



Read Me First—LAN Management Solution, Release 2.0

The LAN Management Solution (LMS) provides applications for configuring, administering, monitoring, and troubleshooting a campus network. It enables network administrators to more effectively manage their LAN and campus networks.

You must install the LMS software on a system that meets specific requirements. You will need to configure client systems and some applications before use.

Statement of Use

This release of LMS contains product CDs for both Windows and Solaris. The CDs are provided to you as a convenience in deploying LMS on the operating system of your choice. Your purchase authorizes you to use LMS in a single installation. You are authorized to install each LMS component (Essentials, Campus Manager, and so on) on one server. If you must distribute components to other servers in order to meet application-specific or server-performance requirements, you are authorized to install additional instances of CD One to host them. To install multiple instances of the LMS components, including backup systems, you must purchase additional copies of the complete LMS product.



Corporate Headquarters: Cisco Systems, Inc., 170 West Tasman Drive, San Jose, CA 95134-1706 USA

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78-12706-02

What the Bundle Contains

LMS contains:

- CiscoWorks2000 CD One, 4th Edition (CD One)—CiscoWorks2000 Server and CiscoView 5.3 provide common web services and support for third-party network management solutions as well as real-time views of networked Cisco Systems devices (a CD One update CD provides enhancements to Java, a technology used through out the applications in this solution).
- Resource Management Essentials 3.3 (Essentials)—Web-enabled administration tool for simplifying the device software and configuration management of Cisco routers and switches.
- Campus Manager 3.1 (Campus)—Web-based suite of network management tools that enables administrators to obtain graphical views of network topology and end-user information.
- Device Fault Manager 1.1 (DFM)—Real-time, detailed fault data collection and analysis for Cisco devices.
- NetScout nGenius Real-Time Monitor 1.3 (RTM)—Web-based system designed to manage and monitor the packets, application and protocol traffic in the network. It provides tools for troubleshooting and monitoring traffic thresholds. This client-server network management solution is offered to Cisco Systems customers in cooperation with NetScout Systems, Inc.



Note

In addition to the enclosed paper documents, PDF versions of product documentation are available on the product CDs. Refer to the installation instructions for individual products and print out the relevant documentation before proceeding with the installation. You can also order printed copies of documentation using the sources in “Ordering Additional Documentation” on page 10.

Installation Prerequisites

Table 1 and Table 2 summarize the minimum server and client requirements for installing LMS. The requirements listed are based on managing 500 devices (including up to 15,000 ports, with 15 percent of these being managed), with all applications hosted on a single server.

If your LMS applications are distributed on multiple servers or you have chosen not to install some of them, the minimum requirements may be less than those given in these tables. If you are managing more than 500 devices or you are running additional Cisco or third-party applications on the servers, the requirements may be higher. Refer to the individual LMS application installation guides for specific product requirements.



Note

If you have an older version of LMS, you can upgrade the product before or after you upgrade the operating system. However, if you upgrade the product first, you will not see operating system patch-related or Service Pack-related warnings provided as part of the LMS installer.

Table 1 *Server System Requirements*

Requirement	Windows 2000 and Windows NT Server	Solaris Server
Hardware	<ul style="list-style-type: none"> • IBM PC-compatible computer with 550 MHz or faster Pentium III (dual processor required for hosting multiple management solutions) • CD-ROM drive 	<ul style="list-style-type: none"> • Sun UltraSPARC 60 MP with 440 MHz or faster processor (dual processor required for hosting multiple management solutions) • CD-ROM drive
Memory (RAM)	1 GB	1 GB

Table 1 *Server System Requirements (continued)*

Requirement	Windows 2000 and Windows NT Server	Solaris Server
Available disk drive space	<ul style="list-style-type: none"> • 9 GB minimum • 2 GB virtual memory 	<ul style="list-style-type: none"> • 9 GB minimum • 2 GB swap space
Software	<p>One of the following:¹</p> <ul style="list-style-type: none"> • Windows NT 4.0 Server or Workstation with Service Pack 6a. • Windows 2000 Server or Professional edition with Service Pack 1. 	Solaris 2.6 or 2.7

1. Do not install on a FAT file system.

Table 2 *Client System Requirements*

Requirement Type	Minimum Requirement
System software and hardware	<p>Any one of these systems:</p> <ul style="list-style-type: none"> • IBM PC-compatible computer with 300 MHz Pentium processor, 256 MB RAM and 512 MB virtual memory; running Windows NT 4.0 Workstation or Server with Service Pack 6a, Windows 98, or Windows 2000 Server or Professional edition with Service Pack 1. • Sun UltraSPARC 10 with 333 MHz processor, 256 MB RAM and 512 MB swap space; running Solaris 2.6 or 2.7. • IBM RS/6000 workstation with 256 MB RAM and 512 MB swap space; running AIX 4.3.3. • HP9000 series with 256 MB RAM and 512 MB swap space; running HP-UX 11.0. (RTM 1.3 is not yet supported by Cisco Systems on HP-UX clients; future support is planned.) <p>Color monitor with video card set to 256 colors.</p>
Browser	<p>One of these browsers:</p> <ul style="list-style-type: none"> • Microsoft Internet Explorer 5.5 with Service Pack 1 (supported on Windows systems only). • Netscape Navigator 4.75 (supported on all platforms).

Installing the Bundle

Table 3 shows the recommended order in which you should install the LMS software.



Note

You *must* install CD One before installing any other applications. While it is strongly recommended that you follow the order of installation described in this section, you can install the remaining applications in any order.

Table 3 *Order of Installation*

Task	For Detailed and Custom Installation, Refer To
<p>1. Install CiscoWorks2000 CD One, 4th Edition. This typically takes about 40 minutes. When complete, install the CD One Java plug-in Patch CD.</p>	<ul style="list-style-type: none"> • <i>Installing and Setting Up CiscoWorks2000 CD One, 4th Edition.</i> • Release Notes for CiscoWorks2000 CD One, 4th Edition (for any last-minute updates). • Release Notes contained on the CD One Java plug-in Patch CD.
<p>2. Install Resource Manager Essentials 3.3. This typically takes about 30 minutes.</p>	<ul style="list-style-type: none"> • <i>Installing and Setting Up Resource Manager Essentials.</i> • Release Notes for Resource Manager Essentials (for any last-minute updates).
<p>3. Install Campus Manager 3.1. This typically takes about 10 minutes.</p>	<ul style="list-style-type: none"> • <i>Installing and Setting Up Campus Manager.</i> • Release Notes for Campus Manager (for any last-minute updates).

Table 3 Order of Installation (continued)

Task	For Detailed and Custom Installation, Refer To
<p>4. Install Device Fault Manager 1.1. This typically takes about 10 minutes. (See “Installing DFM and RTM on the Same Server” below.)</p>	<ul style="list-style-type: none"> • <i>Installing and Setting Up Device Fault Manager.</i> • Release Notes for Device Fault Manager (for any last-minute updates).
<p>5. Install RTM 1.3 (three CD-ROMs) in this sequence (see “Installing DFM and RTM on the Same Server” below):</p> <ol style="list-style-type: none"> a. Real-Time Monitor. b. Packet Analyzer Decode Engine. c. Applications on Third party Applications CD-ROM. <p>This takes 5 to 15 minutes total.</p>	<ul style="list-style-type: none"> • <i>Supplement and Release Notes for NetScout nGenius Real-Time Monitor Release 1.3</i> (Cisco document). • <i>nGenius Real-Time Monitor 1.3 Release Notes</i> (NetScout document). • <i>Real-Time Monitor Installation Guide</i> (NetScout document).

Installing DFM and RTM on the Same Server

If you decide to install Device Fault Manager and Real-Time Monitor on the same server, you must change the default configuration of both products in order to receive traps properly. To make the changes, perform the following tasks:

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- Step 1** Stop the nGenius Server process.
 - Step 2** Open the file `//nGenius_directory/bin/serverprivate.properties` (where `//nGenius_directory/` is the path to the installed nGenius Server files).
 - Step 3** Change `devicelistener.portlist=162,395` to `devicelistener.portlist=395`.
 - Step 4** Save the file and restart the nGenius Server.
 - Step 5** Use the instructions in *Installing and Setting Up Device Fault Manager* to reconfigure DFM to forward traps to port 395.
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Getting Started

You must complete the following tasks before starting up LMS.

Table 4 *Getting Started*

Task	Refer To
1. Set up the CiscoWorks2000 Server.	<i>Getting Started with the CiscoWorks2000 Server</i>
2. Set up your client machine.	<i>Installing and Setting Up CiscoWorks2000 CD One, 4th Edition</i>
3. Prepare to use Resource Manager Essentials.	<i>Installing and Setting Up Resource Manager Essentials</i>
4. Prepare to use Campus Manager.	<i>Installing and Setting Up Campus Manager</i>
5. Prepare to use Device Fault Manager.	<i>Installing and Setting Up Device Fault Manager</i>
6. Prepare to use nGenius Real-Time Monitor.	<ul style="list-style-type: none"> • <i>Real-Time Monitor Installation Guide</i> • <i>Real-Time Monitor Configuration Guide</i> • <i>Getting Started with nGenius Traffic Monitor</i> • <i>Getting Started with NetScout Packet Analyzer</i>

Related Documentation

The following paper documentation ships with LMS:

- *Installing and Setting Up CiscoWorks2000 CD One, 4th Edition*
- *Installing and Setting Up Resource Manager Essentials*
- *Installing and Setting Up Campus Manager*
- *Installing and Setting Up Device Fault Manager*
- *Supplement and Release Notes for NetScout nGenius Real-Time Monitor Release 1.3* (Cisco document)
- *nGenius Real-Time Monitor 1.3 Release Notes* (NetScout document)
- *Real-Time Monitor Installation Guide* (NetScout document)

The following related documentation is also available as PDF files on the product CD-ROMs and on Cisco.com:

- *Getting Started with the CiscoWorks2000 Server*
- *Using CiscoView 5.3*
- *Using Resource Manager Essentials*
- *Using Campus Manager*
- *Device Fault Manager User Guide*
- *nGenius Instrumentation Overview*
- *Real-Time Monitor Configuration Guide*
- *Getting Started with Traffic Monitor*
- *Getting Started with NetScout Packet Analyzer*



Note Adobe Acrobat Reader 4.0 is required to view PDF files.

Online help is available from within the products.

Ordering Additional Documentation

You can order a complete set of hardcopy user guides for the Cisco products in this version of the LAN Management Solution using the part number CWDOC-RWAN-LMS, as follows:

- Registered Cisco Direct Customers can order Cisco Product documentation from the Networking Products MarketPlace:
http://www.cisco.com/cgi-bin/order/order_root.pl
- Nonregistered Cisco.com users can order documentation through a local account representative by calling Cisco corporate headquarters (California, USA) at 408-526-7208 or, in North America, by calling 800-553-NETS(6387).

Contact NetScout Systems directly to order hardcopies of the Real-Time Monitor documents.

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