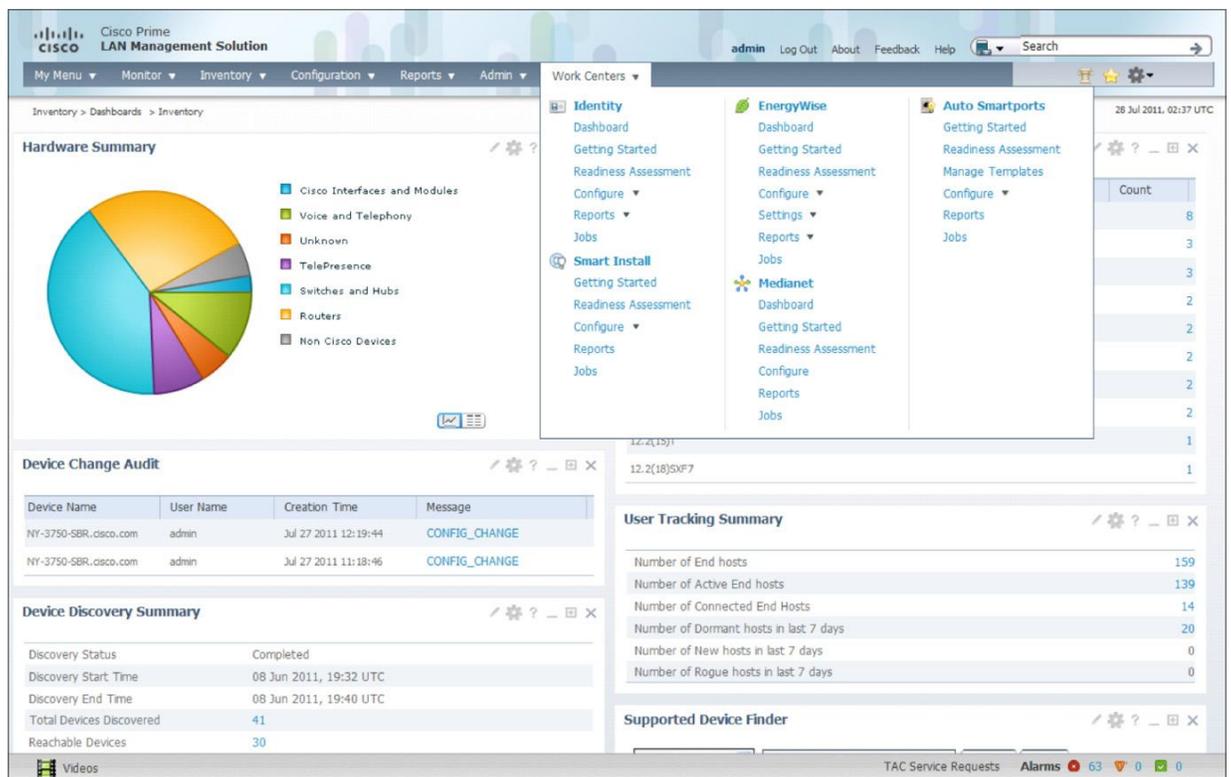


Cisco Prime LAN Management Solution 4.1

Product Overview

Cisco Prime LAN Management Solution (LMS) delivers powerful network lifecycle management by simplifying the configuration, administration, monitoring, and troubleshooting of Cisco networks. This innovative solution offers end-to-end management for business critical technologies and services, such as, medianet, TrustSec, and EnergyWise. Cisco Prime LMS 4.1 improves the overall user experience, providing new workflows that are built on functional partitioning and that align the product with the way network operators do their jobs. Once installed, prepackaged monitoring and troubleshooting dashboards provide actionable information to quickly isolate and fix network problems before they affect services. Configuring and deploying updates to the network has never been easier with the Template Center, which now incorporates Cisco Smart Business Architecture (SBA) templates that are based upon Cisco Validated Designs, simplifying platform and technology rollout and reducing the chance for errors. Work Centers provide a single area where guided workflows give step-by-step instructions to help operators quickly provision, monitor, and manage new Cisco value-added technologies and solutions, such as medianet, EnergyWise, TrustSec/Identity, Auto Smartports, and Smart Install. See Figure 1.

Figure 1. Cisco Prime LMS 4.1



About Cisco Prime Products

The [Cisco Prime](#) portfolio of enterprise and service provider management offerings supports integrated lifecycle management of Cisco architectures and technologies based on a network services management foundation. Built on an intuitive workflow-oriented user experience, Cisco Prime products help increase IT productivity and reduce operations costs through innovative management solutions for the network services, infrastructure, and endpoints. For more information about Cisco Prime, please visit <http://www.cisco.com/go/prime>.

A New Management Paradigm

Cisco Prime LMS has evolved from a collection of individual products into a seamless set of integrated management functions based upon the way network managers do their work. Organizing the product based on management function simplifies the overall user experience by reducing the need to cross application boundaries to complete a specific management task. Workflows are self-contained and all required functionality is maintained within a functional area. Table 1 lists the major functional areas.

Table 1. Cisco Prime LAN Management Solution Major Functional Areas

Functional Area	Description
Monitoring and troubleshooting	Quickly and proactively identify and fix network problems before they affect end users or services <ul style="list-style-type: none">• Centralized fault and event browser (consolidated, syslog, traps, and events and alarms)• Quick navigation and "hover-over" to identify problem areas• Embedded troubleshooting workflow for quick problem isolation and remediation• Simple Network Management Protocol (SNMP)-based polling to identify availability and performance issues• Medianet dashboard provides fault and availability statistics of medianet endpoints and devices• IPSLA video operations help validate whether the network is ready for video and rich media applications• Smart Interaction for contextual Cisco Service Request creation and Cisco Support Community searches
Configuration management	Configuration backup, software image management, compliance, and change management required to maintain and update network devices <ul style="list-style-type: none">• Cisco best practices configuration templates - deploy full or partial configurations based on Cisco validated designs and Cisco Smart Business Architecture recommendations• Dynamic guided workflows reduce chance for errors• Extensible configuration library, new updates, and configurations templates can easily be downloaded from Cisco.com, including the SBA templates• Integration with Cisco Configuration Professional to assist with multidevice deployment of configuration files generated by Cisco Configuration Professional through LMS configuration templates and scheduler
Inventory	Complete and thorough inventory of all Cisco equipment details - chassis, module, interface <ul style="list-style-type: none">• Provides a single menu for discovery status, device status, user tracking, and inventory dashboards• Support for more than 600 Cisco device types• Day-one device support allows new device packages to be downloaded the day the platform ships
Reporting	All reports are centralized in a single menu, simplifying navigation and access to detailed reports and information <ul style="list-style-type: none">• Inventory, end-of-sale, Cisco Product Security Incident Response Team (PSIRT), configuration and compliance, user tracking, and all other Cisco Prime LMS reports are represented in a consolidated menu• Reports can be easily scheduled to run immediately or daily, weekly, or monthly and can be viewed online or optionally exported to a file or comma-separated value (CSV) file
Work Centers	End-to-end lifecycle management of Cisco value-added technologies - deployment, monitoring, and management of medianet, EnergyWise, TrustSec/Identity, Auto Smartports, Smart Install <ul style="list-style-type: none">• Getting started workflows provide simplified configuration and setup of infrastructure for supporting Cisco technologies• Dashboards provide up-to-date status on configuration, inventory, and monitoring for troubleshooting purposes
Administration	Getting started and improved workflows simplify application setup and administration <ul style="list-style-type: none">• All administrative functions for setting up and configuring the application are centralized for easier access

Using Cisco Prime LMS 4.1 to Manage Borderless Networks

The ability to manage any Cisco platform, anytime, anywhere, to deploy new Cisco technologies and services, and to integrate with third-party management platforms is key to lowering overall operating expenses (OpEx) while improving network availability. Cisco Prime LMS 4.1 will help simplify managing borderless networks in the following ways:

Reduces operating expenses: Network management has traditionally been burdened with being too complex and expensive to maintain. Required tasks such as installing management software, configuring and setting up the platform, and discovering the network, coupled with the need for multiple disparate applications with high maintenance costs, made manageability a time-consuming and expensive proposition for most enterprise customers. As a result, many customers gave up, walked away frustrated, and failed to use the features available or to realize any reduction in their overall OpEx. Cisco Prime LMS 4.1 provides a getting started guided workflow to simplify the initial setup, reducing the time required to operationalize the product. Automonitoring features help enable immediate value right out of the box, providing real-time dashboards for quickly isolating and troubleshooting network- and device-related problems immediately after the product is installed.

Simplifies deployment of new technologies: Cisco provides unparalleled value in the features and capabilities of its hardware platforms that further differentiate Cisco from the competition. Difficulties with deploying and managing differentiated features have made it challenging for some customers to take full advantage of the value. With the delivery of new Cisco switching and routing platforms, new capabilities are being introduced, such as medianet, EnergyWise, TrustSec/Identity, Smart Install, and Auto Smartports. These capabilities further differentiate Cisco from its competitors. Cisco Prime LMS simplifies deployment of these new technologies through a new concept known as Work Centers. Work Centers provide a single consolidated user experience for the deployment and complete lifecycle management of new Cisco technologies.

Provides comprehensive device coverage: To manage a borderless network effectively, device coverage is essential, no matter where the device is located. Cisco Prime LMS provides support for more than 600 different Cisco hardware platforms, from an 800 Series Router to Cisco Nexus[®] switches, a CRS-1, and everything in between. No other product in the industry provides the breadth and depth of support for Cisco platforms. The Cisco Prime Day-one device support program helps to ensure that when a new platform ships from Cisco, manageability support in Cisco Prime LMS is available at the same time.

Complete lifecycle management: Maintaining and managing the many services associated with a borderless network require a good foundation for dealing with the core network infrastructure and day-to-day tasks associated with lifecycle management. Cisco Prime LMS provides the functionality required to perform the day-to-day tasks, including discovery, monitoring and troubleshooting, configuration and change management, autoremediation, and inventory and compliance reporting.

Cisco Prime LMS 4.1 Features, Functions, Benefits

Table 2 lists the features, functions, and benefits of Cisco Prime LMS 4.1.

Table 2. Cisco Prime LMS 4.1 Features, Functions, and Benefits

Feature	Function	Benefit
Simplified installation and setup	<ul style="list-style-type: none"> • Flexible server OS support, including a new Linux-based virtual appliance • Unattended install • Getting started workflow • User-guided wizards • Predefined default settings • Automonitor, provides immediate “Day-one” default polling 	<ul style="list-style-type: none"> • Improves time to deploy and reduces errors typically associated with installation for quick error-free implementation • Provides immediate value with little user intervention and setup
Improved user experience	<ul style="list-style-type: none"> • Cisco Prime user interface • Expanded search feature to find device or product features quickly • Functionality-oriented navigation and operations • Navigation assistance for existing LMS users - legacy menu • User-centered workflows • Ease-of-deployment features 	<ul style="list-style-type: none"> • Intuitive simple user experience with immediate access to key management data reduces the time required to learn the product and perform frequently used tasks • Operational alignment and guided workflows provide immediate return on investment (ROI) • Comprehensive help with video on demand reduces the need for training, saving money and time required to learn the product
Extensibility	<ul style="list-style-type: none"> • Flexible web-based portal framework • Create user-defined views • Lightweight HTML interface 	<ul style="list-style-type: none"> • Helps enable end-user customization to meet operational and end-user management requirements and integration with other web-based management products
Real-time monitoring	<ul style="list-style-type: none"> • Dashboards allow for real-time performance and event monitoring • Consolidated alarm browser 	<ul style="list-style-type: none"> • Proactive notification of issues to quickly fix problems before they affect services or users
Troubleshooting	<ul style="list-style-type: none"> • Troubleshooting assistant with guided workflows • “Hover-over” details allows quick access to additional troubleshooting tools, Telnet, Device Center, CiscoView • Smart Interactions for contextual TAC case creation and Cisco Support Community interaction 	<ul style="list-style-type: none"> • Simplifies troubleshooting, reducing the time required to fix network-related issues • Fast and easy access to quickly launch other tools for problem isolation and remediation • Smartly tap into the Cisco Support Community knowledge base, streamline interactions with TAC
Configuration	<ul style="list-style-type: none"> • Configuration archive and change management • Cisco best practices configuration templates • Dynamic guided workflows • Cisco Smart Business Architecture templates • Extensible configuration library; new updates and configurations can be added from Cisco.com 	<ul style="list-style-type: none"> • Provides complete configuration and change management, reducing error-prone tasks and quickly identifying changes to help ensure network availability • More quickly and reliably utilize Cisco best practices • Cisco validated design helps ensure integrity of configuration changes reducing the chance for error
Work Centers EnergyWise TrustSec/Identity Auto Smartports Smart Install Medianet	<ul style="list-style-type: none"> • Getting started - overview and initial configuration • Status and monitoring dashboard • Readiness assessment and remediation • Day-1-to-N management tasks 	<ul style="list-style-type: none"> • Simplifies the deployment of advanced Cisco technologies, reducing time and expertise required • Detailed assessment of network readiness allows for improved planning and upgrades for deploying new technologies and solutions
Comprehensive device support	<ul style="list-style-type: none"> • Detailed network inventory and management support for more than 600 Cisco platforms • Day-one device support 	<ul style="list-style-type: none"> • Provides immediate manageability for new platforms the day they ship helping enable immediate value and support for new device deployment
Open extensible framework	<ul style="list-style-type: none"> • Open Database Connectivity (ODBC) interface • Open APIs 	<ul style="list-style-type: none"> • Allows for integration with other third-party management applications • Provides open access to data for reporting and other purposes

Operating System Requirements

Cisco Prime LMS 4.1 supports the operating systems listed in Table 3.

Table 3. Operating Systems Supported by Cisco Prime LMS 4.1

Operating System	Requirements
Virtual Appliance	LMS 4.1 Virtual Appliance requires one of the following virtualization systems: <ul style="list-style-type: none">• VMware ESX server 4.1• VMware vSphere Hypervisor (ESXi server 4.1)
Windows	<p>LMS 4.1 supports the following Windows systems:</p> <ul style="list-style-type: none">• Windows 2008 Server Standard Edition Release 1 with Service Pack 1 and Service Pack 2• Windows 2008 Enterprise Edition Release 1 with Service Pack 1 and Service Pack 2 <p>Note Both 32-bit and 64-bit operating systems are supported on the above versions</p> <ul style="list-style-type: none">• Windows Server 2008 R2 Standard Edition• Windows Server 2008 R2 Enterprise Edition <p>Note Only 64-bit operating systems are supported on the above versions</p> <p>LMS 4.1 supports the following virtualization systems for Windows:</p> <ul style="list-style-type: none">• VMware ESX server 3.0.x• VMware ESX Server 3.5.x• VMware ESX Server 4.0.x• VMware ESX Server 4.1• VMware ESXi Server 4.0• VMware vSphere Hypervisor (ESXi Server 4.1)• Hyper V Virtualization (As an installable in Windows 2008) <p>Note: VMware and Hyper V virtualization systems are not supported for the LMS 5000, and LMS 10,000 devices licenses</p>
Solaris	<p>LMS 4.1 supports the following Solaris 10 releases:</p> <ul style="list-style-type: none">• Solaris 10, 10/09 release• Solaris 10, 05/09 release• Solaris 10, 10/08 release• Solaris 10, 05/08 release• Solaris 10, 08/07 release• Solaris 10, 11/06 release <p>Solaris Zones (supported from Solaris 10)</p> <p>LMS 4.1 is installed on the global zone of the Solaris 10 operating system by default</p> <p>LMS 4.1 also supports installing LMS in the whole-root non-global zone</p> <p>Sparse root zone is not supported</p> <p>There is no specific hardware or software requirement for zone support. LMS works in the same way in non-global zones as it does in the global zone</p> <p>LMS 4.1 also supports logical domains (LDOMs) and the ZFS file system</p> <p>See the LMS 4.1 installation guide for more information on Solaris patches to be installed on these operating systems</p> <p>NOTE: With the introduction of the Linux-based Virtual Appliance in this release, future releases of Cisco Prime LMS will no longer include support for Solaris operating systems. It is highly recommended that customers using the Solaris version of this product consider validating the Virtual Appliance version to facilitate future transition.</p>

Refer to the LMS 4.1 installation guide at <http://www.cisco.com/go/lms> for server and client system requirements.

Cisco Unified Computing System (UCS) Support

Cisco Prime LMS 4.1 is supported on the Cisco Unified Computing System (UCS) B-series blade servers (B200-M1 or M2 and B250-M1 or M2) and C-series rack-mount servers (C200-M1 or M2, C210-M1 or M2, and C250-M1 or M2 and UCS C460). The server requirement on UCS blade servers and rack-mount servers remains the same as the server requirements on Windows systems.

The supported processor in UCS B-series blade servers is Intel Xeon 5500 or 5600 Series processors. For more information see http://www.cisco.com/en/US/prod/collateral/ps10265/ps10280/data_sheet_c78-524797_ps10279_Products_Data_Sheet.html.

The supported processor in UCS C-series rack-mount servers is Intel Xeon 5500 or 5600 Series processors with their choices mentioned explicitly. For more information see http://www.cisco.com/en/US/products/ps10493/products_data_sheets_list.html.

Refer to the LMS 4.1 installation guide at <http://www.cisco.com/go/lms> for more details.

Ordering Information

Cisco Prime LMS 4.1 can be ordered through regular Cisco sales and distribution channels worldwide. To place an order, visit the [Cisco Ordering Homepage](#).

Cisco Prime LMS 4.1 availability, ordering and licensing options are described in the Cisco Prime LMS 4.1 product bulletin at <http://www.cisco.com/go/lms>.

Service and Support

Services from Cisco and Our Partners

Realize the full business value of your technology investments with smart, personalized services from Cisco and our partners. Backed by deep networking expertise and a broad ecosystem of partners, Cisco Services enable you to successfully plan, build, and run your network as a powerful business platform. Whether you are looking to quickly seize new opportunities to meet rising customer expectations, improve operational efficiency to lower costs, mitigate risk, or accelerate growth, we have a service that can help you.

Warranty Coverage and Technical Service Options

Cisco Prime LMS 4.1 comes with the Cisco 90-day software warranty. Purchasing an application support service provides benefits not available with warranty including access to maintenance and minor updates, online resources, and Technical Assistance Center support services. Table 4 shows the technical services available for Cisco Prime LMS 4.1.

For more information about Cisco warranties, go to <http://www.cisco.com/go/warranty>.

For information about Cisco Technical Services, go to <http://www.cisco.com/go/ts>.

Table 4. Cisco Technical Services for Cisco Prime LMS 4.1

Technical Services
Cisco Software Application Support (SAS) <ul style="list-style-type: none">• Application software maintenance and minor updates• Around-the-clock, global access to Cisco TAC engineers with specialized application software expertise• Unrestricted access to the extensive Cisco.com resources, communities, and tools

For More Information

For more information about Cisco Prime LAN Management Solution, visit <http://www.cisco.com/go/lms>, contact your local Cisco account representative, or send an email to the product marketing group at ask-lms-team@cisco.com.



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