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Cisco Multicast Manager 2.5

Product Overview

Cisco[®] Multicast Manager is a Web-based network management application that simplifies the holistic discovery, visualization, monitoring, and troubleshooting of multicast networks to help ensure business continuity. 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.

Cisco Multicast Manager includes:

- Automated multicast discovery
- Proactive polling engine
- Real-time multicast diagnostics
- Alerting and reporting

Applications

Figure 1 shows how Cisco Multicast Manager can be used to trace a multicast group. In this example, multicast is being used to transport video. The trace is presented in tabular and graphical format. The table can update dynamically, showing the packet per second (pps) rate, output errors, and discards for each interface along the tree. Cisco Multicast Manager also includes support for video probes that may be deployed for monitoring video quality. The embedded address management database shows which channels are affected if there is a problem with a specific multicast group.

Figure 1. Using Cisco Multicast Manager to Trace a Multicast Group



Features and Benefits

In addition to the features shown in Table 1, Cisco Multicast Manager 2.5 has support for multicast VPNs and RFC 4445 video probes. The MVPN feature provides monitoring and alerting of changes detected in the multicast Virtual Route Forwarding (VRF) tables. The real-time diagnostics show VRF to multicast distribution tree (MDT) mapping details along with MDT data ranges and thresholds. These environments are enhanced in release 2.5 to include bridging the customer edge multicast environments with the service provider edge. Continued support for video probes allows Cisco Multicast Manager to report video quality issues for specific multicast groups while highlighting the video channels that those groups support. Integration for IP Video Management System (iVMS) from Ineoquest Technologies has been added to Cisco Multicast Manager 2.5 to provide real-time alerts to allow for rapid fault isolation of customer impacting video events.

Table 1. Features and Benefits

Feature	Benefit
Automated multicast discovery	Discovers complete multicast topology from a single seed device, along with the MVPN provider and provider edge devices and VRF tables they support. Discovery bridges the provide edge to the customer edge to create an end-to-end view of the multicast environment.

Proactive polling engine	Highly scalable polling engine to detect multicast anomalies before they become mission critical problems
Alerts and reports	Any exceptions detected by the polling engine are sent as Simple Network Management Protocol (SNMP) traps and logged for reporting purposes. Reports are available for Rendezvous Points (RPs), Source-Groups (S,G) pps rates, tree changes, interface bandwidth, Layer 2 port pps rates. Real-time alerts originating from an Ineoquest iVMS application are also actionable through the Video Operations Solution (VOS) add-on.
Show all groups	Provides a complete list of 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.

System Requirements

Table 2 lists the system requirements for Cisco Multicast Manager.

Table 2.	System Requirements
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Component	Description	
Disk space	2 GB or more free space for Cisco Multicast Manager application and data	
Hardware	Linux	
	Dual AMD Opteron Processor 250 2.4-GHz 64-bit 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	
	Red Hat Enterprise Linux ES/AS 4	
	Solaris	
	Solaris 8	
	Solaris 9	
	Solaris 10	
	Note: Solaris x86 is not supported	
Browser	• Firefox 1.5 or greater	
	Internet Explorer 6	
	Netscape 7.0	
	• Mozilla 1.7	
	• Safari 2.0	

Ordering Information

Table 3 lists ordering information. To place an order, visit the Cisco Ordering Homepage. To download software, visit the Cisco Software Center.

Table 3.Ordering Information

Product Name	Part Number
Cisco Multicast Manager 2.5 Less than 200 devices and 100 sources	CMM-2.5-LIN-SM-K9
Cisco Multicast Manager 2.5 Less than 200 devices and 100 sources	CMM-2.5-SOL-SM-K9
Cisco Multicast Manager 2.5 Less than 500 devices and 200 sources	CMM-2.5-LIN-MD-K9
Cisco Multicast Manager 2.5 Less than 500 devices and 200 sources	CMM-2.5-SOL-MD-K9
Cisco Multicast Manager 2.5 LIN Unlimited devices and sources	CMM-2.5-LIN-UL-K9
Cisco Multicast Manager 2.5 SOL Unlimited devices and sources	CMM-2.5-SOL-UL-K9
Cisco Multicast Manager 2.5 Optional VOS Feature	CMM-2.5-VOS-FS
Cisco Multicast Manager 2.5 Optional MVPN Feature	CMM-2.5-MVPN-FS
Cisco Multicast Manager 2.5 LIN Upgrade from SM to MD	CMM-2.5-LIN-UPSMMD
Cisco Multicast Manager 2.5 SOL Upgrade from SM to MD	CMM-2.5-SOL-UPSMMD
Cisco Multicast Manager 2.5 LIN Upgrade from MD to UL	CMM-2.5-LIN-UPMDUL
Cisco Multicast Manager 2.5 SOL Upgrade from MD to UL	CMM-2.5-SOL-UPMDUL
Cisco Multicast Manager 2.4 to 2.5 Migration	CMM-2.4-2.5-UG-K9

Service and Support

Using the Cisco Lifecycle Services approach, Cisco and its partners provide a broad portfolio of end-to-end services and support that can help increase your network's business value and return on investment. This approach defines the minimum set of activities needed, by technology and by network complexity, to help you successfully deploy and operate Cisco technologies and optimize their performance throughout the lifecycle of your network.

For More Information

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



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