



Release Notes for Cisco Video Assurance Management Solution 1.0

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Note Visit <http://www.cisco.com/web/psa/products/index.html> to view the latest copy of these release notes.

Introduction

The Cisco Video Assurance Management Solution (Cisco VAMS) 1.0 provides network element management of an IP Television (IPTV) deployment in a wireline or cable provider network. The management platform is Cisco ANA 3.6 Service Pack 2 (referred to in this document as Cisco ANA 3.6.2). The managed devices include the:

- Cisco 7600 Series router
- Carrier Routing System-1 (CRS-1)
- Cisco Catalyst 4948 switch

The Cisco ANA supports these devices as Virtual Network Elements (VNEs). The Cisco VAMS extends the capabilities of these VNEs to monitor video traffic flows within the video transport network. These Cisco devices forward their traps to the Cisco ANA for processing.



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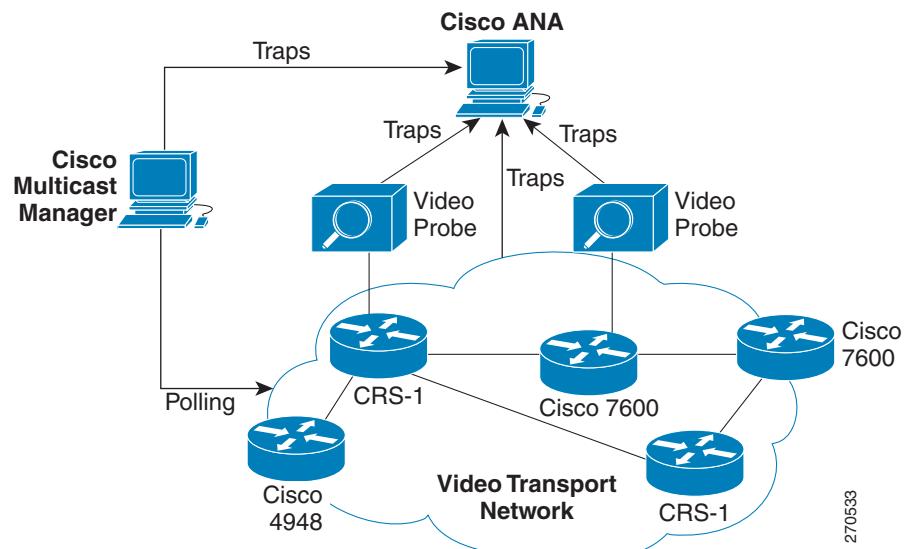
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The Cisco VAMS also includes the Cisco Multicast Manager 2.4. You use the Cisco Multicast Manager to set thresholds for conditions within the video transport network and configure Cisco ANA as the trap receiver. When conditions exceed configured thresholds, the Cisco Multicast Manager generates trap notifications and forwards them to Cisco ANA for monitoring and processing.

The Cisco VAMS also incorporates third-party video probes to monitor traffic flows within the video transport network. The video probes report traps directly to the Cisco ANA.

See [Figure 1](#) for an overview of the Cisco VAMS components (the topology shown in [Figure 1](#) is an example).

Figure 1 Cisco Video Assurance Management Solution Components



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Solution Requirements

Requirements for the Cisco VAMS are listed in [Table 1-1](#):

Table 1-1 Solution Requirements

Solution Component	Version Information	Notes
Cisco VAMS	1.0	Installation script (delivered on DVD)
Active Network Abstract (ANA)	3.6.2	ANA Gateway—Sun Fire V490, Solaris 10 ¹ ANA Unit—Sun Fire V480, Solaris 10 ¹ ANA Client—IBM or PC compatible work station, Windows 2000 or Windows XP ¹
Cisco Multicast Manager ²	2.4	Sun Fire V440—Solaris 8, 9, or 10 Linux—Red Hat Enterprise Linux 3 or 4
Cisco 7600 Series router	12.2(33)SRB2	Supervisor card: 7600-SUP720-3BXL with redundant SUP720-3BXL Line cards include WS-X6704-10GE, WS-X6748-SFP, WS-X6748-GE-TX, WS-X6724-SFP, and optional WS-F6700-DFC3BXL
Cisco Carrier Routing System-1 (CRS-1)	IOS-XR 3.4.2	Line cards include CRS-MSC, CRS1-SIP-800 (with SPA-8X1GE), 8-10GE
Cisco Catalyst 4948 (CAT4948-10GE)	12.2(31)SG	—
Tektronix	MTM400	Application Firmware Version: 3.1.061.000 FPGA Logic Firmware Version: 4 BIOS Version: 2.0.7 SNMP Interface Version: 2.6.0 Hardware Version: 5 QA Build: Alpha 01 Build Timestamp: Dec 19 2007 22:22:42
IneoQuest	Singulus GT-1	Singulus GT-1 Media Analyzer Firmware Version: TB-2.3a-011707
Mixed Signals	Sentry Digital Content Monitor	Sentry 136 ³ Sentry Engine Version: PDM (build 1455.38) Sentry Database Version: 2.7.0.25 Sentry Configuration: TRANSPORT

1. See *Solution Guide for the Cisco Video Assurance Management Solution 1.0* for detailed specifications.
2. Configure Cisco Multicast Manager to forward traps to Cisco ANA. See *Solution Guide for the Cisco Video Assurance Management Solution 1.0* for workflow.
3. The Cisco VAMS 1.0 does not support carousel-related traps for Mixed Signals Sentry 136.

Installation Notes

Installation of the Cisco VAMS involves installation of its key components:

Hardware Installation

- The core network elements of the video transport network:
 - Cisco 7600
 - CRS-1
 - Catalyst 4948
- Third-party video probes:
 - IneoQuest Singulus GT-1
 - Tektronix MTM400
 - Mixed Signals Sentry Digital Content Monitor
- Management servers for Cisco ANA and Cisco Multicast Manager

Software Installation

- The IPTV-enabled IOS software versions:
 - 12.2(33)SRB2 on the Cisco 7600
 - IOS-XR 3.4.2 on the CRS-1
 - 12.2(31)SG on the Catalyst 4948
- Cisco ANA 3.6.2 (includes ANA gateway, unit, and client installation)
- Cisco Multicast Manager 2.4 (on dedicated server)
- Cisco VAMS (installation script delivered on DVD)

For complete details of the installation workflow, including procedures and references to installation documents, see “[Install the Cisco VAMS](#)” in the *Solution Guide for the Cisco Video Assurance Management Solution 1.0*.

Uninstall

You uninstall the Cisco VAMS by running the uninstall script. This action removes the IPTV extensions that enable Cisco devices to monitor video conditions in the transport network. The uninstallation procedure is contained in the *Solution Guide for the Cisco Video Assurance Management Solution 1.0*.

Limitations and Restrictions

This section contains these topics:

- [Java Error During Installation, page 5](#)
- [Cisco Multicast Manager Trap Limitations, page 5](#)

Java Error During Installation

If you encounter an error during installation of ANA 3.6.2, follow the workaround described here:

http://www.cisco.com/en/US/docs/net_mgmt/active_network_abstraction/3.6_sp2/release_notes/rn36_sp2.html#wp76407

Cisco Multicast Manager Trap Limitations

The following Cisco Multicast Manager *Normalized* traps do not clear their corresponding *Threshold Exceeded* traps:

```
'High L2 Port Threshold Exceeded',
'Low L2 Port Threshold Exceeded',
'L2 Threshold Normalized',
---
'SG Delta Threshold Exceeded',
'SG Threshold Normalized',
---
'Multicast Bandwidth Percent High Threshold Exceeded',
'Multicast Bandwidth Percent Low Threshold Exceeded',
'Multicast Bandwidth Percent Threshold Normalized',
---
'High BPS Threshold Exceeded',
'Low BPS Threshold Exceeded',
'BPS Threshold Normalized',
```

The Cisco ANA processes all Cisco Multicast Manager traps, but currently lacks the capability to correlate threshold normalized traps to their corresponding threshold exceeded traps.

In addition, the following Cisco Multicast Manager traps do not have corresponding *clears*.

```
'RP Group Threshold Exceeded',
---
'RPF Failure Threshold Exceeded',
---
'High Threshold Exceeded PPS',
'Low Threshold Exceeded PPS',
```

Open Caveats

The Cisco VAMS 1.0 includes these caveats:

- CSCsk44501

Symptom Soft property does not appear in the Cisco 7600 logical inventory after creating it in the Soft Property Manager window in ANA NetworkVision.

Conditions Add a soft property to an IP interface on the Cisco 7600 or Cisco CRS-1 VNE. Stop and start the VNE. The property does not appear in inventory even though the soft property editor displays the soft property. (This problem does not occur with the Catalyst 4948.)

Workaround None.

- CSCsm88030

Symptom Cisco VAMS 1.0 does not detect RPF failures (non-RPF drops) from CRS-1 devices.

Conditions Cisco VAMS 1.0 configures the CRS-1 to send non-RPF traps based on a value in the cIpMRouteDifferentInIfPackets MIB attribute. However, the CRS-1 does not support this MIB attribute. Therefore, the CRS-1 does not send traps for non-RPF drops.

Workaround Use the Cisco Multicast Manager 2.4 to view RPF failure reports from CRS-1 devices.

- CSCsl63682

Symptom Cisco ANA NetworkVision inventory does not show the interfaces for these CRS-1 line cards:

```
RP/0/RP0/CPU0:RTP-TAC-CRS8-C#sho platform
Node          Type       PLIM      State     Config State
-----+-----+-----+-----+-----+-----+
0/0/CPU0    MSC        8-10GbE   IOS  XR  RUN    PWR, NSHUT, MON
0/3/CPU0    MSC        4OC192-POS/DPT  IOS  XR  RUN    PWR, NSHUT, MON
0/5/CPU0    MSC        1OC768-POS   IOS  XR  RUN    PWR, NSHUT, MON
0/RP0/CPU0   RP(Active) N/A       IOS  XR  RUN    PWR, NSHUT, MON
0/RP1/CPU0   RP(Standby) N/A       IOS  XR  RUN    PWR, NSHUT, MON
RP/0/RP0/CPU0:RTP-TAC-CRS8-C#
```

Also, the following error appears in the AVM log file:

```
According the AVM log:
* Device 172.18.104.16, path:cisco2/ciscoCRS8S, got unsupported software version: Cisco
IOS XR Software (Cisco CRS-8/S),
Version 3.4.2[Default]^M
```

Workaround None.

Related Documentation

This section lists documents related to the Cisco VAMS.

- [Release-Specific Documents, page 7](#)
- [Platform-Specific Documents, page 7](#)
- [Hardware Documents, page 8](#)
- [Cisco IOS Software Documentation Set, page 9](#)
- [Third-party Documents, page 9](#)
- [Solution-related Documents, page 10](#)

Release-Specific Documents

Release 1.0 of the Cisco VAMS includes these documents:

- *Release Notes for the Cisco Video Assurance Management Solution 1.0* (this document)
- *Solution Guide for the Cisco Video Assurance Management Solution 1.0*

Platform-Specific Documents

Platform-specific documents include:

- [Cisco Active Network Abstraction, page 7](#)
- [Cisco Multicast Manager, page 8](#)

Cisco Active Network Abstraction

Cisco ANA Release Notes

http://www.cisco.com/en/US/docs/net_mgmt/active_network_abstraction/3.6_sp2/release_notes/rn36_sp2.html

Cisco ANA User and Reference Guides

- *Cisco Active Network Abstraction EventVision User Guide Version 3.6*
- *Cisco Active Network Abstraction Fault Management User Guide Version 3.6*
- *Cisco Active Network Abstraction Managing MPLS User Guide Version 3.6*
- *Cisco Active Network Abstraction NetworkVision User Guide Version 3.6*
- *Cisco Active Network Abstraction Technology Support and Information Model Reference Manual, Version 3.6*
- *Cisco Active Network Abstraction 3.6 Virtual Network Element Reference Guide*

The Cisco ANA user and reference guides are available here:

http://www.cisco.com/en/US/products/ps6776/products_user_guide_list.html

Cisco ANA Configuration Guides

- *Cisco Active Network Abstraction BQL User Guide 3.6*
- *Cisco Active Network Abstraction Command Builder User Guide 3.6*
- *Cisco Active Network Abstraction Customization User Guide 3.6*
- *Cisco Active Network Abstraction Workflow User Guide 3.6*

The Cisco ANA configuration guides are available here:

http://www.cisco.com/en/US/products/ps6776/products_installation_and_configuration_guides_list.html

Cisco ANA Administration Guides

- *Cisco Active Network Abstraction Administrator Guide 3.6*
- *Cisco Active Network Abstraction Error Messages 3.6*
- *Cisco Active Network Abstraction High Availability User Guide 3.6*
- *Cisco Active Network Abstraction Shell User Guide 3.6*

http://www.cisco.com/en/US/products/ps6776/prod_maintenance_guides_list.html

Cisco Multicast Manager

The list of Cisco Multicast Manager documents includes:

- *Release Notes for Cisco Multicast Manager 2.4*
http://www.cisco.com/en/US/products/ps6337/prod_release_notes_list.html
- *Installation Guide for Cisco Multicast Manager, 2.4*
http://www.cisco.com/en/US/products/ps6337/prod_installation_guides_list.html
- *User Guide for Cisco Multicast Manager 2.4*
http://www.cisco.com/en/US/products/ps6337/products_user_guide_list.html

Hardware Documents

Hardware documents for the Cisco devices in the Cisco Video Assurance Management Solution include:

Cisco 7600 Series Routers

http://www.cisco.com/en/US/products/hw/routers/ps368/tsd_products_support_series_home.html

Cisco Carrier Routing System (CRS-1)

http://www.cisco.com/en/US/products/ps5763/tsd_products_support_series_home.html

Cisco Catalyst 4900 Series Switches

http://www.cisco.com/en/US/products/ps6021/tsd_products_support_series_home.html

Cisco IOS Software Documentation Set

Software documents for the Cisco devices in the Cisco VAMS include:

Cisco 7600 Series Routers

Release notes for the 12.2(33)SRB2 IOS software to enable Cisco 7600 Series routers for this solution:

http://www.cisco.com/en/US/products/ps6922/prod_release_note09186a00806c096f.html

Cisco Carrier Routing System (CRS-1)

Release notes for the IOS-XR 3.4.2 software to enable Cisco CRS-1 for this solution:

http://www.cisco.com/en/US/docs/ios_xr_sw/iosxr_r3.4/general/release/notes/reln_342.html

Cisco Catalyst 4900 Series Switches

Release notes for the 12.2(31)SG IOS software to enable Cisco Catalyst 4948 switches for this solution:

http://www.cisco.com/en/US/docs/switches/lan/catalyst4500/release/note/OL_9592.html

Third-party Documents

Third-party documents related to the Cisco VAMS include:

IneoQuest IQMediaMonitor Series M1 Singulus G1-T

- *Hardware User's Guide*
- *IQMediaAnalyzer Application User's Guide*

Tektronix MTM400

- *MTM400 MPEG Transport Stream Monitor User Manual*
- *MTM400 MPEG Transport Stream Monitor Technical Reference*
- *MTM400 MPEG Transport Stream Monitor Programmer Manual*

Mixed Signals Sentry

- *Mixed Signals Sentry Digital Content Monitor User Guide*

Solution-related Documents

Other solution documents related to the Cisco VAMS include:

Cisco IPTV Wireline Solutions

Cisco Wireline Video/IPTV Solution Design and Implementation Guide, Release 1.1

http://www.cisco.com/en/US/products/ps6902_products_implementation_design_guide_book09186a00806b5b4c.html

Cisco IPTV Cable Solutions

Cisco Gigabit-Ethernet Optimized Video Networking Solution for Cable Design and Implementation Guide, Release 3.0

http://www.cisco.com/en/US/products/ps6902_products_implementation_design_guide_book09186a00806470d8.html

Obtaining Documentation and Submitting a Service Request

For information on obtaining documentation, submitting a service request, and gathering additional information, see the monthly *What's New in Cisco Product Documentation*, which also lists all new and revised Cisco technical documentation, at:

<http://www.cisco.com/en/US/docs/general/whatsnew/whatsnew.html>

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