PB452654

Cisco Video Assurance Management Solution 1.0

Solution Overview

Cisco® Video Assurance Management Solution (VAMS) 1.0 delivers to service providers real-time centralized monitoring of their backbone, regional, and aggregation networks for broadcast video transport. Cisco Video Assurance Management Solution 1.0 provides the framework for a flexible end-to-end assurance platform for video.

The Cisco Video Assurance Management Solution 1.0 comprises the following Cisco products:

- Cisco Active Network Abstraction (ANA) 3.6: Cisco VAMS 1.0 enhances the base functions of Cisco ANA 3.6 virtual network elements (VNEs) for Cisco 7600 Series Routers, Cisco Catalyst® 4948 Switches and Cisco CRS-1 Carrier Routing System devices that address the specific requirements of video delivery across the network.
- Cisco Multicast Manager 2.4: Cisco VAMS 1.0 collects the outputs from Cisco Multicast Manager into Cisco Active Network Abstraction (ANA) providing views of both device and multicast faults.

Cisco VAMS 1.0 also integrates third-party video probes from Ineoquest, Mixed Signals, and Tektronix, demonstrating how the information from dedicated video probes can be correlated with network data to facilitate problem isolation and troubleshooting.

Cisco VAMS 1.0 includes a northbound API that supports integration with OSS applications. Specifically, Cisco VAMS 1.0 may be integrated with Cisco Assurance Management Solution (AMS) 1.0 (http://www.cisco.com/en/US/products/ps8408/index.html) to provide a single Manager of Managers view of broadcast video across the transport network.

Table 1 lists the features and benefits of Cisco VAMS 1.0.

Table 1.   Features and Benefits

Feature	Benefit
Virtualization	
Core and distribution topology map	Allows operators to view their core and distribution networks in a single map
Chassis views for elements on map	Allows operators to find more details on devices and status in both a tabular and graphical manner
Multicast view	Allows operators to see how the multicast trees overlay the physical topology
Visualize video probes on map	Allows pinpointing of problem areas by using information from video probes and their location on the topology map and the multicast trees
Single Manager of Managers view	A northbound API supports integration with Cisco Assurance Management Solution (AMS) 1.0 to provide a single Manager of Managers view of broadcast video across the transport network
Monitoring	
Service monitoring	Uses network device instrumentation to detect service-affecting packet drops and uses video probes to detect service degradation
Device fault monitoring	Aggregates device and service faults into a consolidated fault view
OSS integration API	Northbound API to support integration with third-party OSS products, for example, IBM Tivoli Netcool, part of the Cisco Assurance Management Solution

Multicast monitoring	Provides monitoring and troubleshooting of the multicast services in the network and correlates this with video probe data
Extended Device Support	
Cisco CRS-1 Carrier Routing System	Traps based on:
Cisco 7600Series Routers	• Non-Reverse Forwarding Path (non-RFP) drops, for example video packets with unrecognized source addresses
Cisco Catalyst 4948 Switches	• Multicast including PIM interface config and operational status and changes to multicast route tables
Tektronix MTM400	Add a vendor-specific probe VNE to ANA Network View
Ineoquest	Add the network links between the probe to the network element to which it is connected
Mixed Signals	ANA monitors probe properties exposed through MIB2 (system and interface).
	ANA receives video stream-related traps from the probe and maps into ANA format and severity levels
	Video events are visible through ANA Network View or ANA Event View and are forwarded through the ANA northbound interface

Solution Specifications

To order Cisco VAMS 1.0, the following must also be purchased as prerequisites:

- Cisco ANA 3.6 (Service Patch 2) with VNEs and RTU licenses for relevant devices (4948s, 7600s and CRS-1s)
- Cisco Multicast Manager 2.4 with the VOS (Video Operations Solution) extensions

Cisco VAMS 1.0 may then be deployed as an extension to the above.

Ordering Information

Table 2 gives ordering information.

Table 2.   Ordering Information

Product Description	Part Number
Cisco Video Assurance Management Solution 1.0 (Top level part number)	VAMS-1-SOFTWARE
Video Extensions to 4948 (G2) VNE – Software (optional, qty 0-1)	VAMS1.0-3.6VNE4948
Video Extensions to 7600 (G3) VNE – Software (optional, qty 0-1)	VAMS1.0-3.6VNE7600
Video Extensions to CRS-1 (G5) VNE – Software (optional, qty 0-1)	VAMS1.0-3.6VNEG5
Video Extensions to CRS-1 (G6) VNE – Software (optional, qty 0-1)	VAMS1.0-3.6VNEG6
Cisco Multicast Manager (CMM) VNE – Software (optional, qty 0-1)	VAMS1.0-3.6VNECMM
Ineoquest Video Probe VNE – Software (optional, qty 0-1)	VAMS1.0-3.6VNEIQ
Mixed Signals Video Probe VNE – Software (optional, qty 0-1)	VAMS1.0-3.6VNEMS
Tektronics Video Probe VNE – Software (optional, qty 0-1)	VAMS1.0-3.6VNETK
Ineoquest Video Probe RTU – Right-to-use for one IQ probe (optional, qty 0-unlimited)	VAMS1.0-3.6IQRTU
Mixed Signals Video Probe RTU – Right-to-use for one IQ probe (optional, qty 0-unlimited)	VAMS1.0-3.6MSRTU
Tektronix Video Probe RTU – Right-to-use for one IQ probe (optional, qty 0-unlimited)	VAMS1.0-3.6TKRTU

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 Video Assurance Management Solution, visit http://www.cisco.com/go/vams or contact your local Cisco account representative.