



APPENDIX A

Trap Definitions

The Cisco Video Assurance Management Solution (Cisco VAMS) supports traps (alarms) for:

- [Cisco Multicast Manager, page A-1](#)
- [Textronix Video Probe, page A-3](#)
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Cisco Multicast Manager

Alarm Message Text ¹	Severity
The Layer 3 multicast bandwidth percentage on an interface has exceeded the percentage threshold.	Minor
The designated router for an interface has been detected.	Warning
One or more parameters of a multicast route entry has changed.	Warning
The rendezvous point did not respond to a <i>sysUpTime</i> poll.	Information
The Layer 3 multicast b/s rate for a (source,group) has exceeded the high b/s rate threshold.	Minor
The application has rediscovered a router.	Information
The rendezvous point responded to a <i>sysUpTime</i> poll.	Information
The designated router for an interface has been removed.	Major
That a health check has detected one or more failures.	Minor
The Layer 3 multicast bandwidth percentage on an interface has exceeded the percentage threshold.	Information
The Layer 3 multicast Reverse Path Forwarding (RPF) failures for a (source, group) that is now being measured at a value above the low threshold.	Minor
The unicast or multicast routing table has changed compared to the initial baseline.	Information
The video probe media loss rate (MLR) for a video flow has exceeded the configured threshold.	Major

Alarm Message Text ¹ (continued)	Severity
The multicast group limit exceeded the configured threshold on the rendezvous point.	Minor
A Layer 2 port multicast p/s low threshold is exceeded.	Minor
The Layer 3 multicast b/s rate for a (source, group) has exceeded the low b/s rate threshold.	Minor
A rendezvous point that did not respond to a poll.	Information
The Layer 3 multicast p/s rate for a (source, group) has exceeded the set threshold when measured between the routers on a multicast forwarding tree.	Warning
A (source, group) no longer exists on the router.	Major
One or more parameters of a unicast route entry has changed.	Information
A multicast forwarding tree that has reverted to its baseline.	Warning
The Layer 3 multicast b/s rate for a (source, group) has exceeded the high b/s rate threshold.	Cleared
The multicast p/s rate for the aggregate multicast traffic on a Layer 2 port, which is now being measured at a value between the high and low p/s rate thresholds.	Cleared
A (source, group) has been removed from the rendezvous point since the poll.	Major
Notification that the video probe delay factor (DF) for a video flow has exceeded the configured threshold.	Major
A (source, group) has been added to the rendezvous point since the last poll.	Information
A Layer 2 port multicast p/s high threshold is exceeded.	Minor
The multicast bandwidth percentage for the aggregate multicast traffic on an interface is now at a value lower than the high threshold.	Cleared
The Layer 3 multicast p/s rate for a (source, group) that is now being measured at a value between the high and low p/s rate thresholds.	Cleared
A multicast group that has more than a single source sending to it.	Major
A multicast forwarding tree that has changed from its baseline.	Warning
The Layer 3 multicast p/s rate for a (source, group) has exceeded the high p/s rate threshold.	Minor
The Layer 3 multicast p/s rate for a (source, group) has exceeded the low p/s rate threshold.	Minor
The designated router for an interface has changed.	Warning
A multicast sender on the default multicast distribution tree (MDT) for a particular VPN routing/forwarding (VRF) instance has been removed.	Warning
A VRF on a multicast VPN (MVPN) Provider Edge (PE) router has been removed.	Warning
A default MDT address for a VRF has been configured on a PE that does not match the configuration on the rest of the PEs.	Warning
The number interfaces associated with a VRF on an MVPN PE has changed.	Warning
A VRF on an MVPN PE has been added.	Warning
A new multicast sender on the default MDT for a particular VRF has been detected.	Warning
The number of VRFs configured on an MVPN PE has changed.	Warning

1. See [Glossary](#) for abbreviations that are used in alarm message text.

Textronix Video Probe

Alarm Message Text ¹	Severity
Number of packet received out of order exceeds Warning threshold	Warning
Inter packet delay exceeds Warning threshold	Warning
IP Packets lost exceeds Warning threshold	Warning
IP Packets in error exceeds Warning threshold	Warning
Number of packet received out of order exceeds threshold	Minor
IP Packets lost exceeds threshold	Minor
IP Packets in error exceed threshold	Minor
1.5a PMT	Major
2.5 PTS	Minor
1.5 Ind PMT Error Timer	Major
2.3b PCR Discontinuity Indicator - The difference between two consecutive PCR values ($PCR_i + 1 - PCR_i$) is outside the range of 0ms to 100 ms without the discontinuity_indicator set	Minor
2.3a PCR Repetition - Error Timer	Minor
1.4 Continuity	Major
2.3b PCR Discontinuity Indicator - This test applies only to PIDs that are indicated as PCR_PID in the current PMT	Minor
2.3a PCR EVID_INDIVIDUAL_PCR_ERR_TIMER	Minor
1.5 PMT Error Scrambling	Major
1.5 PMT Error Timer	Major
1.3 PAT Error Scrambling	Major
1.3 PAT Error Table Id	Major
1.3 PAT Error Timer	Major
2.4 PCR Accuracy	Minor
CAT (DVB test 2.6)	Minor
PTS (DVB test 2.5)	Minor
PCR Accuracy (DVB test 2.4)	Minor
CRC (DVB test 2.2)	Minor
Transport (DVB test 2.1)	Minor
PMT (DVB test 1.5)	Major
PAT Table (DVB test 1.3)	Major
1.6 PID	Major
PID (DVB test 1.6)	Major
Continuity Error (DVB test 1.4)	Major

Alarm Message Text ¹ (continued)	Severity
Sync Byte (DVB test 1.2)	Major
Sync Loss (DVB test 1.1)	Major

1. See [Glossary](#) for abbreviations that are used in alarm message text.

IneoQuest Video Probe

Alarm Message Text ¹	Severity
The network utilization on the primary port exceeds the threshold value.	Minor
User feedback event.	Information
The delay factor threshold crossover is detected.	Minor
A stream was lost for a period defined in the outage.	Major
A 15-minute monitored metric threshold crossover is detected.	Information
The Bit-Rate for a stream exceeds the threshold value.	Warning
The maximum RTP media loss period threshold crossover is detected.	Minor
A system fault condition occurred.	Minor
Software or config download.	Information
This trap is sent when link is lost.	Major
This event is sent every 15-Min to indicate the completion of an interval of system statistics.	Information
The PID bitrate threshold is crossed for a PID selected from the video characteristic template.	Minor
This trap is sent when the media loss threshold crossover is detected.	Minor
The minimum loss distance threshold crossover is detected.	Minor
The media loss threshold crossover is detected.	Minor
The multicast IGMP join time threshold crossover is detected.	Information
The stream alarms limit is reached for a 15-Minute period.	Information
The media link is established.	Information
A new flow has been detected by the system.	Information
The bit rate for a stream exceeds the threshold value.	Minor
A stream was lost for a period defined in the outage.	Major
The Minimum Bit-Rate Threshold is crossed.	Warning
The ZAP time threshold crossover is detected.	Information

1. See [Glossary](#) for abbreviations that are used in alarm message text.

Mixed Signals Video Probe

Alarm Message Text ¹	Severity
Table bit rate	Warning
Table detect	Warning
Table cycle time	Warning
PID bit rate	Warning
PID detect	Warning
PID discontinuity	Minor
PID audio silence	Minor
PID video freeze	Minor
PID table bit rate	Warning
PID table detect	Warning
PID table cycle time	Warning
Program bit rate	Warning
Program detect	Warning
Program discontinuity	Warning
Program audio silence	Warning
Program video freeze	Warning
Program PCR interval	Warning
Program PCR jitter	Warning
Program table PMT bit rate	Warning
Program table PMT detect	Warning
Program table PMT cycle time	Warning
DSM-CC DII bit rate	Warning
DSM-CC DII detect	Warning
DSM-CC DII cycle time	Warning
DSM-CC DC bit rate	Warning
DSM-CC DC detect	Warning
DSM-CC DC cycle time	Warning
Carousel bit rate	Warning
Carousel source file add-delete	Warning
Carousel source DSM-CC DII bit rate	Warning
Carousel source DSM-CC DII detect	Warning
Carousel source DSM-CC DII cycle time	Warning
Carousel source DSM-CC DC bit rate	Warning
Carousel source DSM-CC DC detect	Warning
Carousel source DSM-CC DC cycle time	Warning

Alarm Message Text ¹ (continued)	Severity
Carousel file bit rate	Warning
Carousel file detect	Warning
Carousel file cycle time	Warning
Carousel file change	Warning
Port IP arrival interval	Warning
Port delay factor	Warning

1. See [Glossary](#) for abbreviations that are used in alarm message text.

Cisco 7600, CRS-1, and 4948 Devices

Alarm Text Message ¹	Severity
PIM Neighbor loss	Major
PIM Interface down	Major
PIM Interface up	Clear
The number of multicast routes changed.	Information
The number of non-RPF drops exceeded threshold.	Minor

1. See [Glossary](#) for abbreviations that are used in alarm message text.

Performance Metrics

For the Cisco VAMS, the Cisco ANA supports a:

- Sustained trap rate of 35 traps per second
- Cut-off rate of 5 traps per second per VNE

Cisco ANA drops traps that exceed the cut-off rate. For example, if a VNE receives six traps per second, the ANA drops the sixth trap. Also, the cut-off rate is cumulative. For example, for two VNEs, the cut-off rate is 10 traps per second.