that your machine meets these requirements and then click **Next**.

The next wizard page appears, prompting you to specify an installation directory.



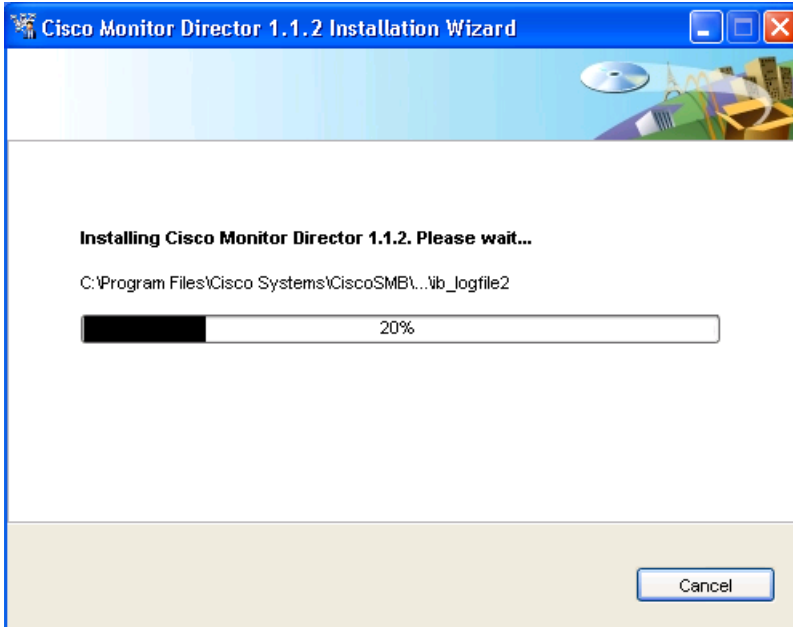
If you want to install Cisco Monitor Director in the default directory, skip ahead to Step 7. Otherwise, go to Step 6.

Step 6 Do one of the following:

- In the Directory Name field, enter the directory in which you want to install Cisco Monitor Director.
- Click **Browse...** to navigate to the desired Cisco Monitor Director installation directory and then click **Open**.

Step 7 Click **Install**.

The next wizard screen appears, indicating the installation's progress.



After the necessary files have been installed, the next wizard screen appears.

Cisco Monitor Director 1.1.2 Installation Wizard

Cisco Monitor Director Application Administrator Setup:

Username

(Eight-character minimum)

Password

(Eight-character minimum; case sensitive)

Retype Password

Next > Cancel

Step 8 Enter the username and password required for Administrator privileges on this Cisco Monitor Director instance and then click **Next**.

Valid Cisco Monitor Director usernames and passwords meet the following criteria:

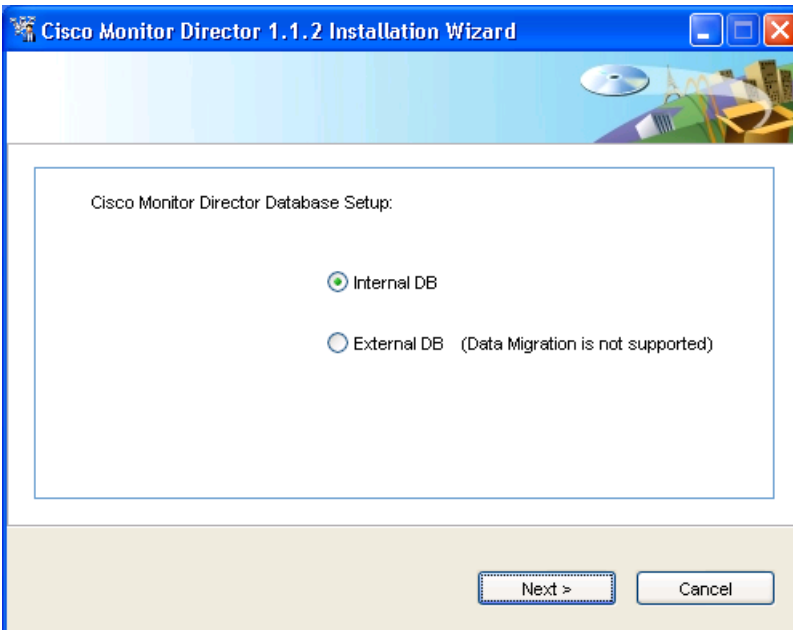
- Range from 8 to 80 characters in length
- Contain only characters from the struck ASCII set



Note In addition to letters (both lowercase and uppercase) and numbers, this set contains the following characters: !"#\$%&'()*+,-./:;<=>?@[\\]^_`{|}~

- Are case sensitive
- Begin with a letter

The next wizard screen appears.



Step 9 Enter the settings for either a local or remote database and then click **Next**.

To configure a local database:

- a. Select the **Internal DB** radio button and then click **Next**.
- b. Enter the following information:
 - Username and password required to manage a local database
 - Number of the port configured for database access
- c. Click **Next**.

To configure a remote database:

- a. Select the **External DB** radio button and then click **Next**.
- b. Enter the following information:
 - Username and password required to connect to and manage a remote database
 - Hostname or IP address of the machine on which a remote database resides
 - Number of the port configured for remote database access
 - Name of the remote database

- c. Click **Test**.

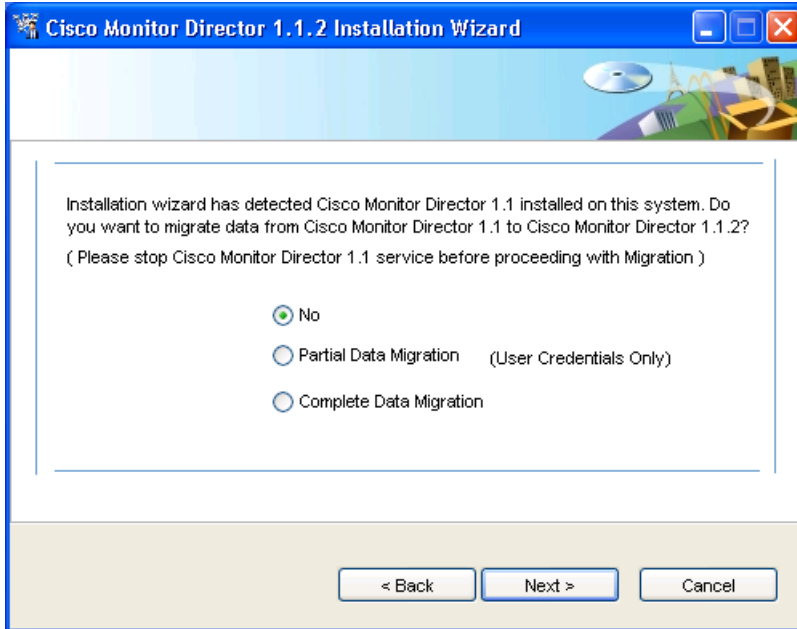
A message appears, indicating whether the remote database you specified is running.

- d. Click **OK** to close this message.
- e. Click **Next**.

To enable you to migrate data from the Cisco Monitor Director 1.1 instance that is already installed on this machine, you must meet the following requirements:

- A valid runtime license must be registered for your Cisco Monitor Director 1.1 instance.
- You must be configuring a local database.

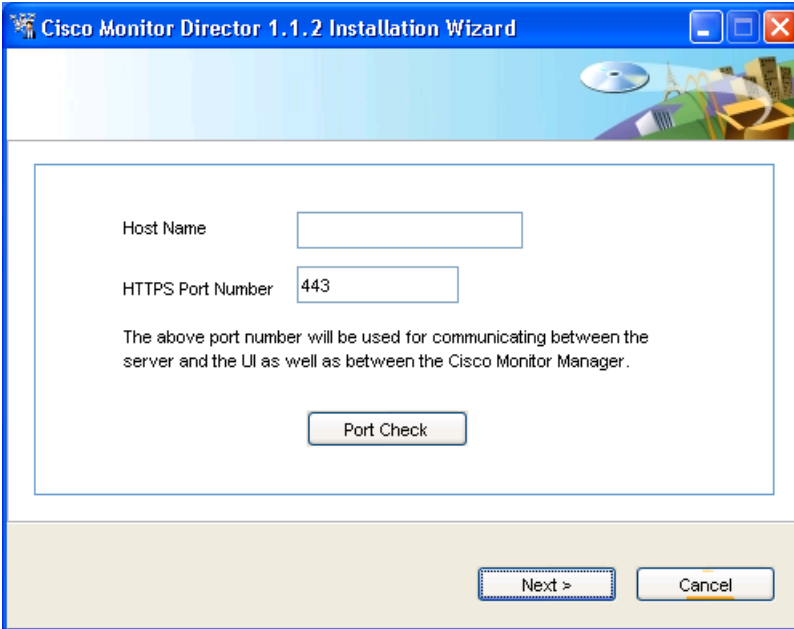
If you have met these requirements, then the following wizard screen appears.



Step 10 Select one of the following radio buttons and then click **Next**:

- **No**—Select if you do not want to migrate data
- **Partial Data Migration**—Select if you only want to migrate user credentials and other basic settings
- **Complete Data Migration**—Select if you want to migrate all data from Cisco Monitor Director 1.1, as well as any valid runtime licenses

The following wizard screen appears.



Step 11 Enter the port number that will be used by this Cisco Monitor Director instance to communicate with both the GUI and associated Cisco Monitor Manager instances.



Note If you selected the **Complete Data Migration** radio button in the previous step, make sure to enter the same port number configured for Cisco Monitor Director 1.1.

Step 12 Click **Port Check**.

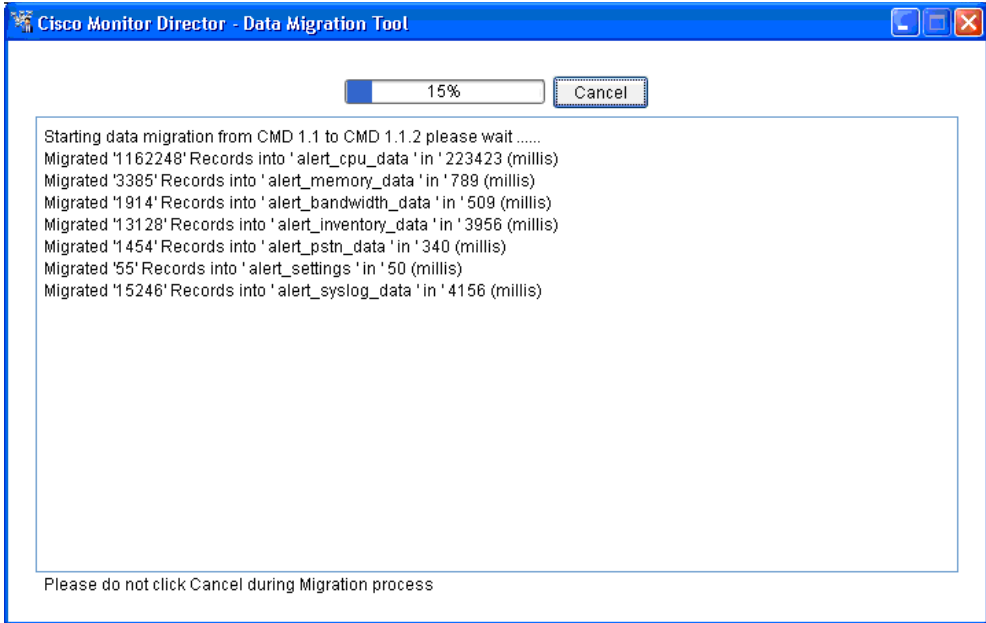
A message appears, indicating whether the port you specified is free.

Step 13 Click **OK** to close this message.

If necessary, enter the number of a port that is not already in use.

Step 14 Click **Next**.

If you are migrating data, the Data Migration Tool appears.



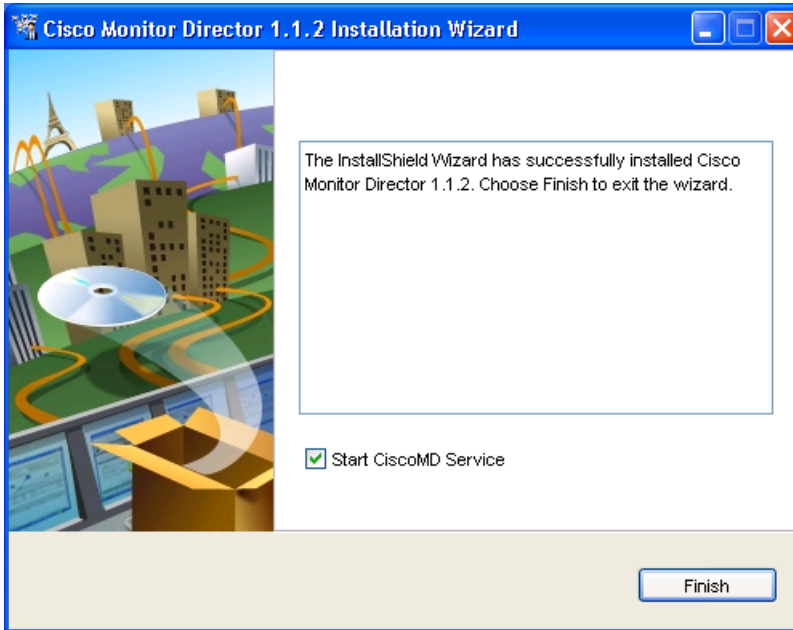
After all of your customer and device information has been migrated, click **Finish**. This information will be available in Cisco Monitor Director 1.1.2 after you start the application for the first time.



Note

The data migration may take a few hours, depending on the amount of data being migrated.

The installation of Cisco Monitor Director is now complete.



Step 15 Click **Finish** to close the wizard.

The runtime license registered for Cisco Monitor Director 1.1 is automatically copied over to Cisco Monitor Director 1.1.2.

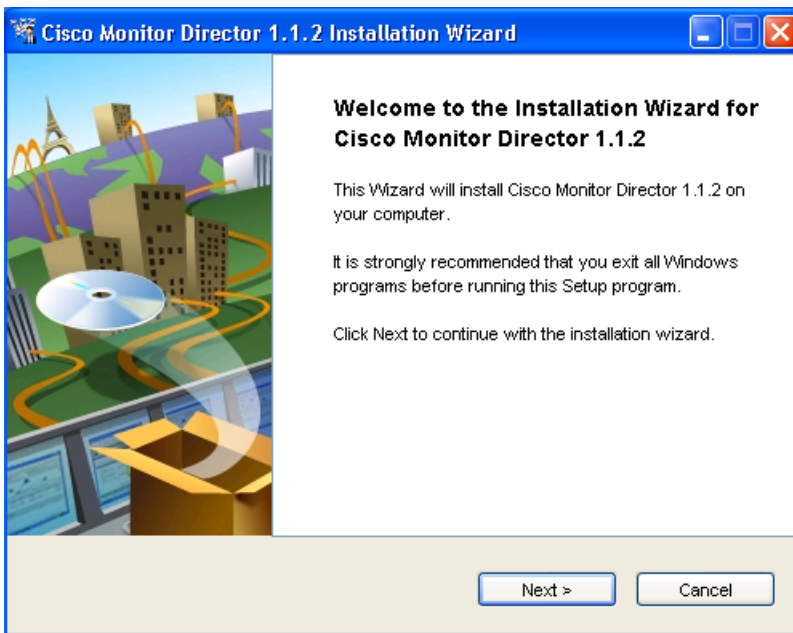
Step 16 Do one of the following:

- If your license has expired, you will need to register a new one. Proceed to the [Registering Your Runtime License, page 39](#) for more information.
 - If your license is still valid, you will not be prompted to register a new license. Proceed to the [Logging into Cisco Monitor Director, page 40](#).
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6 Installing Cisco Monitor Director 1.1.2

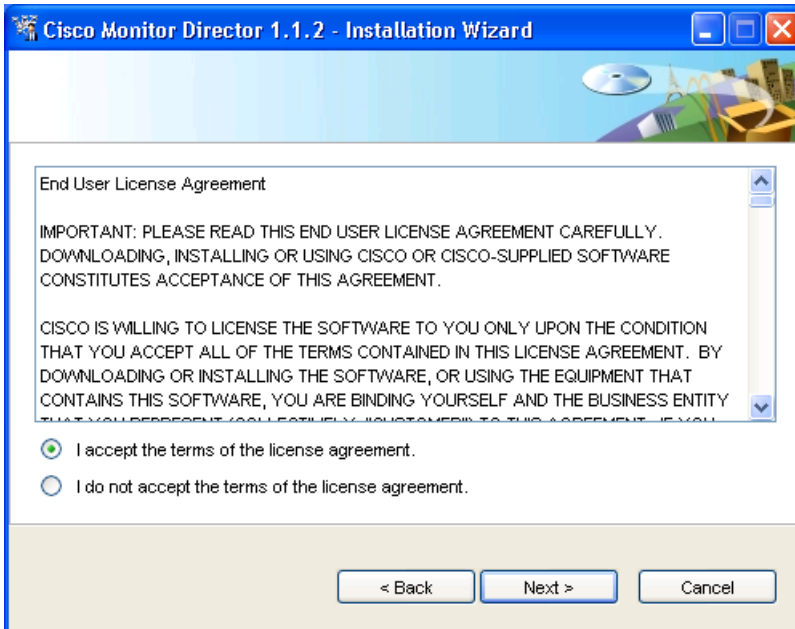
Step 1 On your machine, navigate to and double-click `cisco-monitor-director-1_1_2-win32-k9.exe` to launch the installation wizard.

The first wizard screen appears.



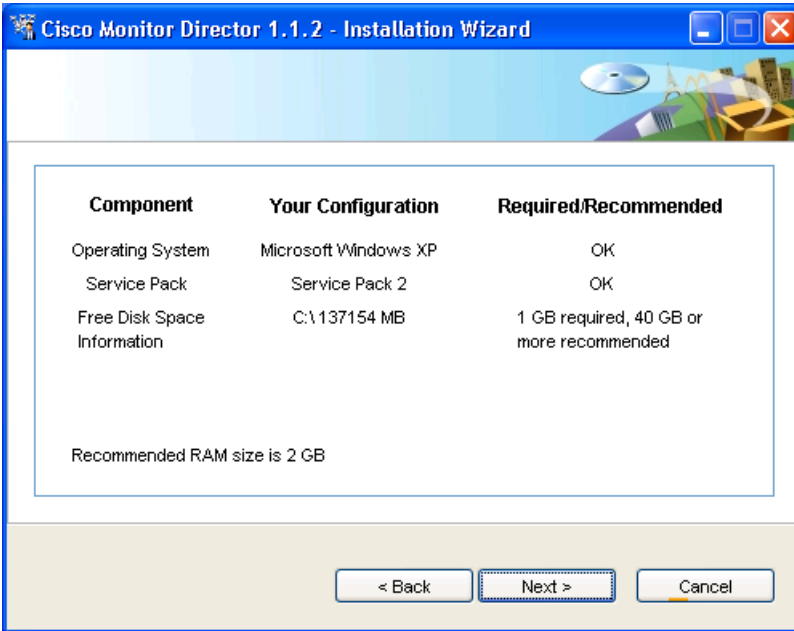
Step 2 Click Next.

The next wizard screen appears, displaying the End User License Agreement.



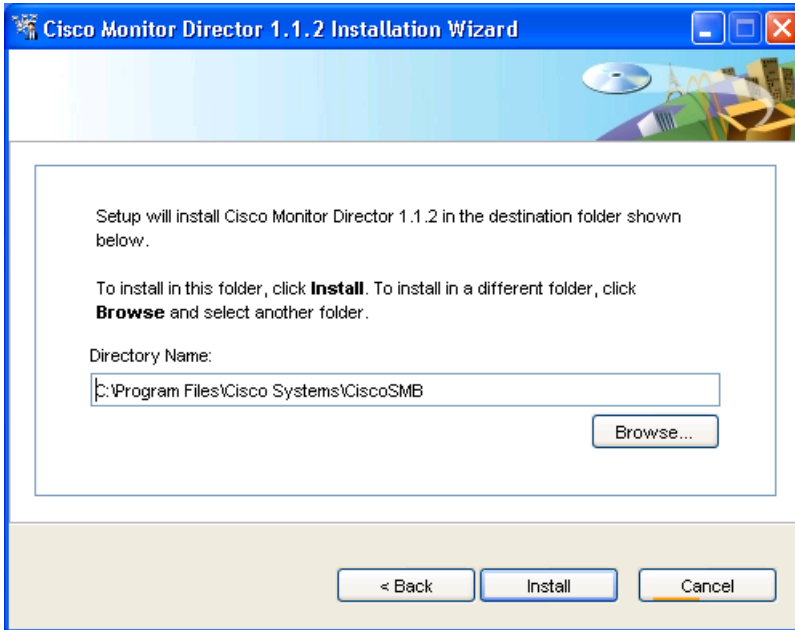
Step 3 After reading through the license agreement, click the **I accept the terms of the license agreement** radio button and then click **Next**.

The next wizard screen appears, indicating the minimum amount of disk space and RAM required to proceed with the installation.



Step 4 Verify that your machine meets these requirements and then click Next.

The next wizard page appears, prompting you to specify an installation directory. If you want to install Cisco Monitor Director in the default directory, skip ahead to Step 6. Otherwise, go to Step 5.

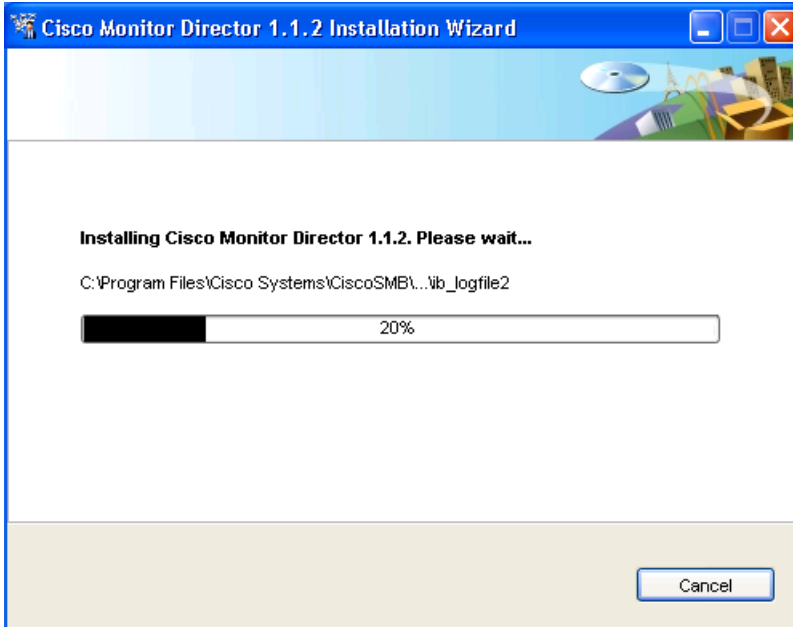


Step 5 Do one of the following:

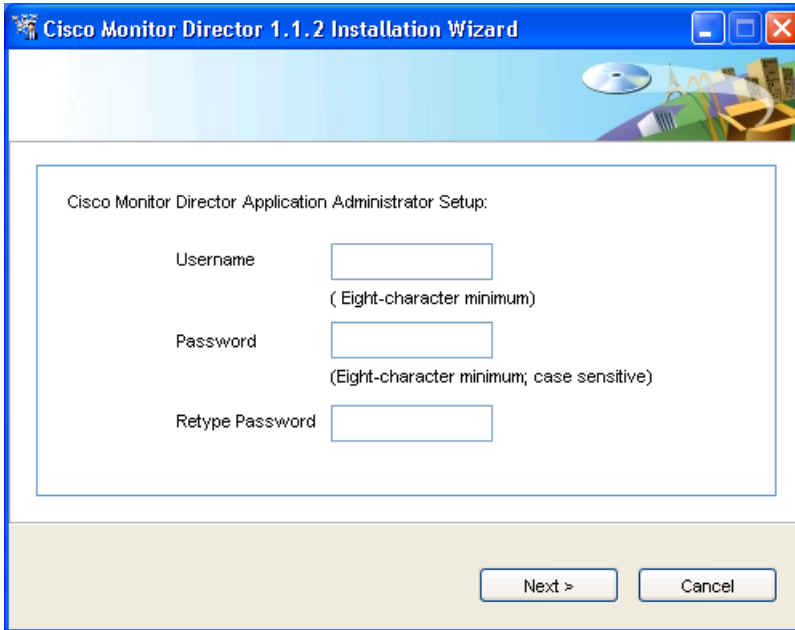
- In the Directory Name field, enter the directory in which you want to install Cisco Monitor Director.
- Click **Browse...** to navigate to the desired Cisco Monitor Director installation directory and then click **Open**.

Step 6 Click **Install**.

The next wizard screen appears, indicating the installation's progress.



After the necessary files have been installed, the next wizard screen appears.



Cisco Monitor Director 1.1.2 Installation Wizard

Cisco Monitor Director Application Administrator Setup:

Username
(Eight-character minimum)

Password
(Eight-character minimum; case sensitive)

Retype Password

Next > Cancel

Step 7 Enter the username and password required for Administrator privileges on this Cisco Monitor Director instance and then click **Next**.

Valid Cisco Monitor Director usernames and passwords meet the following criteria:

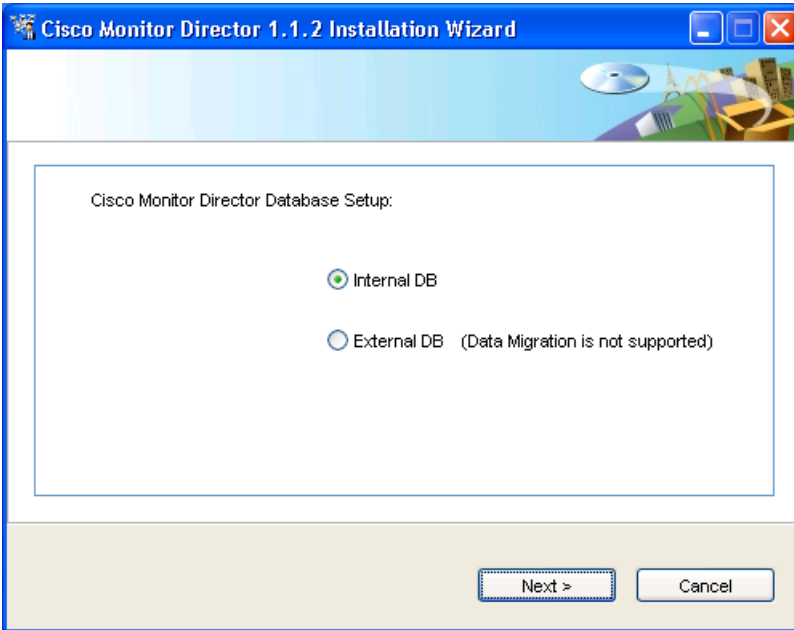
- Range from 8 to 80 characters in length
- Contain only characters from the struck ASCII set



Note In addition to letters (both lowercase and uppercase) and numbers, this set contains the following characters: !"#\$%&'()*+,-./:;<=>?@[\\]^_`{|}~

- Are case sensitive
- Begin with a letter

The next wizard screen appears.



Step 8 Enter the settings for either a local or remote database and then click **Next**.

To configure a local database:

- a. Select the **Internal DB** radio button and then click **Next**.
- b. Enter the following information:
 - Username and password required to manage a local database
 - Number of the port configured for database access
- c. Click **Next**.

To configure a remote database:

- a. Select the **External DB** radio button and then click **Next**.
 - b. Enter the following information:
 - Username and password required to connect to and manage a remote database
 - Hostname or IP address of the machine on which a remote database resides
 - Number of the port configured for remote database access
 - Name of the remote database
 - c. Click **Test**.
- A message appears, indicating whether the remote database you specified is running.
- d. Click **OK** to close this message.
 - e. Click **Next**.

The next wizard screen appears.

Cisco Monitor Director 1.1.2 Installation Wizard

Host Name

HTTPS Port Number

The above port number will be used for communicating between the server and the UI as well as between the Cisco Monitor Manager.

Port Check

Next > Cancel

Step 9 Enter the port number that will be used by this Cisco Monitor Director instance to communicate with associated Cisco Monitor Manager instances.

Step 10 Click **Port Check**.

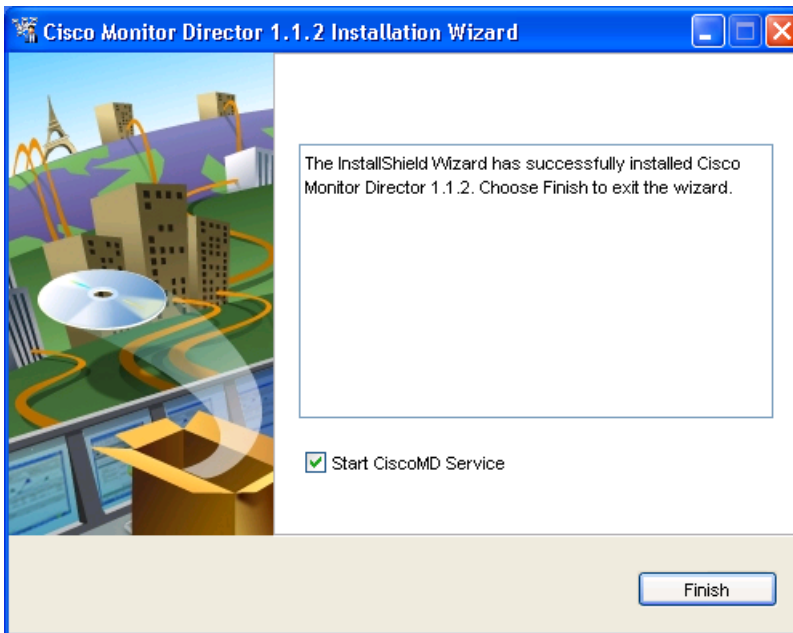
A message appears, indicating whether the port you specified is free.

Step 11 Click **OK** to close this message.

If prompted, enter the number of a port that is not already in use.

Step 12 Click **Next**.

The installation of Cisco Monitor Director is complete.



Step 13 Click **Finish** to close the wizard.

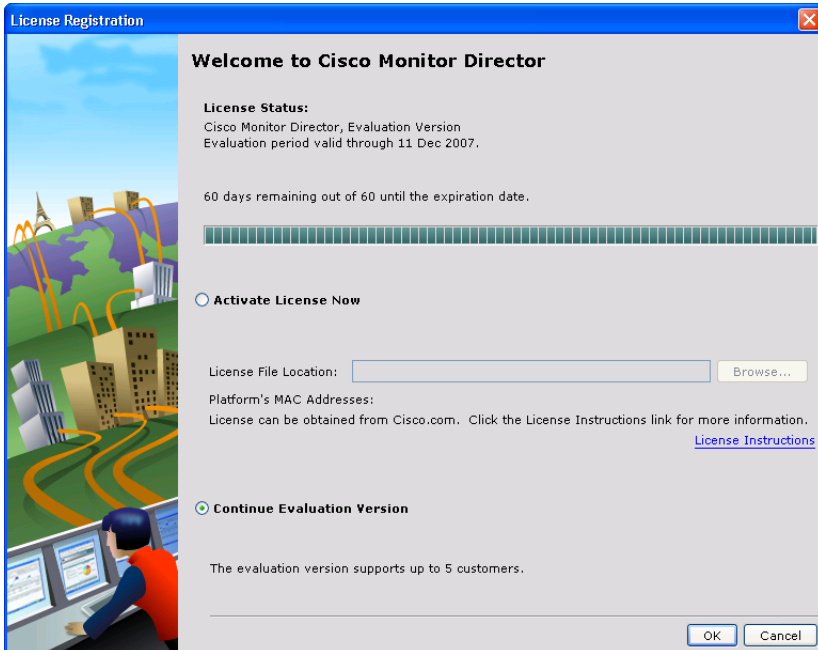
7 Post-Installation Tasks

After you have installed Cisco Monitor Director 1.1.2, complete the following tasks to get up and running:

- [Registering Your Runtime License, page 39](#)
- [Logging into Cisco Monitor Director, page 40](#)
- [Administering Your Network, page 42](#)

Registering Your Runtime License

- Step 1** Launch the Administration Console. You can launch this utility in one of two ways:
- Select **Start > All Programs > Cisco Monitor Director > Launch AdminTool**.
 - From the system tray, right-click the Cisco Monitor Director icon and then select **Launch AdminTool**.
- Step 2** Click **License** from the Administration Console toolbar.
- Step 3** Click **Registration** to launch the License Registration page.



Step 4 Select the **Activate License Now** radio button.

Step 5 Click **Browse...**

A message appears, indicating that because Cisco Monitor Director runs as a service, the license browser initially starts at your machine's top-level directory instead of your home directory (C:\Documents and Settings\username\My Documents, for example).

Step 6 Click **OK** to close the message.

Step 7 Navigate to your runtime license and then click **Open**.

A message appears, indicating that you have successfully registered your license.

Step 8 Click **OK** to close this message, and then click **OK** to close the License Registration page.

At this point, Cisco Monitor Director should automatically restart. If it does not, restart the application to ensure that license registration is complete.

Logging into Cisco Monitor Director

Now that you have registered your runtime license, log into Cisco Monitor Director. Before you proceed, verify that the Cisco Monitor Director Service is running. If the Cisco Monitor Director system tray icon is not displayed, start the service by selecting **Start > Programs > Cisco Monitor Director > Start CiscoMD Service**.

Note that Cisco Monitor Director uses a self-signed certificate for HTTPS authentication. If you use a self-signed certificate instead of an official certificate, warning messages appear.

After you enter the application URL in a browser, a security warning dialog box appears, indicating that the certificate was created by an unauthorized authority. To proceed, select either of the following radio buttons:

- Accept this certificate permanently
- Accept this certificate temporarily for this session

If you accept the certificate permanently, the security warning dialog box will not appear for subsequent logins.

After accepting the certificate, the browser might display a security warning indicating a domain name mismatch. Click **OK** in this dialog box to proceed. The application login window appears.



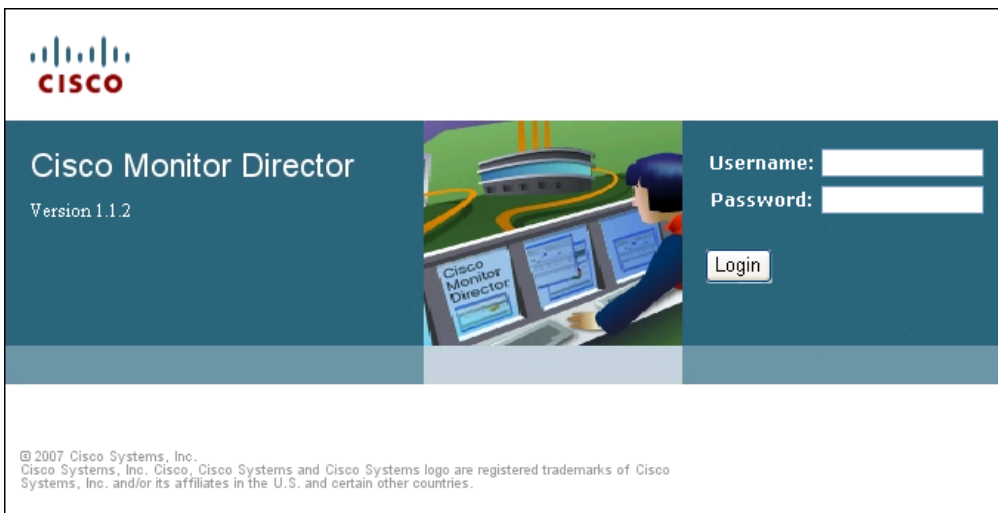
Note Security dialog boxes might differ, depending on the browser used.

Step 1 Open a browser and enter the following URL:

`https://Cisco_Monitor_Director_Server_IP_Address:[port]`

where *Cisco_Monitor_Director_Server_IP_Address* is the IP address of the machine on which this Cisco Monitor Director instance is installed and *port* is the port number used by this Cisco Monitor Director instance to communicate with both the GUI and associated Cisco Monitor Manager instances.

The Cisco Monitor Director login screen appears.



Step 2 Enter your username and password.

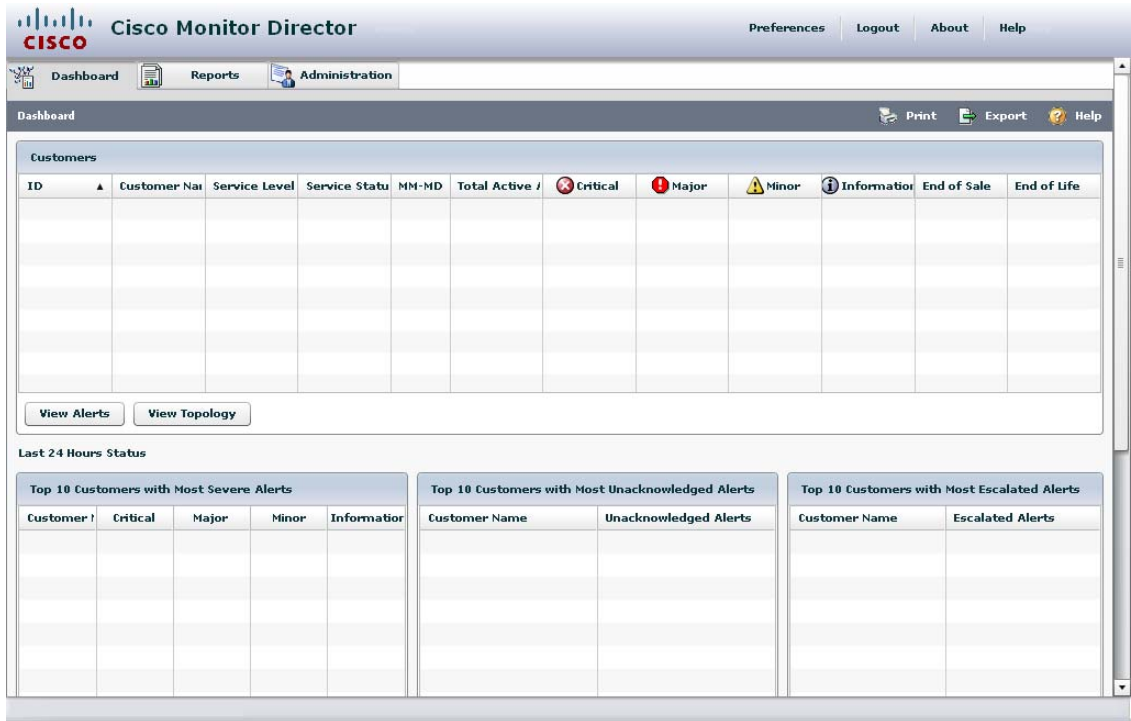
Step 3 Click **Login**.

After you log in, Cisco Monitor Director determines whether Adobe Flash Player is installed on your machine. If it is, Cisco Monitor Director then determines whether it needs to upgrade to the latest version.

- If you already have Adobe Flash Player (any version from 6.0.65 to 9.0.46) installed, the Express Installation page appears. After you confirm that you want to install the latest version, the upgrade is automatically completed.
- If you do not have Adobe Flash Player installed, or have a version previous to 6.0.65 installed, you must install the latest version manually. Launch the following URL for instructions:
http://www.adobe.com/shockwave/download/download.cgi?P1_Prod_Version=ShockwaveFlash

Administering Your Network

After you log into Cisco Monitor Director, the administrator dashboard appears.



Click the Administration tab to perform any of the following tasks:

- Manage customers—Add new customers, edit the settings for existing customers, and delete old customers.
- Manage users—Add new users of this Cisco Monitor Director instance, edit the settings for existing users, and delete old users.
- Specify system settings—Specify general system settings (such as the address of the SMTP server used to deliver alert notification and monthly report emails) and manage both your customers' service levels and branding information.

- Specify application update information—Specify how often Cisco Monitor Director should check Cisco.com for updates and install application update packages.
- View support information—Launch a page that shows information such as the operating system of the computer on which Cisco Monitor Director is installed and

For detailed information about these tasks, see the “Administering Your Network” section of the Cisco Monitor Director online help.

8 Additional Information

The following section describes how to complete the following tasks:

- [Exporting Data Reports, page 43](#)
- [Managing Your Database, page 45](#)
- [Launching Cisco Monitor Director from an RDP Client, page 51](#)

Exporting Data Reports

New to Cisco Monitor Director 1.1.2 is the ability to generate text-based data reports, which you can export into other programs (such as Microsoft Excel) for management purposes. You have three reports to choose from:

- Inventory report—provides detailed information on network devices
- Syslog report—summarizes the Syslog messages generated within a network
- EOS report—provides End-of-Sales data for network devices

These reports will display only the data you are authorized to access. Customers have access to only their data, while Administrators and Network Operations Center (NOC) engineers have access to all customer data.

To generate a report:

Step 1 Launch the Services window (**Start > Control Panel > Administrative Tools > Services**) and verify that the Cisco Monitor Director Service is running. If the service is not running, start it by selecting **Start > Programs > Cisco Monitor Director > Start CiscoMD Service**.

Step 2 Launch a browser and enter the following URL:

```
https://[name:port]/ui/getdata?[command parameters]
```

where *name* is the hostname or IP address of the device on which Cisco Monitor Director 1.1.2 is installed, *port* is the port number configured for HTTPS service on that device, and *command parameters* are the settings for the report you want to generate. You can configure the following parameters:

- **custid:** Enter the ID of the customer for whom you want to generate a report.
 - **type:** Specify whether you want to generate an inventory (inventory), Syslogs (syslogs), or End-of-Sales (eos) report.
 - **format:** Specify whether you want to generate a comma-delimited (csv) or tab-delimited (tsv) report.
 - **header:** Enter either yes or no to specify whether the report will display column headers.
 - **info:** If you are generating an inventory report, specify whether the report will display device-level (device), card-level (card), or port-level (port) information.
 - **template:** Specify whether the report will use the default or uiview template.
-

For example, to generate a report that provides card-level inventory information, is comma-delimited, and displays column headers for customer Nintendo, you would enter the following URL:

```
https://localhost:1234/ui/getdata?custid=Nintendo&type=inventory&format=csv&header=yes&info=card
```

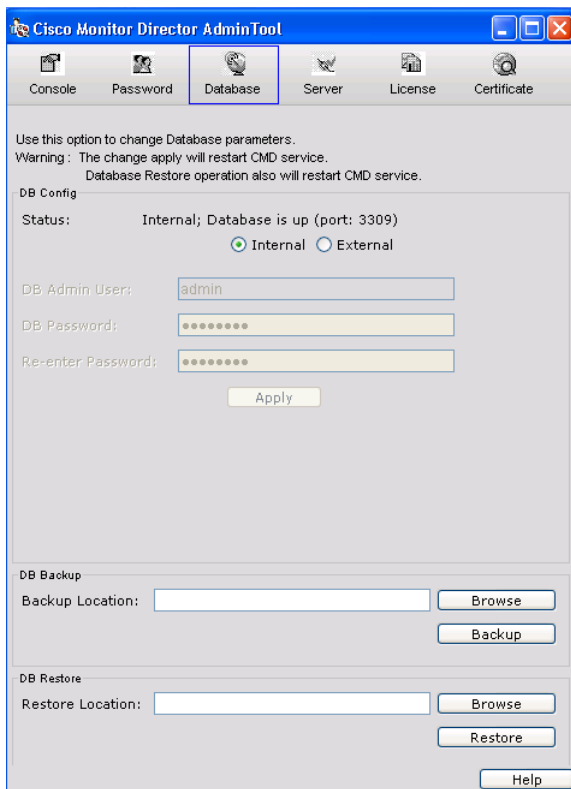
Note the following:

- The **custid** parameter is the only one you are required to enter a value for.
- Unless you specify otherwise, the following parameter values are used:
 - **type:** inventory
 - **format:** csv
 - **headers:** no
 - **info:** device
 - **template:** default

- For every card in a card-level inventory report, information about the device on which the card resides is provided.
- For every port in a port-level inventory report, information about the device and card on which the port resides is provided.

Managing Your Database

From the Administration Console, you can manage the database utilized by this Cisco Monitor Director instance.



You can launch this utility in one of two ways:

- Select **Start > All Programs > Cisco Monitor Director > Launch AdminTool**.
- From the system tray, right-click the Cisco Monitor Director icon and then select **Launch AdminTool**.

For more information on the Administration Console, see the Cisco Monitor Director 1.1.2 online help.



Note If you plan to access a Cisco Monitor Director instance that is installed on a Windows 2003 server remotely, see [Launching Cisco Monitor Director from an RDP Client, page 51](#) for instructions.

This section covers the following tasks:

- [Backing Up/Restoring a Local Database, page 46](#)
- [Setting Up a Remote Database, page 47](#)
- [Configuring Remote Database Access, page 50](#)

Backing Up/Restoring a Local Database

Step 1 Click **Database** from the Administration Console toolbar.

Step 2 Select the **Internal** radio button.

Step 3 If you are backing up the current database:

- a. Click **Browse** in the DB Backup pane to navigate to the directory where you want to save your database information, and then click **Open**.
- b. Click **Backup**. Your database information is saved to the file CiscoMD.SQL.

If you are restoring a previously saved database:

- a. Click **Browse** in the DB Restore pane to navigate to the directory that contains your database information.
 - b. Select the file CiscoMD.SQL and then click **Open**.
 - c. Click **Restore**.
-

Setting Up a Remote Database

Step 1 Ensure that the machine on which you will set up a remote database meets the requirements listed in [System Requirements, page 5](#).



Note When a firewall is in place between a Cisco Monitor Director instance and a remote database, you will also need to open the TCP port configured for MySQL use (by default, port 3306) on the firewall.

Step 2 Install MySQL on a remote machine (where the MySQL database will reside).

The MySQL installer prompts you to enter an Administrator username and password. Please retain this information—you will need to enter the same username and password when you install Cisco Monitor Director 1.1.2.

Step 3 Start MySQL.

During installation, you can choose whether you want to run MySQL in NT service mode or console mode. If you select NT service mode, MySQL is installed as a service and starts automatically after installation is complete. If you select console mode, launch a command prompt and enter the following commands:

- a. Navigate to the MySQL bin directory by entering:

```
cd <MySQL installation directory>\bin
```
- b. Stop the MySQL service from the Services window (Start > Control Panel > Administrative Tools > Services).
- c. Start the MySQL server/daemon by entering:

```
mysqld-nt.exe --innodb --console
```



Note If MySQL is started in console mode, the application will indicate on which port it is running.

Step 4 Verify connectivity/user credentials by entering the following commands:

- a. Navigate to the MySQL bin directory by entering:

```
cd <MySQL installation directory>\bin
```

- b. Connect to MySQL by entering:

```
mysql.exe -u <username> -p<password>
```

where *username* and *password* are the Administrator username and password you entered during the MySQL installation process.

A MySQL shell appears.

- c. From the MySQL shell, enter the following query to display a list of available databases:

```
show databases;
```

- d. Verify that the MySQL database is listed.

Step 5 Provide proper grants/permissions to the Administrator.

- a. Navigate to the MySQL bin directory by entering:

```
cd <MySQL installation directory>\bin
```

- b. Connect to MySQL by entering:

```
mysql.exe -u <username> -p<password>
```

A MySQL shell appears.

- c. Connect to the MySQL database by entering the following commands in the MySQL shell:

```
- use mysql;
- GRANT ALL PRIVILEGES ON *.* TO '<username>'@'%' IDENTIFIED BY '<password>'
  WITH GRANT OPTION;
- FLUSH PRIVILEGES;
- Exit;
```



Note

username and *password* are the Administrator username and password you entered during the MySQL installation process.

Step 6 Install Cisco Monitor Director 1.1.2 on a local machine, as described in [Installing Cisco Monitor Director 1.1.2, page 30](#).

When you reach Step 8, follow the instructions provided for configuring a remote database. Make sure to enter the appropriate information for the machine on which the MySQL database resides.

After you complete the installation, the Cisco Monitor Director service starts and the application establishes a connection with the remote database.

Step 7 Log into Cisco Monitor Director, as described in [Logging into Cisco Monitor Director, page 40](#).

Step 8 Perform the following tasks to optimize Cisco Monitor Director performance:

- a. From the machine on which Cisco Monitor Director is installed, navigate to the following directory: *<Cisco Monitor Director installation directory>\MySQL\mysql\bin*
- b. Copy the following files to the machine on which the remote database resides:
 - `createindices_CiscoMD.cmd`
 - `ciscomd_indices.sql`

Place these files in the following directory: *<MySQL installation directory>\MySQL\mysql\bin*

- c. Make sure that the remote database is running.
- d. Start Cisco Monitor Director and point to the remote database (see [Configuring Remote Database Access, page 50](#) for instructions).
- e. From the machine on which the remote database resides, navigate to the following directory: *<MySQL installation directory>\MySQL\mysql\bin*

For example, if MySQL is installed on your C: drive, you would open a command prompt and enter the following command: `cd C:\MySQL\mysql\bin`

- f. Enter the following command:

```
createindices_CiscoMD.cmd <port number> <username> <password>
```

where *port number* is the number of the port configured for remote database use, and *username/password* are the username and password required for Administrator privileges on this remote database.

For example, let's assume that port 3306 is configured for database use. We'll also assume that the Administrator username is *admin* and that the password is *allaccess*. In this case, you would enter: `createindices_CiscoMD.cmd 3306 admin allaccess`

After entering this command, a message will indicate that database indexing has completed. At this point, we recommend that you check `ciscomd_indices.log` (located in the current directory) and verify that the size of this file is zero bytes. This will confirm that database indexing has completed.

If you encounter any problems during this procedure, see the following log files for troubleshooting help:

- Wrapper logs: `<Cisco Monitor Director 1.1.2 installation directory>\Wrapper\wrapper-windows-x86-32-3.2.0\logs`
- Server/client logs: `<Cisco Monitor Director 1.1.2 installation directory>\logs` (CMDServer.log, CMDClient.log)

Configuring Remote Database Access

Step 1 Click **Database** from the Administration Console toolbar.

Step 2 Select the **Remote** radio button.

Step 3 Enter the following information:

- Username of the user who has administrator privileges for this database
- Password required to authenticate the administrator for this database
- Name of this remote database
- Hostname or IP address of the server on which the remote database is located
- Number of the port assigned to this remote database

Step 4 Click **Apply** to save your settings.

Launching Cisco Monitor Director from an RDP Client

To launch a Cisco Monitor Director instance that is installed on a Windows 2003 server from a Remote Desktop Protocol (RDP) client, do the following:

Step 1 Click **Start > Run** to open the Run dialog box.

Step 2 Enter the following command and then click **OK**:

```
MSTSC /V terminal-server /CONSOLE
```

where *terminal-server* is either the hostname or IP address of the terminal server.

9 Where to Go Next

For more information on Cisco Monitor Director, see the following documentation:

- *Release Notes for Cisco Monitor Director 1.1.2*: Describes known product bugs and their workarounds (if available).
- Context-sensitive online help: Describes the features provided in this release.

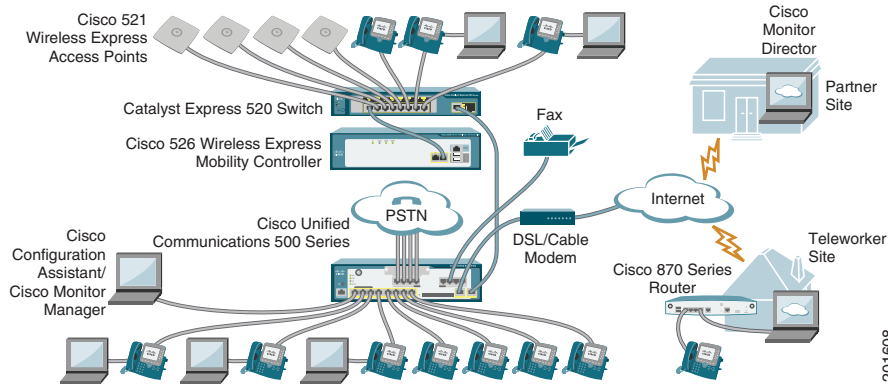


Note

Although every effort has been made to validate the accuracy of the information in the electronic documentation, you should also check Cisco.com for any updates.

10 Cisco Smart Business Communications System

The Cisco Smart Business Communications System is a unified communications solution for small businesses that provides voice, data, video, security, and wireless capabilities while integrating with existing desktop applications like calendar, e-mail, and Customer Relationship Management (CRM).



201608



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