



DATA SHEET

CISCOWORKS CAMPUS MANAGER 4.0

Today's networks are critical business assets, and require robust tools for administering, monitoring, and configuring their foundational connectivity services. The CiscoWorks LAN Management Solution (LMS) with Campus Manager delivers on those needs. Designed for operational use, CiscoWorks Campus Manager provides powerful tools for configuring, managing, understanding, and visualizing the complex physical and logical Layer 2 infrastructures.

CiscoWorks Campus Manager includes the following tools:

- User tracking (and end-host tracking)
- Discrepancy reporting
- Topology services
- VLAN, private VLAN (PVLAN), and VLAN Trunking Protocol (VTP) management
- Spanning-tree management and visualization
- ATM management
- Path analysis
- Data-extraction engine

KEY FEATURES AND BENEFITS

CiscoWorks Campus Manager features include:

- Intuitive workflow and dashboard user interfaces for easy data access and administration
- Intelligent discovery and display of large Layer 2 networks on browser-accessible topology maps, independent of VTP server
- Configuration of VLAN/LAN Emulation (LANE), PVLAN, and ATM services and assignment of switch ports to those services
- Link and device status display based upon Simple Network Management Protocol (SNMP) polling
- Identification of Layer 2 configuration discrepancies and many other new physical and logical discrepancies
- Diagnostic tools for connectivity-related problems between end stations, and Layer 2 and Layer 3 devices
- Automatic location and correlation of information on users by MAC, IP address, NT login, or UNIX host name, with their physical connections to the switched network
- Visibility and launch point of Cisco® CallManager from topology services as well as tracking of phone handset to IP, MAC address, and switch port
- Layer 2 and Layer 3 path trace between source and destination handsets
- Export of topology maps to Visio
- Java plug-ins to improve GUI performance
- New lightweight HTML-based user interface for the User Tracking and Campus Administration functions
- Ability to form hierarchical groups in Topology View based on criteria like SysLocation, SysName, and IP address or subnet mask with unlimited levels of nesting
- Support for Spanning Tree Protocol—Per VLAN Spanning Tree Plus (PVST+), Multiple Spanning Tree Protocol (MSTP) support for configuration, recommendation reports, and Visualization reports for modeling Spanning Tree Protocol configuration in offline mode
- Secure communication between the client browser and CiscoWorks Campus Manager using Secure Sockets Layer (SSL)

- Support for Time Delay Reflectometry (TDR) to detect faults in a cable and locate open circuits, short circuits, sharp bends, crimps, kinks, impedance mismatches, and other such defects
- Support for SNMP Version 3 (SNMPv3)
- Support for Cisco Secure Access Control Server (ACS)-based user roles
- Support for dual stack devices using IPv6 or IPv4

User Tracking

CiscoWorks Campus Manager includes a user-tracking tool that assists in locating end-station connections at the access-switch level for quickly locating and troubleshooting end-user connections. User tracking is useful for troubleshooting end-station communication issues because of its ability to perform extensive connectivity analysis of the network. Through automated acquisition, a table of end-user stations and Layer 2 connection information is constructed. This table can be sorted and queried, allowing administrators to easily find users on the network. Users can be identified by name, IP handset, MAC and IP address, as well as the switch port and switch that they are connected to, along with VLAN and VTP assignment by port address. Predefined reports, such as duplicate MAC addresses per switch port, or duplicate IP addresses, help managers to locate mobile users or violations in port policies.

In addition, the user-tracking tool supports several customizable options such as layouts, the ability to predefine queries and quick queries, along with new reports like switch-port usage reports. The reports help identify switch ports that have been recently used, unused, or disabled.

Discrepancy Reporting

This feature offers reports on network inconsistencies, anomalies, or configuration errors in the physical and logical constructs of the discovered network, making it easy to identify configuration errors such as:

- Link-speed mismatch
- Link-duplex mismatch
- Trunk mismatch
- UpLinkFast disabled
- BackboneFast disabled
- High Availability disabled

Topology Services

The topology-services tool allows you to view, monitor, and configure the physical and logical services in your network.

Features include:

- View detailed network information by devices, links, and ports
- Display physical and logical services
- Launch network-management tools like CiscoWorks CiscoView and Resource Manager Essentials (RME) from the network views
- Configure, manage, and monitor ATM devices
- Segment your network logically and manage workgroups that use VLANs
- Create and manage LANE services to extend VLANs across ATM devices
- View port, device, and trunk attributes along with port information by VTP domain for simplifying VLAN configuration
- View reports on inconsistencies or misconfigurations of the physical or logical network setup
- Simplify topology views through the creation of hierarchical groups by SNMP SysLocation, SysName, and IP address or subnet mask with multiple levels of nesting

VLAN, PVLAN, and VTP Management

CiscoWorks Campus Manager provides an easy-to-use GUI for creating, modifying, or deleting VLANs, LANE elements, or assigning switch ports to VLANs. As VLANs are created or modified, port and user changes are instantly updated and transmitted to the switches, eliminating the need to update and configure each participating switch individually. As VLANs are selected, the table view displays the participating ports, port status, and switch information. The topology map can be launched to graphically highlight participating devices and links of the VLAN connections. Additional mapping tools allow the user to show spanning-tree states, VTP trunks, switch-port links, and existing LANE service elements.

CiscoWorks Campus Manager features include:

- Tabular summary views of VLANs showing participating ports, devices, links, and port-status information
- Graphical setup of VLANs (including transparent VLANs) and VLAN membership to simplify administration
- Integration of LANE-configuration services in VLAN configuration tools for more efficient operational and engineering practices
- A separate interface for administrators to quickly search using a variety of criteria, and assign selected switch ports, individually or in bulk, to VLANs
- Logical display of VLAN configurations to easily visualize switch connections
- Automated discrepancy reports highlighting connection problems and link mismatches
- Automated VLAN membership registration, reducing administration and configuration requirements
- Support for PVLAN creation and deletion; promiscuous ports; and creation of isolated, community, or two-way community
- Inter-VLAN routing on Route Switch Modules (RSM), Multilayer Switch Feature Cards (MSFC), Layer 2 and 3 devices, and external routers
- VTP support for domains, VTP v3 support, VTP reports, VTP views

Spanning-Tree Management

CiscoWorks Campus Manager provides advanced capabilities to manage spanning-tree protocols in a campus network such as Per VLAN Spanning Tree (PVST), Multiple Spanning Tree Protocol (MSTP), and Multi-Instance Spanning Tree Protocol (MISTP).

Features include:

- Configuration of spanning-tree protocols through Spanning Tree Protocol parameters
- Reports on spanning trees in the network deployment
- Visualization of spanning tree on the topology maps
- Recommendation reports on Spanning Tree Protocol for optimal root recommendation, instance-reduction recommendation, and VLAN-to-instance mapping recommendation
- The Spanning Tree Protocol Visualizer allows the user to model and test Spanning Tree Protocol parameter changes before actually applying them to the network

ATM Management

CiscoWorks Campus Manager offers a graphical tool for managing complex ATM networks, simplifying their configuration and monitoring their performance. ATM networks are displayed on the topology map and the logical VLAN and ATM domain views provide graphical representations of ATM switches and LANE elements.

Features include:

- Autodiscovery of ATM switches, including switched virtual circuit (SVC) and permanent virtual circuit (PVC) connections
- Connectivity checking of SVCs and PVCs
- End-to-end virtual-circuit path tracing and analysis, which assists in connectivity diagnostics
- LANE troubleshooting and performance analysis
- Quality of service (QoS) templates for simplifying the configuration of typical traffic such as video or constant-bit-rate (CBR) service

- Simple configuration of soft PVCs
- ATM remote monitoring (RMON) data collection and analysis

Path Analysis

Path analysis is an operational and diagnostic tool that traces the connectivity between two specified devices on the network, including the physical and logical paths taken by packets flowing between those points.

Path analysis uses user-tracking, topology-services, and real-time spanning-tree information to determine Layer 2 and 3 connectivity between two end points, or IP handsets, in the network. The resulting trace is presented in graphical topology views that illustrate the Layer 2 and 3 devices, path direction, and link types, and in tabular formats that provide specific interface, IP address, VLAN, and link-type information.

Data Extraction Engine

This utility provides servlet and command-line access to CiscoWorks Campus Manager application data (user tracking, topology, and discrepancy), and allows you to extract data in Extensible Markup Language (XML) format.

ORDERING INFORMATION

CiscoWorks Campus Manager is part of the CiscoWorks LAN Management Solution (LMS). The CiscoWorks LMS is available for purchase through regular Cisco sales and distribution channels worldwide.

To place an order, visit the [Cisco Ordering Home Page](#).

SERVICE AND SUPPORT

Cisco Systems® offers a wide range of services programs to accelerate customer success. These innovative services programs are delivered through a unique combination of people, processes, tools, and partners, resulting in high levels of customer satisfaction. Cisco services help you to protect your network investment, optimize network operations, and prepare the network for new applications to extend network intelligence and the power of your business. For more information about Cisco services, see [Cisco Technical Support Services](#) or [Cisco Advanced Services](#).

FOR MORE INFORMATION

For more information about the CiscoWorks Campus Manager application, visit <http://www.cisco.com/go/lms> or contact your local Cisco account representative or send an email to the Product Marketing group at cisoworks@cisco.com.



Corporate Headquarters

Cisco Systems, Inc.
170 West Tasman Drive
San Jose, CA 95134-1706
USA
www.cisco.com
Tel: 408 526-4000
800 553-NETS (6387)
Fax: 408 526-4100

European Headquarters

Cisco Systems International
BV
Haarlerbergpark
Haarlerbergweg 13-19
1101 CH Amsterdam
The Netherlands
www-europe.cisco.com
Tel: 31 0 20 357 1000
Fax: 31 0 20 357 1100

Americas Headquarters

Cisco Systems, Inc.
170 West Tasman Drive
San Jose, CA 95134-1706
USA
www.cisco.com
Tel: 408 526-7660
Fax: 408 527-0883

Asia Pacific Headquarters

Cisco Systems, Inc.
168 Robinson Road
#28-01 Capital Tower
Singapore 068912
www.cisco.com
Tel: +65 6317 7777
Fax: +65 6317 7799

Cisco Systems has more than 200 offices in the following countries and regions. Addresses, phone numbers, and fax numbers are listed on **the Cisco Website at www.cisco.com/go/offices.**

Argentina • Australia • Austria • Belgium • Brazil • Bulgaria • Canada • Chile • China PRC • Colombia • Costa Rica • Croatia • Cyprus
Czech Republic • Denmark • Dubai, UAE • Finland • France • Germany • Greece • Hong Kong SAR • Hungary • India • Indonesia • Ireland
Israel • Italy • Japan • Korea • Luxembourg • Malaysia • Mexico • The Netherlands • New Zealand • Norway • Peru • Philippines • Poland
Portugal • Puerto Rico • Romania • Russia • Saudi Arabia • Scotland • Singapore • Slovakia • Slovenia • South Africa • Spain • Sweden
Switzerland • Taiwan • Thailand • Turkey • Ukraine • United Kingdom • United States • Venezuela • Vietnam • Zimbabwe

Copyright © 2005 Cisco Systems, Inc. All rights reserved. CCIP, CCSP, the Cisco *Powered* Network mark, Cisco Unity, Follow Me Browsing, FormShare, and StackWise are trademarks of Cisco Systems, Inc.; Changing the Way We Work, Live, Play, and Learn, and iQuick Study are service marks of Cisco Systems, Inc.; and Aironet, ASIST, BPX, Catalyst, CCDA, CCDP, CCIE, CCNA, CCNP, Cisco, the Cisco Certified Internetwork Expert logo, Cisco IOS, the Cisco IOS logo, Cisco Press, Cisco Systems, Cisco Systems Capital, the Cisco Systems logo, Empowering the Internet Generation, Enterprise/Solver, EtherChannel, EtherSwitch, Fast Step, GigaStack, Internet Quotient, IOS, IP/TV, iQ Expertise, the iQ logo, iQ Net Readiness Scorecard, LightStream, Linksys, MeetingPlace, MGX, MICA, the Networkers logo, Networking Academy, Network Registrar, *Packet*, PIX, Post-Routing, Pre-Routing, RateMUX, Registrar, ScriptShare, SlideCast, SMARTnet, StrataView Plus, Stratm, SwitchProbe, TeleRouter, The Fastest Way to Increase Your Internet Quotient, TransPath, and VCO are registered trademarks of Cisco Systems, Inc. and/or its affiliates in the United States and certain other countries.

All other trademarks mentioned in this document or Website are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (0501R) 204192.bh_ETMG_LF_1.05