



# MIBs Used and SNMP Traps Generated

## MIBs Used

Service Monitor uses the CISCO-SYSLOG-MIB to generate SNMP traps.

## SNMP Traps Generated

Cisco Unified Service Monitor (Service Monitor) generates the following traps:

- MOS violation
- Cisco 1040 unreachable

Trap details are provided as name-value pairs in clogHistMsgText field of the clogMessageGenerated notification. [Table C-1](#) lists details of the MOS violation SNMP trap.

**Table C-1** MOS Violation SNMP Trap

TAG	Description	Value
TT	Trap type	1: Data from sensor 3: Data from Cisco Unified CallManager cluster
01	Cisco 1040 sensor MAC address (when TT = 1) or Cisco Unified CallManager cluster ID (when TT = 3)	Text string.
02	Time stamp	<YYYYMMDDhhmm>
03	Threshold value	Sample value: 3.5.
A	Flag indicating actual or sampled data	0: Actual 1: Sampled (not used)
B	Source device IP address. The source device can be: <ul style="list-style-type: none"> <li>• An IP phone or a voice gateway (when TT = 1 and TT = 3).</li> <li>• A remote Cisco Unified CallManager (when TT = 3 and the call is an intercluster call).</li> </ul>	IPv4 address, for example: 172.20.4.18

**Table C-1** *MOS Violation SNMP Trap (continued)*

<b>TAG</b>	<b>Description</b>	<b>Value</b>
C	Recipient device IP address. The recipient device can be: <ul style="list-style-type: none"> <li>An IP phone or a voice gateway (when TT = 1 and TT = 3).</li> <li>A remote Cisco Unified CallManager (when TT = 3 and the call is an intercluster call).</li> </ul>	IPv4 address, for example: 172.20.5.12
D	Codec of call data record (see also CDC in this table).	One of these: 2: G711Alaw 64k 3: G711Alaw 56k 4: G711Ulaw 64k 5: G711Ulaw 56k 6: G722 64k 7: G722 56k 8: G722 48k 10: G728 11: G729 12: G729AnnexA 15: G729AnnexB 16: G729AnnexAwAnnexB
E	MOS score calculated by the sensor (when TT = 1) or CVTQ (when TT = 3).	Sample value: 3.4
F	Primary cause of call degradation.	When TT = 1: <ul style="list-style-type: none"> <li>J: Jitter</li> <li>P: Packet Loss</li> </ul> When TT = 3, N/A
G	Actual packet loss in the previous minute.	Sample value: 0.0.
H	Actual jitter in milliseconds in the previous minute.	Sample value: 0 Value is NA when TT = 3

Table C-1 MOS Violation SNMP Trap (continued)

TAG	Description	Value
CDC	Codec of call data record.	One of these: <ul style="list-style-type: none"> <li>• G711Alaw64k</li> <li>• G711Alaw56k</li> <li>• G711Ulaw64k</li> <li>• G711Ulaw56k</li> <li>• G722 64k</li> <li>• G722 56k</li> <li>• G722 48k</li> <li>• G728</li> <li>• G729</li> <li>• G729AnnexA</li> <li>• G729AnnexB</li> <li>• G729AnnexAwAnnexB</li> </ul>
CCR	Cumulative Concealment Ratio—Cumulative ratio of concealment time over speech time observed after starting a call.	Sample value: 0.0 Value is NA when TT = 1
ICR	Interval Concealment Ratio—Interval-based average concealment rate; the ratio of concealment time over speech time for the last three seconds of active speech.	Sample value: 0.0 Value is NA when TT = 1
ICRmx	Interval Concealment Ratio Max—Maximum concealment ratio observed during the call.	Sample value: 0.0 Value is NA when TT = 1
CS	Concealment Seconds—Number of seconds during which some concealment is observed during a call.	Sample value: 0 Value is NA when TT = 1
SCS	Severely Concealed Seconds—Number of seconds during which a significant amount of concealment is observed. If, on average, the observed concealment is greater than fifty milliseconds or approximately five percent, speech is probably not very audible.	Sample value: 0 Value is NA when TT = 1
MLQK	MOS Listening Quality or CVTQ Score—The Cisco Voice Transmission Quality (CVTQ) algorithm provides an objective estimate of the mean opinion score (MOS) for listening quality (LQK), rating it from 5 (excellent) to 1 (bad). This score is based on audible concealment events due to frame loss in the preceding 8-second interval of the voice stream.  <b>Note</b> The CVTQ score can vary based on the type of codec that the Cisco Unified IP Phone uses.	Sample value: 4.5 Value is NA when TT = 1

**Table C-1** MOS Violation SNMP Trap (continued)

<b>TAG</b>	<b>Description</b>	<b>Value</b>
MLQKmn	MOS Listening Quality CVTQ Min—Minimum score observed since the beginning of a call; represents the worst-sounding eight-second interval.	Sample value: 4.1 Value is NA when TT = 1
MLQKmx	MOS Listening Quality CVTQ Max—Maximum score observed since the beginning of a call; represents the best sounding eight-second interval.	Sample value: 4.5 Value is NA when TT = 1
MLQKvr	Version of the CVTQ calculation.	Sample value: .95 Value is NA when TT = 1
DRTN	Duration of the call in seconds.	Sample value: 120 Value is NA when TT = 1
NST	Number of suppressed traps from start time to end time when TT = 1. For more information, see the entry for Send traps every <i>n</i> minutes in <a href="#">Setting Up the Sensor Default Configuration, page 4-4</a> .	Sample value: 9 Value is 0 when TT = 3
ST	Start time when TT = 1. Time when the first trap was sent out for the endpoint.	UTC time Value is 0 when TT = 3
ET	End time when TT = 1. Time when the most recent trap was sent out.	UTC time Value is 0 when TT = 3

[Table C-2](#) lists details of the Cisco 1040 unreachable SNMP trap.

**Table C-2** Cisco 1040 Unreachable SNMP Trap

<b>TAG</b>	<b>Description</b>	<b>Value</b>
TT	Trap type	2
01	Cisco 1040 ID	Cisco 1040 MAC address
02	Time stamp	<YYYYMMDDhhmm>