

CiscoWorks LAN Management Solution 2.5.1

PRODUCT OVERVIEW

CiscoWorks LAN Management Solution (LMS) provides the integrated management tools needed to simplify the configuration, administration, monitoring, and troubleshooting of Cisco® networks. It provides IT organizations an integrated system for sharing device information across management applications, automation of device management tasks, visibility into the health and capability of the network, and identification and localization of network trouble. By using common centralized systems and network-inventory knowledge, CiscoWorks LMS delivers a unique platform of cross-functional management capabilities that reduces network administration overhead and provides upper-layer systems integration.

CiscoWorks LMS 2.5.1 includes:

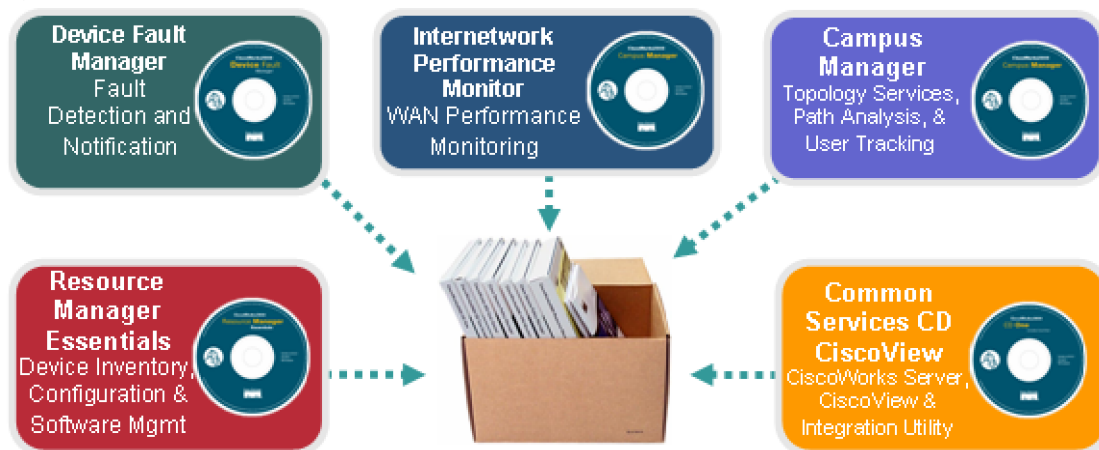
- CiscoWorks Device Fault Manager (DFM) 2.0.3
- CiscoWorks Campus Manager 4.0.3
- CiscoWorks Resource Manager Essentials (RME) 4.0.3
- CiscoWorks Internetwork Performance Monitor (IPM) 2.6
- CiscoWorks Common Services 3.0.3 with CiscoView 6.1.2

CiscoWorks LMS is part of the CiscoWorks Family of products that provide comprehensive network-management solutions to improve IT organizational effectiveness through task automation, simplification, and integration. Other CiscoWorks products include the CiscoWorks IP Telephony Environment Monitor (ITEM) for helping ensure the readiness and manageability of converged networks that support voice over IP (VoIP) and IP telephony traffic and applications; the CiscoWorks VPN/Security Management Solution (VMS) providing an integrated set of Web-based applications that assist in the deployment and monitoring of VPN and security devices; and the CiscoWorks Wireless LAN Solution Engine that helps enable advanced wireless access point and radio management.

KEY FEATURES AND BENEFITS

The CiscoWorks LMS 2.5.1 release is an important milestone in providing network-management tools for simplifying the configuration, performance monitoring, and troubleshooting of Cisco® devices in today's enterprises. It introduces a centralized system for sharing device information across all applications, improving manageability and allowing the management system to more dynamically adjust to changes. CiscoWorks LMS 2.5.1 also offers a new lightweight desktop interface that facilitates rapid navigation between tools and that can be modified to individual workflow needs. CiscoWorks LMS 2.5.1 utilizes security information maintained in Cisco Secure Access Control Server (ACS) to simplify the management of user privileges. Cisco Secure ACS integration provides flexibility in defining user roles, and supports secured user views of specific devices, groups of devices, or by geographic or logical network segments. Significant improvement in performance, such as multithreading background tasks, has reduced the time needed to deliver updates to the network, as well as generate reports. Efficient task processing and its shared database of managed devices allow CiscoWorks LMS to be deployed into larger networks.

Figure 1. CiscoWorks Solutions



CiscoWorks LMS is offered in two device license models:

- CiscoWorks LMS 2.5.1 Enterprise (restricted device support)—Designed for enterprise networks consisting of 50 to 300 Cisco devices per server
- CiscoWorks LMS 2.5.1 Large Enterprise (unrestricted device support)—Designed for large enterprise networks consisting of 300 to 1500 devices per server

The applications offered in both models provide equivalent capability and features and simply limit the number of devices managed per server. Offering two models of CiscoWorks LMS benefits customers who want to invest in managing a smaller network today, then as their network grows they can easily upgrade their CiscoWorks LMS license key to support more devices.

CiscoWorks LMS consists of operationally focused tools capable of fault management, scalable topology views, sophisticated configuration, Layer 2 and 3 path analysis, voice-supported path trace, WAN performance troubleshooting, end-station tracking, and device troubleshooting. CiscoWorks LMS is built on the CiscoWorks Common Services management infrastructure and foundation. This design facilitates operations workflow between applications by linking data collection, monitoring, and analysis tools—all from a single desktop application. For example, a user complaint of slow response time or a poor IP phone connection can be quickly diagnosed using CiscoWorks LMS Layer 2 path tools that automatically acquire user-path information stored in one database, and highlight devices on a topology map. Additionally, switch or router configurations can then be quickly examined to detect anomalies or the need for changes. Those actions may draw information from one or more applications.

CiscoWorks LMS uses Internet standards to tie together best-in-class tools and to take advantage of their capabilities through data- and task-integration standards. Using the common information model (CIM) and Extensible Markup Language (XML), these industry standards for data sharing allow CiscoWorks LMS a means of extracting data and using it with popular network-management products.

Table 1 and 2 list the CiscoWorks LMS 2.5.1 applications, features, and benefits.

Table 1. CiscoWorks LAN Management Solution 2.5.1 Applications

Applications	Description
CiscoWorks Device Fault Manager (DFM)	Real-time fault detection, analysis, and reporting using device knowledge and fault rules based on Cisco best practices for each device.
CiscoWorks Campus Manager	A robust set of Layer 2 tools for device and connectivity discovery, detailed topology views, virtual LAN/LAN Emulation (VLAN/LANE) and ATM configuration, end-station tracking, Layer 2 and 3 path analysis, and IP phone user and path information.

CiscoWorks Resource Manager Essentials (RME)	Tools for managing Cisco devices using inventory- and device-change management, network-configuration and software-image management, network availability, and syslog analysis.
CiscoWorks CiscoView	GUI providing back- and front-panel displays of devices in a dynamic, color-coded graphical display. Simplifies device-status monitoring, device-specific component diagnostics, and application launching.
CiscoWorks Internetwork Performance Monitor (IPM)	A network response-time and availability troubleshooting application. This tool empowers network engineers to proactively troubleshoot network performance using real-time and historical reports.
CiscoWorks Server	Provides the infrastructure for a common management-desktop experience and services for securing access to all CiscoWorks applications. Facilities include a foundation for integrating with other Cisco and third-party applications.

Table 2. CiscoWorks LMS 2.5.1 Features and Benefits

Function	Component	Description
Offers intelligent, automatic discovery of Cisco devices to create topology views of the network	CiscoWorks Campus Manager	The topology services discover Cisco devices and calculate Layer 2 relationships to provide views of the Cisco network by ATM domain, VLAN Trunking Protocol (VTP) domain, LAN edge view, and a general Layer 2 view.
Gives topology status indications	CiscoWorks Campus Manager	The topology maps indicate the discovery and Simple Network Management Protocol (SNMP) status of Cisco devices; these maps also are launching points for other CiscoWorks applications.
Configures, manages, and monitors VLAN and ATM services and networks	CiscoWorks Campus Manager	Campus Manager provides tools for creating, deleting, and editing VLANs; it provides ATM tools for displaying virtual circuits and for configuring soft permanent virtual connections (SPVCs) and soft permanent virtual paths (SPVPs).
Discovers end stations and IP phones connected to switch ports and identifies user locations based on user ID	CiscoWorks Campus Manager	The user-tracking function correlates MAC address and IP address to switch port; integration with Microsoft's PDC and Novell's NDS tree provides the user ID for even more efficient user location and tracking.
Traces Layer 2 and Layer 3 connectivity between two points (such as devices, servers, or phones) in the network	CiscoWorks Campus Manager	The path-analysis tool performs path analysis for Layer 2 and Layer 3 devices using the device host name or IP address, and shows results on a map display, in a table display, or in a trace display.
Intelligently analyzes fault conditions, detecting problems before they become network disruptions	CiscoWorks Device Fault Manager	The automated fault detection recognizes common problems in networks without forcing users to define their own rules sets, SNMP trap filters, or device-polling intervals.
Interprets fault conditions at both the device and VLAN levels	CiscoWorks Device Fault Manager	With the characteristics of over a 100 Cisco routers and switches predefined, new device support is easily added through Cisco.com. Cisco Device Fault Manager simplifies managing both Layer 2 and Layer 3 environments.
Offers detailed software and hardware inventory reporting	CiscoWorks Resource Manager Essentials	CiscoWorks RME provides accurate Cisco product-inventory baseline information, including memory, slots, software versions, and BootROMs needed to make decisions about the network.
Offers automated update engines for device software and configuration changes	CiscoWorks Resource Manager Essentials	CiscoWorks RME allows software and configuration updates to be sent to selected devices on a scheduled basis; it reduces time and errors involved in network updates.
Offers a consolidated troubleshooting tools center	CiscoWorks Resource Manager Essentials	A wide collection of switch- and router-analysis tools is accessible from a single location; third-party applications can link to the tool center.

Offers centralized change-audit logging	CiscoWorks Resource Manager Essentials	A comprehensive change-monitoring log records users and applications that are active on the network.
Offers graphical device management	CiscoWorks CiscoView	CiscoView displays a browser representation of Cisco router and switch devices, color-coded to indicate operational states, with access to configuration and monitoring tools.
Provides network response and availability information for WAN networks	CiscoWorks Internetwork Performance Monitor	CiscoWorks IPM simplifies the identification of devices contributing to latency and network delays and allows WAN managers to manage the effectiveness of VoIP and quality of service (QoS) features implemented in their networks.
Provides application-access security	CiscoWorks Server	Its management desktop controls user access to applications, helping ensure that only appropriate classes of users can access tools that change network parameters versus read-only tools.
Offers third-party integration tools and interfaces like the Network Management Integration Module (NMIM)	CiscoWorks Server	The CiscoWorks Server simplifies the Web integration of third-party and other Cisco management tools.

SYSTEM REQUIREMENTS

Table 3 and 4 list CiscoWorks LMS 2.5.1 system requirements.

Table 3. System Requirements—Server

Disk space	10 GB or more free space for LMS applications and data
Hardware	<p>Solaris: Sun UltraSPARC IIIi or Sun UltraSPARC IIICu for CiscoWorks LMS 2.5.1 Enterprise Dual Sun UltraSPARC IIIi or dual Sun UltraSPARC IIICu for CiscoWorks LMS 2.5.1 Large Enterprise</p> <p>Windows: 2.8 GHz Intel Pentium IV or 2.8 GHz Intel Xeon processor for CiscoWorks LMS 2.5.1 Enterprise Dual 2.8 GHz Intel Pentium IV or dual 2.8 GHz Intel Xeon processor for CiscoWorks LMS 2.5.1 Large Enterprise</p>
Memory	2 GB (CiscoWorks LMS 2.5.1 Enterprise) or 4 GB (LMS 2.5.1 Large Enterprise)
Software	Windows 2000 Professional with Service Pack 4 Windows 2000 Server with Service Pack 4 Windows 2000 Advanced Server with Service Pack 4 Windows Server 2003 Standard and Enterprise Editions with Service Pack 1 Solaris 8, Solaris 9 (English and Japanese)
Network Management Solution (NMS) integration	CiscoWorks CiscoView with Network Management Integration Module (NMIM) and Device Fault Manager supports integration with Hewlett Packard OpenView 6.4 and 7.01 IBM Tivoli NetView 7.1 and 7.1.4 are supported by Dynamic Contact Replication (DCR) and NMIM

Table 4. System Requirements—Client

Disk space	Solaris: 1 GB swap space Windows: 1 GB virtual memory
Memory	512 MB

Hardware / Software	IBM PC-compatible system with at least Intel Pentium IV processor running, Windows 2000 Professional with Service Pack 4 Windows 2000 Server with Service Pack 4 Windows 2000 Advanced Server with Service Pack 4 Windows Server 2003 Standard and Enterprise Edition with Service Pack 1 Windows XP with Service Pack 2 Solaris 8, Solaris 9 (English and Japanese)
Browser	Internet Explorer 6.0. Service Pack 1—Windows 2000, Windows Server 2003 Internet Explorer 6.0.2900.2180—Windows XP Netscape Navigator 7.1 and 7.2—Windows 2000, Windows Server 2003 Netscape Navigator 7.0—Solaris 8, Solaris 9 Mozilla 1.7 and 1.7.5—Windows 2000, Windows Server 2003, Windows XP, Solaris 8, Solaris 9 Java Plug-in version 1.4.2_08 (CiscoWorks Campus Manager and Internetwork Performance Monitor only)

ORDERING INFORMATION

CiscoWorks LMS 2.5.1 is available for purchase through regular Cisco sales and distribution channels worldwide. To place an order, visit the [Cisco Ordering Home Page](#).

CiscoWorks LMS licensing options are described in the CiscoWorks LMS product bulletin, viewed at: http://www.cisco.com/en/US/products/sw/cscowork/ps2425/prod_bulletins_list.html.

SERVICE AND SUPPORT

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FOR MORE INFORMATION

For more information about the CiscoWorks LAN Management Solution, visit <http://www.cisco.com/go/lms> or contact your local Cisco account representative, or send an e-mail to the Product Marketing group at lms-pm@cisco.com.



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