Cisco Multicast Manager 3.0

Product Features

Q. What is Cisco® Multicast Manager?

A. Cisco Multicast Manager is a web-based network management application that simplifies the holistic discovery, visualization, monitoring, and troubleshooting of multicast networks.

Q. Who should deploy Cisco Multicast Manager?

A. Cisco Multicast Manager is applicable to enterprise customers that employ multicast for financial market data, to multiple system operators (MSOs) that utilize multicast to transport video over IP, and to service providers that need to manage their Multicast VPN (MVPN) environment.

Q. What benefits can customers expect from deploying Cisco Multicast Manager Release 3.0?

A. Cisco Multicast Manager Release 3.0 provides the following customer benefits:

- **New User Interface:** Enhanced user interface for improved usability, information display, workflow, navigation, and functional organization:
  - A hierarchical presentation of features with better categorization
  - Streamlined navigation linkage of configuration, reports, and diagnostics functionality
  - Richer event browser with multiple filters for improved event analysis
  - Multicast topology viewer
- **Dashboard:** Display Cisco Multicast Manager monitoring and event information, including events, real-time graphs, quick links, device lists, reports, and user activity.
- **Improved System Performance and Scalability:** Cisco Multicast Manager 3.0 moves from a file-based data storage system to an internal RDBMS for improved system performance and scalability.
- **Role-based Access Control:** Embedded authentication, authorization, and accounting capabilities provide customizable access and auditing of Cisco Multicast Manager features:
  - Authentication: Support for remote TACACS or local authentication. New inactivity log out feature.
  - Authorization: Functionality within Cisco Multicast Manager can be granted to different user roles, including system administrator, network administrator, network operator, and help desk.
  - Accounting: Critical actions within Cisco Multicast Manager are logged, including user ID, action taken, date, time, and action result.
- **VMware Support:** Cisco Multicast Manager 3.0 has been tested to operate in a VMware ESX 3.5 virtual environment.

- **(Optional) Multivendor Video Probe Support:** Support for RFC 4445 Media Delivery Index (MDI) video quality monitoring, including Media Loss Rate (MLR) and Delay Factor (DF) parameters. Cisco Multicast Manager 3.0 supports integration with leading video probe vendors IneoQuest iVMS 4.0, BridgeTech Probe v3.7, and Mixed Signals Sentry Engine (build 1462.408) to provide efficient, real-time video fault information.
- **Heartbeat Trap:** A user-configurable option to have Cisco Multicast Manager send periodic traps to external trap receivers to verify the continuous online status of Cisco Multicast Manager.
- **Telnet and Secure Shell (SSH) Protocol support:** Flexible device access
- **WSDL-based Northbound API:** Allows integration with external applications
- **Redhat Linux AS5 support**
- **Cisco IOS® XR 3.8 device support**
- **Cisco ASR 1000 family device support**

Q. **What major features are provided in Cisco Multicast Manager?**

A. Table 1 lists the major features of Cisco Multicast Manager.

Table 1. Features of Cisco Multicast Manager

Feature	Benefit
Automated multicast discovery	Discovers complete multicast topology from a single seed device, along with the MVPN provider and provider edge devices and Virtual Route Forwarding (VRF) tables they support
Proactive polling engine	Highly scalable polling engine to detect multicast anomalies before they become critical problems
Alerts and reports	Any exceptions detected by the polling engine are sent as SNMP traps and logged for reporting purposes. Reports are available for Rendezvous Points (RPs), Source-Group (S,G) packet per second (pps) rates, tree changes, interface bandwidth, Layer 2 port pps rates
Show all groups	Provides a complete list of the complete, active S,Gs
IGMP diagnostics	Displays all devices that have seen an Internet Group Management Protocol (IGMP) join for a particular group
MSDP status	Shows the status of all Multicast Source Discovery Protocol (MSDP)–enabled devices and their peers, including Source-Active cache information
Layer 2 diagnostics	Shows which multicast groups are being forwarded on a particular Layer 2 switch port
Health check	Provides on-demand checking of forwarding trees; RPs and checking for the existence of specific S,Gs can also be scheduled to run automatically
6500/7600 troubleshooting	Provides the equivalent of a Cisco IOS® Software command-line interface "show tech" for multicast, along with Local Target Logic (LTL) checking and pps rates taken from the route processor, switch processor, or distributed forwarding card. Output can be e-mailed directly to the Cisco Technical Assistance Center for further analysis.

Q. **What equipment does Cisco Multicast Manager manage?**

A. All multicast-enabled devices running Cisco IOS Software, including Layer 2 switches, as well as the Cisco CRS platform running Cisco IOS XR up to Software Release 3.8, can be monitored by Cisco Multicast Manager.

Q. **Can Cisco Multicast Manager monitor non Cisco Layer 3 network devices?**

A. Yes, as long as the device supports standard multicast SNMP instrumentation it should work with Cisco Multicast Manager. The device should support at least one MIB from each of the categories given in Table 2.

Table 2.   Supported MIBs

Category	MIBs
IGMP	• IGMP-MIB.my • IGMP-STD-MIB.my
IGMP Snooping	CISCO-IGMP-SNOOPING-MIB.my (CatOS only)
Mroute	• IPMROUTE-MIB.my • IPMROUTE-STD-MIB.my • CISCO-IPMROUTE-MIB.my
PIM	• PIM-MIB.my • CISCO-PIM-MIB.my
MSDP	MSDP-MIB.my
mVPN	CISCO-MVPN-MIB.my

Product Licensing and Platform Requirements

Q. **How is Cisco Multicast Manager software licensed?**

A. The software is licensed on a per server basis. The customer must purchase a Base software license (which supports both Solaris and RedHat Linux) that covers the right to use Cisco Multicast Manager for either a small deployment (fewer than 200 devices), medium-size deployment (fewer than 500), or large-scale deployment (unrestricted number of devices). Additionally, customers can chose between two option licenses for support of multicast VPN monitoring and video quality monitoring through third-party probe integration. Please refer to the Cisco Multicast Manager ordering guide for part numbers and pricing.

Q. **What hardware platform is required to run Cisco Multicast Manager?**

A. Table 3 lists the hardware platform required for Cisco Multicast Manager.

Table 3.   Hardware Requirements for Cisco Multicast Manager

Component	Description
Disk space	4 GB or more free space for Cisco Multicast Manager application and data
Hardware	**Linux** • Dual AMD Opteron Processor 250 2.4-GHz for large enterprise (more than 500 devices) • Dual 2.8-GHz Intel Pentium IV or dual 2.8-GHz Intel Xeon processor for large enterprise (more than 500 devices) • 2.8-GHz Intel Pentium IV or 2.8-GHz Intel Xeon processor **Solaris** • Sun Fire v440: Up to four 1.593-GHz UltraSPARC IIIi processors for large enterprise (more than 500 devices) • Sun Fire v240: One 1.34-GHz or two 1.5-GHz UltraSPARC processors
Memory	• 2 GB • 4 GB for large enterprise (more than 500 devices)
Software	**Linux** • Red Hat Enterprise Linux ES/AS 3, 4, and 5 **Solaris** • Solaris 8 • Solaris 9 • Solaris 10 *Note*: Solaris x86 is not supported **VMware** • ESX 3.5

Browser	• Firefox 1.5 or greater • Internet Explorer 6 and 7 • Netscape 7.0 • Mozilla 1.7 • Safari 2.0

Q. **How do customers migrate from Cisco Multicast Manager Release 2.x to Release 3.0?**

A. Customers that have purchased any version of Cisco Multicast Manager Release 2.x can migrate to Cisco Multicast Manager Release 3.0 by purchasing Base Upgrade kits CMM2.X-3.0-UGSM-K9, CMM2.X-3.0-UGMD-K9 or CMM2.X-3.0-UGUR-K9, depending on the license size of their current Cisco Multicast Manager 2.x license. Additionally, Cisco Multicast Manager 3.0 customers, with 200 device (SM) and 500 device (MD) licenses, can upgrade to larger licenses of Cisco Multicast Manager 3.0 via Upgrade kits. Customers can chose to add video operations solution (VOS) and MVPN feature kits for an additional cost.

Q. **Can I evaluate a trial version of Cisco Multicast Manager?**

A. Yes, you can download a free trial version and fully operate Cisco Multicast Manager for 60 days to evaluate its usefulness in your network environment. The Cisco Multicast Manager 3.0 60-day trial version will be available for download at http://www.cisco.com/go/nmsevals beginning on April 13, 2009.

An evaluation license key is required. To obtain a key, please email get-cmm-key-eval@cisco.com with your name, company name, and IP address of the intended Cisco Multicast Manager server. The evaluation license key will be generated and emailed to you within 48 hours.

Q. **Where can I find more information about Cisco Multicast Manager?**

A. For more information about Cisco Multicast Manager, visit http://www.cisco.com/go/cmm, contact your local account representative, or send an email to ask-cmm-pm@cisco.com.

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