Mediant 500 Gateway and E-SBC and MP-1288

Version 7.2

HD VoIP
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Contents

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Abbreviations and Terminology

Each abbreviation, unless widely used, is spelled out in full when first used.

Term	Description
MG	Refers to the Media Gateway.
'Frame' and 'Screen'	Sometimes used interchangeably

Related Documentation

Manual Name
Mediant 500 MSBR User's Manual
Mediant 500L MSBR User's Manual
Mediant 500L Gateway and E-SBC User's Manual
Mediant 800B Gateway and E-SBC User's Manual
Mediant 800B MSBR User's Manual
Mediant 1000B Gateway and E-SBC User's Manual
Mediant 1000B MSBR User's Manual
Mediant 2600 SBC User's Manual
Mediant 3000 User's Manual
Mediant 4000 SBC User's Manual
Mediant 9000 SBC User's Manual
Mediant Software SBC User's Manual
Element Management System (EMS) Server Installation, Operation and Maintenance Manual
Element Management System (EMS) Product Description
Element Management System (EMS) OAM Integration Guide
Element Management System (EMS) User's Manual
SEM User's Manual
IP Phone Management Server Administrator's Manual
IP Phone Manager Express Administrator's Manual
OVOC Security Guidelines
Element Management System (EMS) Online Help
Mediant 5000 / 8000 Media Gateway Installation, Operation and Maintenance Manual
Mediant 5000 / 8000 Media Gateway Release Notes

Manual Name
Mediant 2600-4000-9000-SW SBC Series Performance Monitors and Alarms Guide
Mediant 3000 with TP-6310 Performance Monitors and Alarms Guide
Mediant 3000 with TP-8410 Performance Monitors and Alarms Guide
Mediant 800 Gateway and E-SBC Mediant Software SBC and CloudBond/CCE Appliance Performance Monitors and Alarms Guide.
Mediant 500 E-SBC and Mediant 800 Gateway and E-SBC and MP-1288 Performance Monitors and Alarms Guide
Mediant 1000B Gateway and E-SBC Performance Monitors and Alarms Guide
Mediant MSBR Series OAMP Guide

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1 Introduction

This document describes performance monitoring parameters and alarms for the following products:

- Mediant 500 Gateway & E-SBC
- Mediant 500L E-SBC
- MP-1288
- EMS
- SEM
- Endpoints

The alarms are displayed in the AudioCodes One Voice Operation Center platforms (EMS/SEM/IP Phone Manager).

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2   Performance Monitoring Parameters

Customers are often faced with a complex VoIP network with little or no information on the status and capacities of each component in it. PM helps the system architect design a better network. PM helps operators discover malfunctioning devices before they start causing a problem on the production network.

The system provides two types of performance measurements:

■ Gauges: Gauges represent the current state of a PM parameter in the system. Gauges, unlike counters, can decrease in value, and like counters, can increase.

■ Counters: Counters always increase in value and are cumulative. Counters, unlike gauges, never decrease in value unless the system is reset. The counters are then zeroed.

Performance measurements are available for the EMS or for a 3rd party performance monitoring system through an SNMP interface. These measurements can be polled at scheduled intervals by an external poller or utility in a media server or another off-device system.

PM measurements can be divided into two main groups:

■ Real-Time PM Measurements - supply the current value of the PM entity. When requested, the entity is sampled and the current value is received.

■ History PM Measurements - supply statistical data of the PM entity during the last interval period. These measurements include the Average, Minimum and Maximum values of the entity during the last interval. The default interval length is 15 minutes.

History PM Measurements
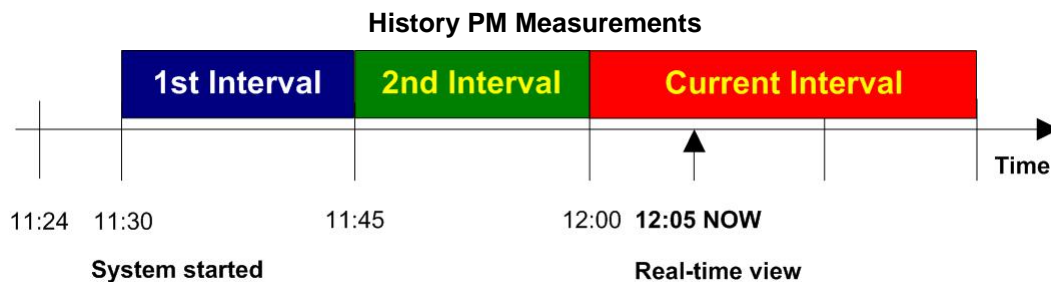
History Performance is measured in a constant time interval of 15 minutes to which all elements in the network are synchronized. Intervals commence precisely every 15 minutes, for example, 12:00:00, 12:15:00, 12:30:00, 12:45:00, etc. This allows synchronization of several management systems to the same interval time frame. Note that the first interval after start-up is always shorter (in the example above, the first interval only lasts 6 minutes - so that a new interval can start exactly on the 15 minute interval, in this case 11:30:00). During the initial start-up interval i.e. 6 minutes in the example above, polling is not performed.

2.1 Frame: Gateway System Monitoring (Configuration)

2.1.1 Tab: System IP

Frame: Gateway System Monitoring (Configuration), Tab: System IP

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
Number of Outgoing KBytes	HIST	Counter	Counts the total number of outgoing Kbytes (1000 bytes) from the interface during the last interval. Mib name: acPMNetUtilKBytesVolumeTx
Number of Incoming KBytes	HIST	Counter	Counts the total number of Kbytes (1000 bytes) received on the interface, including those received in error, during the last interval. Mib name: acPMNetUtilKBytesVolumeRx
Number of Outgoing Pkts	HIST	Counter	Counts the total number of outgoing Packets from the interface during the last interval. Mib name: acPMNetUtilPacketsVolumeTx
Number of Incoming Pkts	HIST	Counter	Counts the total number of Packets received on the interface, including those received in error, during the last interval. Mib name: acPMNetUtilPacketsVolumeRx
Number of Incoming Discarded Pkts	HIST	Counter	Counts the total number of malformed IP Packets received on the interface during the last interval. These are packets which are corrupted or discarded due to errors in their IP headers, including bad checksums, version number mismatch, other format errors, time-to-live exceeded, errors discovered in processing their IP options, etc. Mib name: acPMNetUtilDiscardedPacketsVal

2.1.2 Tab: VoIP Call Statistics

Frame: Gateway System Monitoring (Configuration), Tab: VoIP Call Statistics

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
Num of Active Contexts Avg	HIST	Gauge	Indicates the average number of voice calls connected on the gateway since the last clear. Mib name: acPMActiveContextCountAverage
Num of Active Contexts Min	HIST	Gauge	Indicates the minimum number of voice calls connected on the gateway since the last clear. Mib name: acPMActiveContextCountMin

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
Num of Active Contexts Max	HIST	Gauge	Indicates the maximum number of voice calls connected on the gateway since the last clear. Mib name: acPMActiveContextCountMax
G711 Active Calls Avg	HIST	Gauge	Indicates the average number of G.711 calls present on the TPM. Mib name: acPMChannelsPerCoderAverageG711
G723 Active Calls Avg	HIST	Gauge	Indicates the average number of G.723 calls present on the TPM. This attribute is only displayed if the G.723 Codec is provisioned on the DSP template. Mib name: acPMChannelsPerCoderAverageG723
G728 Active Calls Avg	HIST	Gauge	Indicates the average number of G.728 calls present on the TPM. This attribute is only displayed if the G.728 Codec is provisioned on the DSP template. Mib name: acPMChannelsPerCoderAverageG728
G729a Active Calls Avg	HIST	Gauge	Indicates the average number of G.729a calls present on the TPM. This attribute is only displayed if the G.729a Codec is provisioned on the DSP. Mib name: acPMChannelsPerCoderAverageG729a
G729e Active Calls Avg	HIST	Gauge	Indicates the average number of G.729e calls present on the TPM. This attribute is only displayed if the G.729e Codec is provisioned on the DSP template. Mib name: acPMChannelsPerCoderAverageG729e
AMR Active Calls Avg	HIST	Gauge	Indicates the average number of AMR calls present on the TPM. This attribute is only displayed if the AMR Codec is provisioned on the DSP template. Mib name: acPMChannelsPerCoderAverageAMR
EVRC Active Calls Avg	HIST	Gauge	Indicates the average number of EVRC calls present on the TPM. This attribute is only displayed if the EVRC Codec is provisioned on the DSP template. Mib name: acPMChannelsPerCoderAverageEVRC
Rx RTP Packet Loss Max	HIST	Gauge	Indicates the Max Rx RTP Packet loss (reported by RTCP) per TPM, up to this point in time during the collection interval, as indicated by the time Interval. Mib name: acPMModuleRTPPacketLossRxMax
Tx RTP Packet Loss Max	HIST	Gauge	Indicates the Max Tx RTP Packet loss (reported by RTCP) per TPM, up to this point in time during the collection interval, as indicated by the time Interval. Mib name: acPMModuleRTPPacketLossTxMax
RTP delay Average	HIST	Gauge	Indicates the average RTP packets delay per TPM, up to this point in time during the collection interval, as indicated by the time Interval. Mib name: acPMModulePacketDelayAverage

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
RTP delay Max	HIST	Gauge	Indicates the maximum RTP packets delay per TPM, up to this point in time during the collection interval, as indicated by the time Interval. Mib name: acPMModulePacketDelayMax
RTP delay Min	HIST	Gauge	Indicates the minimum RTP packets delay per TPM, up to this point in time during the collection interval, as indicated by the time Interval. Mib name: acPMModulePacketDelayMin
RTP jitter Average	HIST	Gauge	Indicates the average RTP packets jitter per TPM, up to this point in time during the collection interval, as indicated by the time Interval. Mib name: acPMModulePacketJitterAverage
RTP jitter Min	HIST	Gauge	Indicates the minimum RTP packets jitter per TPM, up to this point in time during the collection interval, as indicated by the time Interval. Mib name: acPMModulePacketJitterMin
RTP jitter Max	HIST	Gauge	Indicates the maximum RTP packets jitter per TPM, up to this point in time during the collection interval, as indicated by the time Interval. Mib name: acPMModulePacketJitterMax
Rx RTP Bytes Max	HIST	Gauge	Indicates the Max Tx RTP Bytes per TPM, up to this point in time during the collection interval, as indicated by the time Interval. Mib name: acPMModuleRTPBytesRxMax
Tx RTP Bytes Max	HIST	Gauge	Indicates the Max Rx RTP Bytes per TPM, up to this point in time during the collection interval, as indicated by the time Interval. Mib name: acPMModuleRTPBytesTxMax
Rx RTP Packets Max	HIST	Gauge	Indicates the Max Rx RTP Packets per TPM, up to this point in time during the collection interval, as indicated by the time Interval. Mib name: acPMModuleRTPPacketsRxMax
Tx RTP Packets Max	HIST	Gauge	Indicates the Max Tx RTP Packets per TPM, up to this point in time during the collection interval, as indicated by the time Interval. Mib name: acPMModuleRTPPacketsTxMax
RTCP XR Average Conversational R Factor	HIST	Gauge	Average conversational R factor. Mib name: rtcpXrHistoryAvgRCQ
RTCP XR Maximum Conversational R Factor	HIST	Gauge	Maximum conversational R factor. Mib name: rtcpXrHistoryMaxRCQ
RTCP XR Minimum Conversational R Factor	HIST	Gauge	Minimum conversational R factor. Mib name: rtcpXrHistoryMinRCQ

2.1.3 Tab: SIP IP to Tel

Frame: Gateway System Monitoring (Configuration), Tab: SIP IP to Tel

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
IP to Tel Number of Call Attempts	HIST	Counter	Indicates the number of attempted calls for IP to Tel direction, during last interval. Mib name: acPMSIPAttemptedCallsValIP2Tel
IP to Tel Number of Established Calls	HIST	Counter	Indicates the number of established calls for IP to Tel direction, during last interval. Mib name: acPMSIPEstablishedCallsValIP2Tel
IP to Tel Number of Calls Terminated due to a Busy Line	HIST	Counter	Indicates the number of calls that failed as a result of a busy line for IP to Tel direction, during last interval. Mib name: acPMSIPBusyCallsValIP2Tel
IP to Tel Number of Calls Terminated due to No Answer	HIST	Counter	Indicates the number of calls that weren't answered for IP to Tel direction, during last interval. Mib name: acPMSIPNoAnswerCallsValIP2Tel
IP to Tel Number of Calls Terminated due to Forward	HIST	Counter	Indicates the number of calls that were terminated due to a call forward for IP to Tel direction, during last interval. Mib name: acPMSIPForwardedCallsValIP2Tel
IP to Tel Number of Failed Calls due to No Route	HIST	Counter	Indicates the number of calls whose destinations weren't found for IP to Tel direction, during last interval. Mib name: acPMSIPNoRouteCallsValIP2Tel
IP to Tel Number of Failed Calls due to No Matched Capabilities	HIST	Counter	Indicates the number of calls that failed due to mismatched media server capabilities for IP to Tel direction, during last interval. Mib name: acPMSIPNoMatchCallsValIP2Tel
IP to Tel Number of Failed Calls due to No Resources	HIST	Counter	Indicates the number of calls that failed due to unavailable resources or a media server lock for IP to Tel direction, during last interval. Mib name: acPMSIPNoResourcesCallsValIP2Tel
IP to Tel Number of Failed Calls due to Other reasons	HIST	Counter	This counter is incremented as a result of calls that fail due to reasons not covered by the other counters for IP to Tel direction, during last interval. Mib name: acPMSIPFailCallsValIP2Tel
IP to Tel Fax Call Attempts	HIST	Counter	Indicates the number of attempted fax calls for IP to Tel direction, during last interval. Mib name: acPMSIPFaxAttemptedCallsValIP2Tel
IP to Tel Successful Fax Calls	HIST	Counter	Indicates the number of successful fax calls for IP to Tel direction, during last interval. Mib name: acPMSIPFaxSuccessCallsValIP2Tel

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
IP to Tel Average Call Duration [sec]	HIST	Gauge	Indicates the average call duration of established calls for IP to Tel direction, during last interval. Mib name: acPMSIPCallDurationAverageIP2Tel

2.1.4   Tab: SIP Tel to IP

Frame: Gateway System Monitoring (Configuration), Tab: SIP Tel to IP

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
Tel to IP Number of Call Attempts	HIST	Counter	Indicates the number of attempted calls for Tel to IP direction, during last interval. Mib name: acPMSIPAttemptedCallsValTel2IP
Tel to IP Number of Established Calls	HIST	Counter	Indicates the number of established calls for Tel to IP direction, during last interval. Mib name: acPMSIPEstablishedCallsValTel2IP
Tel to IP Number of Calls Terminated due to a Busy Line	HIST	Counter	Indicates the number of calls that failed as a result of a busy line for Tel to IP direction, during last interval. Mib name: acPMSIPBusyCallsValTel2IP
Tel to IP Number of Calls Terminated due to No Answer	HIST	Counter	Indicates the number of calls that weren't answered for Tel to IP direction, during last interval. Mib name: acPMSIPNoAnswerCallsValTel2IP
Tel to IP Number of Calls Terminated due to Forward	HIST	Counter	Indicates the number of calls that were terminated due to a call forward for Tel to IP direction, during last interval. Mib name: acPMSIPForwardedCallsValTel2IP
Tel to IP Number of Failed Calls due to No Route	HIST	Counter	Indicates the number of calls whose destinations weren't found for Tel to IP direction, during last interval. Mib name: acPMSIPNoRouteCallsValTel2IP
Tel to IP Number of Failed Calls due to No Matched Capabilities	HIST	Counter	Indicates the number of calls that failed due to mismatched media server capabilities for Tel to IP direction, during last interval. Mib name: acPMSIPNoMatchCallsValTel2IP
Tel to IP Number of Failed Calls due to No Resources	HIST	Counter	Indicates the number of calls that failed due to unavailable resources or a media server lock for Tel to IP direction, during last interval. Mib name: acPMSIPNoResourcesCallsValTel2IP
Tel to IP Number of Failed Calls due to Other reasons	HIST	Counter	This counter is incremented as a result of calls that fail due to reasons not covered by the other counters for Tel to IP direction, during last interval. Mib name: acPMSIPFailCallsValTel2IP

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
Tel to IP Fax Call Attempts	HIST	Counter	Indicates the number of attempted fax calls for Tel to IP direction, during last interval. Mib name: acPMSIPFaxAttemptedCallsValTel2IP
Tel to IP Successful Fax Calls	HIST	Counter	Indicates the number of successful fax calls for Tel to IP direction, during last interval. Mib name: acPMSIPFaxSuccessCallsValTel2IP
Tel to IP Average Call Duration [sec]	HIST	Gauge	Indicates the average call duration of established calls for Tel to IP direction, during last interval. Mib name: acPMSIPCallDurationAverageTel2IP

2.1.5　Tab: Trunk Statistics

Frame: Gateway System Monitoring (Configuration), Tab: Trunk Statistics

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
Trunk utilization Avg	HIST	Gauge	Indicates the Average of simultaneously busy DS0 channels on this Trunk up to this point in time during the collection interval, as indicated by the Time Interval. A busy channel is when the Physical DS0 Termination isn't in Null context or OOS. A Trunk is either E1 or T1. Mib name: acPMTrunkUtilizationAverage
Trunk utilization Min	HIST	Gauge	Indicates the Minimum of simultaneously busy DS0 channels on this Trunk up to this point in time during the collection interval, as indicated by the Time Interval. A busy channel is when the Physical DS0 Termination isn't in Null context or OOS. A Trunk is either E1 or T1. Mib name: acPMTrunkUtilizationMin
Trunk utilization Max	HIST	Gauge	Indicates the Maximum of simultaneously busy DS0 channels on this Trunk up to this point in time during the collection interval, as indicated by the Time Interval. A busy channel is when the Physical DS0 Termination isn't in Null context or OOS. A Trunk is either E1 or T1. Mib name: acPMTrunkUtilizationMax
Trunk Errored Seconds	HIST	Gauge	Indicates the number of Errored Seconds. Mib name: dsx1IntervalESs
Trunk Controlled Slip Seconds	HIST	Gauge	Indicates the number of Controlled Slip Seconds. Mib name: dsx1IntervalCSSs
Trunk Path Coding Violations	HIST	Gauge	Indicates the number of Path Coding Violations. Mib name: dsx1IntervalPCVs
Trunk Bursty Errored Seconds	HIST	Gauge	Indicates the number of Bursty Errored Seconds. Mib name: dsx1IntervalBESs

2.1.6   Tab: SRD Statistics

Frame: Gateway System Monitoring (Configuration), Tab: SRD Statistics

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
SIP SRD Dialogs Val	HIST	Counter	Value of gauge or counter. Mib name: acPMSIPSRDDialogsVal
SIP SRD Invite Dialogs Val	HIST	Counter	Value of gauge or counter. Mib name: acPMSIPSRDInviteDialogsVal
SIP SRD Subscribe Dialogs Val	HIST	Counter	Value of gauge or counter. Mib name: acPMSIPSRDSubscribeDialogsVal
SIP SRD Other Dialogs Val	HIST	Counter	Value of gauge or counter. Mib name: acPMSIPSRDOtherDialogsVal
ASR Average	HIST	Gauge	Average value with in the period time. Mib name: acPMSBCSrdAsrAverage
ASR Max	HIST	Gauge	Maximum value with in the period time. Mib name: acPMSBCSrdAsrMax
ASR Min	HIST	Gauge	Minimum value with in the period time. Mib name: acPMSBCSrdAsrMin
ACD Average	HIST	Gauge	Average value with in the period time. Mib name: acPMSBCSrdAcdAverage
ACD Max	HIST	Gauge	Maximum value with in the period time. Mib name: acPMSBCSrdAcdMax
ACD Min	HIST	Gauge	Minimum value with in the period time. Mib name: acPMSBCSrdAcdMin
NER Average	HIST	Gauge	Average value with in the period time. Mib name: acPMSBCSrdNerAverage
NER Max	HIST	Gauge	Maximum value with in the period time. Mib name: acPMSBCSrdNerMax
NER Min	HIST	Gauge	Minimum value with in the period time. Mib name: acPMSBCSrdNerMin
IN CAPS Average	HIST	Gauge	Average value with in the period time. Mib name: acPMSBCSrdInCapsAverage
IN CAPS Max	HIST	Gauge	Maximum value with in the period time. Mib name: acPMSBCSrdInCapsMax
IN CAPS Min	HIST	Gauge	Minimum value with in the period time. Mib name: acPMSBCSrdInCapsMin
OUT CAPS Average	HIST	Gauge	Average value with in the period time. Mib name: acPMSBCSrdOutCapsAverage

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
OUT CAPS Max	HIST	Gauge	Maximum value with in the period time. Mib name: acPMSBCSrdOutCapsMax
OUT CAPS Min	HIST	Gauge	Minimum value with in the period time. Mib name: acPMSBCSrdOutCapsMin

2.1.7 Tab: IP Group Statistics

Frame: Gateway System Monitoring (Configuration), Tab: IP Group Statistics

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
SIP IP Group Dialogs Val	HIST	Counter	Value of gauge or counter. Mib name: acPMSIPIPGroupDialogsVal
SIP IP Group Invite Dialogs Val	HIST	Counter	Value of gauge or counter. Mib name: acPMSIPIPGroupInviteDialogsVal
SIP IP Group Subscribe Dialogs Val	HIST	Counter	Value of gauge or counter. Mib name: acPMSIPIPGroupSubscribeDialogsVal
SIP IP Group Other Dialogs Val	HIST	Counter	Value of gauge or counter. Mib name: acPMSIPIPGroupOtherDialogsVal
SIP IP Group In Invite Dialogs	HIST	Counter	Value of gauge or counter. Mib name: acPMSIPIPGroupInInviteDialogsVal
SIP IP Group I nSubscribe Dialogs	HIST	Counter	Value of gauge or counter. Mib name: acPMSIPIPGroupInSubscribeDialogsVal
SIP IP Group Out Invite Dialogs	HIST	Counter	Value of gauge or counter. Mib name: acPMSIPIPGroupOutInviteDialogsVal
SIP IP Group Out Subscribe Dialogs	HIST	Counter	Value of gauge or counter. Mib name: acPMSIPIPGroupOutSubscribeDialogsVal
SIP IP Group Invite Dialogs IP Average	HIST	Gauge	Value of gauge or counter. Mib name: acPMSIPIPGroupInviteDialogsAverage
SIP IP Group Invite Dialogs IP Max	HIST	Gauge	Value of gauge or counter. Mib name: acPMSIPIPGroupInviteDialogsMax
SIP IP Group Invite Dialogs IP Min	HIST	Gauge	Value of gauge or counter. Mib name: acPMSIPIPGroupInviteDialogsMin
ASR Average	HIST	Gauge	Average value with in the period time. Mib name: acPMSBCIPGroupAsrAverage
ASR Max	HIST	Gauge	Maximum value with in the period time. Mib name: acPMSBCIPGroupAsrMax

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
ASR Min	HIST	Gauge	Minimum value with in the period time. Mib name: acPMSBCIPGroupAsrMin
ACD Average	HIST	Gauge	Average value with in the period time. Mib name: acPMSBCIPGroupAcdAverage
ACD Max	HIST	Gauge	Maximum value with in the period time. Mib name: acPMSBCIPGroupAcdMax
ACD Min	HIST	Gauge	Minimum value with in the period time. Mib name: acPMSBCIPGroupAcdMin
NER Average	HIST	Gauge	Average value with in the period time. Mib name: acPMSBCIPGroupNerAverage
NER Max	HIST	Gauge	Maximum value with in the period time. Mib name: acPMSBCIPGroupNerMax
NER Min	HIST	Gauge	Minimum value with in the period time. Mib name: acPMSBCIPGroupNerMin
IN CAPS Average	HIST	Gauge	Average value with in the period time. Mib name: acPMSBCIPGroupInCapsAverage
IN CAPS Max	HIST	Gauge	Maximum value with in the period time. Mib name: acPMSBCIPGroupInCapsMax
IN CAPS Min	HIST	Gauge	Minimum value with in the period time. Mib name: acPMSBCIPGroupInCapsMin
OUT CAPS Average	HIST	Gauge	Average value with in the period time. Mib name: acPMSBCIPGroupOutCapsAverage
OUT CAPS Max	HIST	Gauge	Maximum value with in the period time. Mib name: acPMSBCIPGroupOutCapsMax
OUT CAPS Min	HIST	Gauge	Minimum value with in the period time. Mib name: acPMSBCIPGroupOutCapsMin

2.1.8   Tab: Trunk Group Statistics

Frame: Gateway System Monitoring (Configuration), Tab: Trunk Group Statistics

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
Trunk Group Utilization (%)	HIST	Gauge	Value of gauge or counter. Mib name: acPMSIPTrunkGroupPercentageUtilizationVal
Trunk Group Utilization (channels)	HIST	Gauge	Value of gauge or counter. Mib name: acPMSIPTrunkGroupUtilizationVal

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
Tel to IP Trunk Group Established Calls Val	HIST	Counter	Value of gauge or counter. Mib name: acPMSIPTel2IPTrunkGroupEstablishedCallsVal
IP to Tel Trunk Group Established Calls Val	HIST	Counter	Value of gauge or counter. Mib name: acPMSIPIP2TelTrunkGroupEstablishedCallsVal
No Resources Calls	HIST	Gauge	Value of gauge or counter. Mib name: acPMSIPTrunkGroupNoResourcesCallsVal
Average Call Duration (sec)	HIST	Gauge	Value of gauge or counter. Mib name: acPMSIPTrunkGroupCallDurationAverage
Total Call Duration (sec)	HIST	Gauge	Value of gauge or counter. Mib name: acPMSIPTrunkGroupCallDurationTotal
Trunk Group All Trunks Busy (sec)	HIST	Counter	Value of gauge or counter. Mib name: acPMSIPTrunkGroupAllTrunksBusyVal
All Trunks Busy (%)	HIST	Gauge	Value of gauge or counter. Mib name: acPMSIPTrunkGroupAllTrunksBusyPercentageVal

2.2 Frame: Gateway System Monitoring (History)

2.2.1 Tab: System IP

Frame: Gateway System Monitoring (History), Tab: System IP

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
Number of Outgoing KBytes	HIST	Counter	Counts the total number of outgoing Kbytes (1000 bytes) from the interface during the last interval. Mib name: acPMNetUtilKBytesVolumeTx
Number of Incoming KBytes	HIST	Counter	Counts the total number of Kbytes (1000 bytes) received on the interface, including those received in error, during the last interval. Mib name: acPMNetUtilKBytesVolumeRx
Number of Outgoing Pkts	HIST	Counter	Counts the total number of outgoing Packets from the interface during the last interval. Mib name: acPMNetUtilPacketsVolumeTx
Number of Incoming Pkts	HIST	Counter	Counts the total number of Packets received on the interface, including those received in error, during the last interval. Mib name: acPMNetUtilPacketsVolumeRx

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
Number of Incoming Discarded Pkts	HIST	Counter	Counts the total number of malformed IP Packets received on the interface during the last interval. These are packets which are corrupted or discarded due to errors in their IP headers, including bad checksums, version number mismatch, other format errors, time-to-live exceeded, errors discovered in processing their IP options, etc. Mib name: acPMNetUtilDiscardedPacketsVal

2.2.2   Tab: VoIP Call Statistics

Frame: Gateway System Monitoring (History), Tab: VoIP Call Statistics

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
Num of Active Contexts Avg	HIST	Gauge	Indicates the average number of voice calls connected on the gateway since the last clear. Mib name: acPMActiveContextCountAverage
Num of Active Contexts Min	HIST	Gauge	Indicates the minimum number of voice calls connected on the gateway since the last clear. Mib name: acPMActiveContextCountMin
Num of Active Contexts Max	HIST	Gauge	Indicates the maximum number of voice calls connected on the gateway since the last clear. Mib name: acPMActiveContextCountMax
G711 Active Calls Avg	HIST	Gauge	Indicates the average number of G.711 calls present on the TPM. Mib name: acPMChannelsPerCoderAverageG711
G723 Active Calls Avg	HIST	Gauge	Indicates the average number of G.723 calls present on the TPM. This attribute is only displayed if the G.723 Codec is provisioned on the DSP template. Mib name: acPMChannelsPerCoderAverageG723
G728 Active Calls Avg	HIST	Gauge	Indicates the average number of G.728 calls present on the TPM. This attribute is only displayed if the G.728 Codec is provisioned on the DSP template. Mib name: acPMChannelsPerCoderAverageG728
G729a Active Calls Avg	HIST	Gauge	Indicates the average number of G.729a calls present on the TPM. This attribute is only displayed if the G.729a Codec is provisioned on the DSP. Mib name: acPMChannelsPerCoderAverageG729a

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
G729e Active Calls Avg	HIST	Gauge	Indicates the average number of G.729e calls present on the TPM. This attribute is only displayed if the G.729e Codec is provisioned on the DSP template. Mib name: acPMChannelsPerCoderAverageG729e
AMR Active Calls Avg	HIST	Gauge	Indicates the average number of AMR calls present on the TPM. This attribute is only displayed if the AMR Codec is provisioned on the DSP template. Mib name: acPMChannelsPerCoderAverageAMR
EVRC Active Calls Avg	HIST	Gauge	Indicates the average number of EVRC calls present on the TPM. This attribute is only displayed if the EVRC Codec is provisioned on the DSP template. Mib name: acPMChannelsPerCoderAverageEVRC
Rx RTP Packet Loss Max	HIST	Gauge	Indicates the Max Rx RTP Packet loss (reported by RTCP) per TPM, up to this point in time during the collection interval, as indicated by the time Interval. Mib name: acPMModuleRTPPacketLossRxMax
Tx RTP Packet Loss Max	HIST	Gauge	Indicates the Max Tx RTP Packet loss (reported by RTCP) per TPM, up to this point in time during the collection interval, as indicated by the time Interval. Mib name: acPMModuleRTPPacketLossTxMax
RTP delay Average	HIST	Gauge	Indicates the average RTP packets delay per TPM, up to this point in time during the collection interval, as indicated by the time Interval. Mib name: acPMModulePacketDelayAverage
RTP delay Max	HIST	Gauge	Indicates the maximum RTP packets delay per TPM, up to this point in time during the collection interval, as indicated by the time Interval. Mib name: acPMModulePacketDelayMax
RTP delay Min	HIST	Gauge	Indicates the minimum RTP packets delay per TPM, up to this point in time during the collection interval, as indicated by the time Interval. Mib name: acPMModulePacketDelayMin
RTP jitter Average	HIST	Gauge	Indicates the average RTP packets jitter per TPM, up to this point in time during the collection interval, as indicated by the time Interval. Mib name: acPMModulePacketJitterAverage
RTP jitter Min	HIST	Gauge	Indicates the minimum RTP packets jitter per TPM, up to this point in time during the collection interval, as indicated by the time Interval. Mib name: acPMModulePacketJitterMin

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
RTP jitter Max	HIST	Gauge	Indicates the maximum RTP packets jitter per TPM, up to this point in time during the collection interval, as indicated by the time Interval. Mib name: acPMModulePacketJitterMax
Rx RTP Bytes Max	HIST	Gauge	Indicates the Max Tx RTP Bytes per TPM, up to this point in time during the collection interval, as indicated by the time Interval. Mib name: acPMModuleRTPBytesRxMax
Tx RTP Bytes Max	HIST	Gauge	Indicates the Max Rx RTP Bytes per TPM, up to this point in time during the collection interval, as indicated by the time Interval. Mib name: acPMModuleRTPBytesTxMax
Rx RTP Packets Max	HIST	Gauge	Indicates the Max Rx RTP Packets per TPM, up to this point in time during the collection interval, as indicated by the time Interval. Mib name: acPMModuleRTPPacketsRxMax
Tx RTP Packets Max	HIST	Gauge	Indicates the Max Tx RTP Packets per TPM, up to this point in time during the collection interval, as indicated by the time Interval. Mib name: acPMModuleRTPPacketsTxMax
RTCP XR Average Conversational R Factor	HIST	Gauge	Average conversational R factor. Mib name: rtcpXrHistoryAvgRCQ
RTCP XR Maximum Conversational R Factor	HIST	Gauge	Maximum conversational R factor. Mib name: rtcpXrHistoryMaxRCQ
RTCP XR Minimum Conversational R Factor	HIST	Gauge	Minimum conversational R factor. Mib name: rtcpXrHistoryMinRCQ

2.2.3   Tab: SIP IP to Tel

Frame: Gateway System Monitoring (History), Tab: SIP IP to Tel

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
IP to Tel Number of Call Attempts	HIST	Counter	Indicates the number of attempted calls for IP to Tel direction, during last interval. Mib name: acPMSIPAttemptedCallsValIP2Tel
IP to Tel Number of Established Calls	HIST	Counter	Indicates the number of established calls for IP to Tel direction, during last interval. Mib name: acPMSIPEstablishedCallsValIP2Tel

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
IP to Tel Number of Calls Terminated due to a Busy Line	HIST	Counter	Indicates the number of calls that failed as a result of a busy line for IP to Tel direction, during last interval. Mib name: acPMSIPBusyCallsValIP2Tel
IP to Tel Number of Calls Terminated due to No Answer	HIST	Counter	Indicates the number of calls that weren't answered for IP to Tel direction, during last interval. Mib name: acPMSIPNoAnswerCallsValIP2Tel
IP to Tel Number of Calls Terminated due to Forward	HIST	Counter	Indicates the number of calls that were terminated due to a call forward for IP to Tel direction, during last interval. Mib name: acPMSIPForwardedCallsValIP2Tel
IP to Tel Number of Failed Calls due to No Route	HIST	Counter	Indicates the number of calls whose destinations weren't found for IP to Tel direction, during last interval. Mib name: acPMSIPNoRouteCallsValIP2Tel
IP to Tel Number of Failed Calls due to No Matched Capabilities	HIST	Counter	Indicates the number of calls that failed due to mismatched media server capabilities for IP to Tel direction, during last interval. Mib name: acPMSIPNoMatchCallsValIP2Tel
IP to Tel Number of Failed Calls due to No Resources	HIST	Counter	Indicates the number of calls that failed due to unavailable resources or a media server lock for IP to Tel direction, during last interval. Mib name: acPMSIPNoResourcesCallsValIP2Tel
IP to Tel Number of Failed Calls due to Other reasons	HIST	Counter	This counter is incremented as a result of calls that fail due to reasons not covered by the other counters for IP to Tel direction, during last interval. Mib name: acPMSIPFailCallsValIP2Tel
IP to Tel Fax Call Attempts	HIST	Counter	Indicates the number of attempted fax calls for IP to Tel direction, during last interval. Mib name: acPMSIPFaxAttemptedCallsValIP2Tel
IP to Tel Successful Fax Calls	HIST	Counter	Indicates the number of successful fax calls for IP to Tel direction, during last interval. Mib name: acPMSIPFaxSuccessCallsValIP2Tel
IP to Tel Average Call Duration [sec]	HIST	Gauge	Indicates the average call duration of established calls for IP to Tel direction, during last interval. Mib name: acPMSIPCallDurationAverageIP2Tel

2.2.4   Tab: SIP Tel to IP

Frame: Gateway System Monitoring (History), Tab: SIP Tel to IP

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
Tel to IP Number of Call Attempts	HIST	Counter	Indicates the number of attempted calls for Tel to IP direction, during last interval. Mib name: acPMSIPAttemptedCallsValTel2IP
Tel to IP Number of Established Calls	HIST	Counter	Indicates the number of established calls for Tel to IP direction, during last interval. Mib name: acPMSIPEstablishedCallsValTel2IP
Tel to IP Number of Calls Terminated due to a Busy Line	HIST	Counter	Indicates the number of calls that failed as a result of a busy line for Tel to IP direction, during last interval. Mib name: acPMSIPBusyCallsValTel2IP
Tel to IP Number of Calls Terminated due to No Answer	HIST	Counter	Indicates the number of calls that weren't answered for Tel to IP direction, during last interval. Mib name: acPMSIPNoAnswerCallsValTel2IP
Tel to IP Number of Calls Terminated due to Forward	HIST	Counter	Indicates the number of calls that were terminated due to a call forward for Tel to IP direction, during last interval. Mib name: acPMSIPForwardedCallsValTel2IP
Tel to IP Number of Failed Calls due to No Route	HIST	Counter	Indicates the number of calls whose destinations weren't found for Tel to IP direction, during last interval. Mib name: acPMSIPNoRouteCallsValTel2IP
Tel to IP Number of Failed Calls due to No Matched Capabilities	HIST	Counter	Indicates the number of calls that failed due to mismatched media server capabilities for Tel to IP direction, during last interval. Mib name: acPMSIPNoMatchCallsValTel2IP
Tel to IP Number of Failed Calls due to No Resources	HIST	Counter	Indicates the number of calls that failed due to unavailable resources or a media server lock for Tel to IP direction, during last interval. Mib name: acPMSIPNoResourcesCallsValTel2IP
Tel to IP Number of Failed Calls due to Other reasons	HIST	Counter	This counter is incremented as a result of calls that fail due to reasons not covered by the other counters for Tel to IP direction, during last interval. Mib name: acPMSIPFailCallsValTel2IP
Tel to IP Fax Call Attempts	HIST	Counter	Indicates the number of attempted fax calls for Tel to IP direction, during last interval. Mib name: acPMSIPFaxAttemptedCallsValTel2IP
Tel to IP Successful Fax Calls	HIST	Counter	Indicates the number of successful fax calls for Tel to IP direction, during last interval. Mib name: acPMSIPFaxSuccessCallsValTel2IP

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
Tel to IP Average Call Duration [sec]	HIST	Gauge	Indicates the average call duration of established calls for Tel to IP direction, during last interval. Mib name: acPMSIPCallDurationAverageTel2IP

2.3   Frame: Gateway System Monitoring (Real-Time)

2.3.1   Tab: System IP

Frame: Gateway System Monitoring (Real-Time), Tab: System IP

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
Number of Outgoing KBytes	RT	Counter	This attribute counts the Current total number of outgoing Kbytes (1000 bytes) from the interface, so far from the beginning of the current collection interval as indicated by time Interval. Mib name: acPMNetUtilKBytesTotalTx
Number of Incoming KBytes	RT	Counter	This attribute counts the total number of Kbytes (1000 bytes) received on the interface, including those received in error, so far from the beginning of the current collection interval as indicated by time Interval. Mib name: acPMNetUtilKBytesTotalRx
Number of Outgoing Pkts	RT	Counter	This attribute counts the Current total number of outgoing Packets from the interface, so far from the beginning of the current collection interval as indicated by time Interval. Mib name: acPMNetUtilPacketsTotalTx
Number of Incoming Pkts	RT	Counter	This attribute counts the Current total number of Packets received on the interface, including those received in error, so far from the beginning of the current collection interval as indicated by time Interval. Mib name: acPMNetUtilPacketsTotalRx
Number of Incoming Discarded Pkts	RT	Counter	This attribute counts the Current total number of malformed IP Packets received on the interface from the beginning of the current collection interval. These are packets which are corrupted or discarded due to errors in their IP headers, including bad checksums, version number mismatch, other format errors, time-to-live exceeded, errors discovered in processing their IP options, etc. Mib name: acPMNetUtilDiscardedPacketsTotal

2.3.2   Tab: VoIP Call Statistics

Frame: Gateway System Monitoring (Real-Time), Tab: VoIP Call Statistics

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
Num of Active Contexts	RT	Gauge	Indicates the current number of voice calls connected on the box since last clear. Mib name: acPMActiveContextCountVal
G711 Active Calls	RT	Gauge	This attribute indicates the current number of G711 calls present on the TPM. Mib name: acPMChannelsPerCoderValG711
G723 Active Calls	RT	Gauge	This attribute indicates the current number of G723 calls present on the TPM.This attribute is only displayed if the G723 Codec is provisioned on the DSP template. Mib name: acPMChannelsPerCoderValG723
G728 Active Calls	RT	Gauge	This attribute indicates the current number of G728 calls present on the TPM.This attribute is only displayed if the G728 Codec is provisioned on the DSP template. Mib name: acPMChannelsPerCoderValG728
G729a Active Calls	RT	Gauge	This attribute indicates the current number of G729a calls present on the TPM.This attribute is only displayed if the G729a Codec is provisioned on the DSP. Mib name: acPMChannelsPerCoderValG729a
G729e Active Calls	RT	Gauge	This attribute indicates the current number of G729e calls present on the TPM.This attribute is only displayed if the G729e Codec is provisioned on the DSP template. Mib name: acPMChannelsPerCoderValG729e
AMR Active Calls	RT	Gauge	This attribute indicates the current number of AMR calls present on the TPM.This attribute is only displayed if the AMR Codec is provisioned on the DSP template. Mib name: acPMChannelsPerCoderValAMR
EVRC Active Calls	RT	Gauge	This attribute indicates the current number of EVRC calls present on the TPM.This attribute is only displayed if the EVRC Codec is provisioned on the DSP template. Mib name: acPMChannelsPerCoderValEVRC
G729EV Active Calls	RT	Gauge	Indicates the value of active calls with G729EV coder. Mib name: acPMChannelsPerCoderValG729EV
EG711 Active Calls	RT	Gauge	Indicates the value of active calls with EG711 coder. Mib name: acPMChannelsPerCoderValEG711

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
G726 Active Calls	RT	Gauge	Indicates the value of active calls with G726 coder. Mib name: acPMChannelsPerCoderValG726
RTA Active Calls	RT	Gauge	Indicates the value of active calls with RTA coder. Mib name: acPMChannelsPerCoderValRTA
SILK Active Calls	RT	Gauge	Indicates the value of active calls with SILK coder. Mib name: acPMChannelsPerCoderValSILK
AMR-WB Active Calls	RT	Gauge	Indicates the value of active calls with AMR-WB coder. Mib name: acPMChannelsPerCoderValARMWB
G722 Active Calls	RT	Gauge	Indicates the value of active calls with G722 coder. Mib name: acPMChannelsPerCoderValG722
G727 Active Calls	RT	Gauge	Indicates the value of active calls with G727 coder. Mib name: acPMChannelsPerCoderValG727
GSM Active Calls	RT	Gauge	Indicates the value of active calls with GSM coder. Mib name: acPMChannelsPerCoderValGSM
QCELP Active Calls	RT	Gauge	Indicates the value of active calls with QCELP coder. Mib name: acPMChannelsPerCoderValQCELP
VOXADPCM Active Calls	RT	Gauge	Indicates the value of active calls with VOXADPCM coder. Mib name: acPMChannelsPerCoderValVOXADPCM
ILBC Active Calls	RT	Gauge	Indicates the value of active calls with ILBC coder. Mib name: acPMChannelsPerCoderValILBC
SPEEX Active Calls	RT	Gauge	Indicates the value of active calls with SPEEX coder. Mib name: acPMChannelsPerCoderValSPEEX
Rx Packet Loss current	RT	Gauge	The total number of RTP packet loss reported by RTCP since last reset. Mib name: acPMModuleRTPPacketLossRxTotal
Tx Packets Loss current	RT	Gauge	The total number of RTP packet loss reported by RTCP since last reset. Mib name: acPMModuleRTPPacketLossTxTotal
Rx Packets Current	RT	Gauge	The total number of packets recieved since last reset. Mib name: acPMModuleRTPPacketsRxTotal
Rx Packets Current	RT	Gauge	The total number of RTP packets transmited since last reset. Mib name: acPMModuleRTPPacketsTxTotal
Modem Relay Active Channels	RT	Gauge	Value of gauge or counter. Mib name: acPMModemRelayActiveChannelsVal
DSP Usage	RT	Gauge	Value of gauge or counter. Mib name: acPMDSPUsageVal

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
Registered Users	RT	Gauge	Value of gauge or counter. Mib name: acPMSBCRegisteredUsersVal
Media Legs	RT	Gauge	Value of gauge or counter. Mib name: acPMSBCMediaLegsVal
Transcoding Sessions	RT	Gauge	Value of gauge or counter. Mib name: acPMSBCTranscodingSessionsVal
ASR	RT	Gauge	Value of gauge or counter. Mib name: acPMSBCAsrVal
ACD	RT	Gauge	Value of gauge or counter. Mib name: acPMSBCAcdVal
NER	RT	Gauge	Value of gauge or counter. Mib name: acPMSBCNerVal
LAD Legs	RT	Gauge	Value of gauge or counter. Mib name: acPMSBCLadLegsVal
IN CAPS	RT	Gauge	Value of gauge or counter. Mib name: acPMSBCInCapsVal
OUT CAPS	RT	Gauge	Value of gauge or counter. Mib name: acPMSBCOutCapsVal

2.3.3   Tab: SIP IP to Tel

Frame: Gateway System Monitoring (Real-Time), Tab: SIP IP to Tel

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
IP to Tel Number of Call Attempts	RT	Counter	Indicates the number of attempted calls for IP to Tel direction, during last interval. Mib name: acPMSIPAttemptedCallsValIP2Tel
IP to Tel Number of Established Calls	RT	Counter	Indicates the number of established calls for IP to Tel direction, during last interval. Mib name: acPMSIPEstablishedCallsValIP2Tel
IP to Tel Number of Calls Terminated due to a Busy Line	RT	Counter	Indicates the number of calls that failed as a result of a busy line for IP to Tel direction, during last interval. Mib name: acPMSIPBusyCallsValIP2Tel
IP to Tel Number of Calls Terminated due to No Answer	RT	Counter	Indicates the number of calls that weren't answered for IP to Tel direction, during last interval. Mib name: acPMSIPNoAnswerCallsValIP2Tel

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
IP to Tel Number of Calls Terminated due to Forward	RT	Counter	Indicates the number of calls that were terminated due to a call forward for IP to Tel direction, during last interval. Mib name: acPMSIPForwardedCallsValIP2Tel
IP to Tel Number of Failed Calls due to No Route	RT	Counter	Indicates the number of calls whose destinations weren't found for IP to Tel direction, during last interval. Mib name: acPMSIPNoRouteCallsValIP2Tel
IP to Tel Number of Failed Calls due to No Matched Capabilities	RT	Counter	Indicates the number of calls that failed due to mismatched media server capabilities for IP to Tel direction, during last interval. Mib name: acPMSIPNoMatchCallsValIP2Tel
IP to Tel Number of Failed Calls due to No Resources	RT	Counter	Indicates the number of calls that failed due to unavailable resources or a media server lock for IP to Tel direction, during last interval. Mib name: acPMSIPNoResourcesCallsValIP2Tel
IP to Tel Number of Failed Calls due to Other reasons	RT	Counter	This counter is incremented as a result of calls that fail due to reasons not covered by the other counters for IP to Tel direction, during last interval. Mib name: acPMSIPFailCallsValIP2Tel
IP to Tel Fax Call Attempts	RT	Counter	Indicates the number of attempted fax calls for IP to Tel direction, during last interval. Mib name: acPMSIPFaxAttemptedCallsValIP2Tel
IP to Tel Successful Fax Calls	RT	Counter	Indicates the number of successful fax calls for IP to Tel direction, during last interval. Mib name: acPMSIPFaxSuccessCallsValIP2Tel
IP to Tel Average Call Duration [sec]	RT	Gauge	Indicates the average call duration of established calls for IP to Tel direction, during last interval. Mib name: acPMSIPCallDurationAverageIP2Tel

2.3.4   Tab: SIP Tel to IP

Frame: Gateway System Monitoring (Real-Time), Tab: SIP Tel to IP

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
Tel to IP Number of Call Attempts	RT	Counter	Indicates the number of attempted calls for Tel to IP direction, during last interval. Mib name: acPMSIPAttemptedCallsValTel2IP
Tel to IP Number of Established Calls	RT	Counter	Indicates the number of established calls for Tel to IP direction, during last interval. Mib name: acPMSIPEstablishedCallsValTel2IP

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
Tel to IP Number of Calls Terminated due to a Busy Line	RT	Counter	Indicates the number of calls that failed as a result of a busy line for Tel to IP direction, during last interval. Mib name: acPMSIPBusyCallsValTel2IP
Tel to IP Number of Calls Terminated due to No Answer	RT	Counter	Indicates the number of calls that weren't answered for Tel to IP direction, during last interval. Mib name: acPMSIPNoAnswerCallsValTel2IP
Tel to IP Number of Calls Terminated due to Forward	RT	Counter	Indicates the number of calls that were terminated due to a call forward for Tel to IP direction, during last interval. Mib name: acPMSIPForwardedCallsValTel2IP
Tel to IP Number of Failed Calls due to No Route	RT	Counter	Indicates the number of calls whose destinations weren't found for Tel to IP direction, during last interval. Mib name: acPMSIPNoRouteCallsValTel2IP
Tel to IP Number of Failed Calls due to No Matched Capabilities	RT	Counter	Indicates the number of calls that failed due to mismatched media server capabilities for Tel to IP direction, during last interval. Mib name: acPMSIPNoMatchCallsValTel2IP
Tel to IP Number of Failed Calls due to No Resources	RT	Counter	Indicates the number of calls that failed due to unavailable resources or a media server lock for Tel to IP direction, during last interval. Mib name: acPMSIPNoResourcesCallsValTel2IP
Tel to IP Number of Failed Calls due to Other reasons	RT	Counter	This counter is incremented as a result of calls that fail due to reasons not covered by the other counters for Tel to IP direction, during last interval. Mib name: acPMSIPFailCallsValTel2IP
Tel to IP Fax Call Attempts	RT	Counter	Indicates the number of attempted fax calls for Tel to IP direction, during last interval. Mib name: acPMSIPFaxAttemptedCallsValTel2IP
Tel to IP Successful Fax Calls	RT	Counter	Indicates the number of successful fax calls for Tel to IP direction, during last interval. Mib name: acPMSIPFaxSuccessCallsValTel2IP
Tel to IP Average Call Duration [sec]	RT	Gauge	Indicates the average call duration of established calls for Tel to IP direction, during last interval. Mib name: acPMSIPCallDurationAverageTel2IP

2.4   Frame: Gateway System Monitoring SIP (History)

2.4.1   Tab: System IP

Frame: Gateway System Monitoring SIP (History), Tab: System IP

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
Number of Outgoing KBytes	HIST	Counter	Counts the total number of outgoing Kbytes (1000 bytes) from the interface during the last interval. Mib name: acPMNetUtilKBytesVolumeTx
Number of Incoming KBytes	HIST	Counter	Counts the total number of Kbytes (1000 bytes) received on the interface, including those received in error, during the last interval. Mib name: acPMNetUtilKBytesVolumeRx
Number of Outgoing Pkts	HIST	Counter	Counts the total number of outgoing Packets from the interface during the last interval. Mib name: acPMNetUtilPacketsVolumeTx
Number of Incoming Pkts	HIST	Counter	Counts the total number of Packets received on the interface, including those received in error, during the last interval. Mib name: acPMNetUtilPacketsVolumeRx
Number of Incoming Discarded Pkts	HIST	Counter	Counts the total number of malformed IP Packets received on the interface during the last interval. These are packets which are corrupted or discarded due to errors in their IP headers, including bad checksums, version number mismatch, other format errors, time-to-live exceeded, errors discovered in processing their IP options, etc. Mib name: acPMNetUtilDiscardedPacketsVal

2.4.2   Tab: VoIP Call Statistics

Frame: Gateway System Monitoring SIP (History), Tab: VoIP Call Statistics

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
Num of Active Contexts Avg	HIST	Gauge	Indicates the average number of voice calls connected on the gateway since the last clear. Mib name: acPMActiveContextCountAverage
Num of Active Contexts Min	HIST	Gauge	Indicates the minimum number of voice calls connected on the gateway since the last clear. Mib name: acPMActiveContextCountMin

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
Num of Active Contexts Max	HIST	Gauge	Indicates the maximum number of voice calls connected on the gateway since the last clear. Mib name: acPMActiveContextCountMax
G711 Active Calls Avg	HIST	Gauge	Indicates the average number of G.711 calls present on the TPM. Mib name: acPMChannelsPerCoderAverageG711
G723 Active Calls Avg	HIST	Gauge	Indicates the average number of G.723 calls present on the TPM. This attribute is only displayed if the G.723 Codec is provisioned on the DSP template. Mib name: acPMChannelsPerCoderAverageG723
G728 Active Calls Avg	HIST	Gauge	Indicates the average number of G.728 calls present on the TPM. This attribute is only displayed if the G.728 Codec is provisioned on the DSP template. Mib name: acPMChannelsPerCoderAverageG728
G729a Active Calls Avg	HIST	Gauge	Indicates the average number of G.729a calls present on the TPM. This attribute is only displayed if the G.729a Codec is provisioned on the DSP. Mib name: acPMChannelsPerCoderAverageG729a
G729e Active Calls Avg	HIST	Gauge	Indicates the average number of G.729e calls present on the TPM. This attribute is only displayed if the G.729e Codec is provisioned on the DSP template. Mib name: acPMChannelsPerCoderAverageG729e
AMR Active Calls Avg	HIST	Gauge	Indicates the average number of AMR calls present on the TPM. This attribute is only displayed if the AMR Codec is provisioned on the DSP template. Mib name: acPMChannelsPerCoderAverageAMR
EVRC Active Calls Avg	HIST	Gauge	Indicates the average number of EVRC calls present on the TPM. This attribute is only displayed if the EVRC Codec is provisioned on the DSP template. Mib name: acPMChannelsPerCoderAverageEVRC
G729EV Active Calls Avg	HIST	Gauge	Indicates the average number of G.729EV calls present on the TPM. Mib name: acPMChannelsPerCoderAverageG729EV
EG711 Active Calls Avg	HIST	Gauge	Indicates the average number of EG.711 calls present on the TPM. Mib name: acPMChannelsPerCoderAverageEG711
G726 Active Calls Avg	HIST	Gauge	Indicates the average number of G.726 calls present on the TPM. Mib name: acPMChannelsPerCoderAverageG726
RTA Active Calls Avg	HIST	Gauge	Indicates the average number of RTA calls present on the TPM. Mib name: acPMChannelsPerCoderAverageRTA

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
SILK Active Calls Avg	HIST	Gauge	Indicates the average number of SILK calls present on the TPM. Mib name: acPMChannelsPerCoderAverageSILK
AMR-WB Active Calls Avg	HIST	Gauge	Indicates the average number of AMR-WB calls present on the TPM. Mib name: acPMChannelsPerCoderAverageARMWB
G722 Active Calls Avg	HIST	Gauge	Indicates the average number of G.722 calls present on the TPM. Mib name: acPMChannelsPerCoderAverageG722
G727 Active Calls Avg	HIST	Gauge	Indicates the average number of G.727 calls present on the TPM. Mib name: acPMChannelsPerCoderAverageG727
GSM Active Calls Avg	HIST	Gauge	Indicates the average number of GSM calls present on the TPM. Mib name: acPMChannelsPerCoderAverageGSM
QCELP Active Calls Avg	HIST	Gauge	Indicates the average number of QCELP calls present on the TPM. Mib name: acPMChannelsPerCoderAverageQCELP
VOXADPCM Active Calls Avg	HIST	Gauge	Indicates the average number of VOXADPCM calls present on the TPM. Mib name: acPMChannelsPerCoderAverageVOXADPCM
ILBC Active Calls Avg	HIST	Gauge	Indicates the average number of ILBC calls present on the TPM. Mib name: acPMChannelsPerCoderAverageILBC
SPEEX Active Calls Avg	HIST	Gauge	Indicates the average number of SPEEX calls present on the TPM. Mib name: acPMChannelsPerCoderAverageSPEEX
Rx RTP Packet Loss Max	HIST	Gauge	Indicates the Max Rx RTP Packet loss (reported by RTCP) per TPM, up to this point in time during the collection interval, as indicated by the time Interval. Mib name: acPMModuleRTPPacketLossRxMax
Tx RTP Packet Loss Max	HIST	Gauge	Indicates the Max Tx RTP Packet loss (reported by RTCP) per TPM, up to this point in time during the collection interval, as indicated by the time Interval. Mib name: acPMModuleRTPPacketLossTxMax
RTP delay Average	HIST	Gauge	Indicates the average RTP packets delay per TPM, up to this point in time during the collection interval, as indicated by the time Interval. Mib name: acPMModulePacketDelayAverage

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
RTP delay Max	HIST	Gauge	Indicates the maximum RTP packets delay per TPM, up to this point in time during the collection interval, as indicated by the time Interval. Mib name: acPMModulePacketDelayMax
RTP delay Min	HIST	Gauge	Indicates the minimum RTP packets delay per TPM, up to this point in time during the collection interval, as indicated by the time Interval. Mib name: acPMModulePacketDelayMin
RTP jitter Average	HIST	Gauge	Indicates the average RTP packets jitter per TPM, up to this point in time during the collection interval, as indicated by the time Interval. Mib name: acPMModulePacketJitterAverage
RTP jitter Min	HIST	Gauge	Indicates the minimum RTP packets jitter per TPM, up to this point in time during the collection interval, as indicated by the time Interval. Mib name: acPMModulePacketJitterMin
RTP jitter Max	HIST	Gauge	Indicates the maximum RTP packets jitter per TPM, up to this point in time during the collection interval, as indicated by the time Interval. Mib name: acPMModulePacketJitterMax
Rx RTP Bytes Max	HIST	Gauge	Indicates the Max Tx RTP Bytes per TPM, up to this point in time during the collection interval, as indicated by the time Interval. Mib name: acPMModuleRTPBytesRxMax
Tx RTP Bytes Max	HIST	Gauge	Indicates the Max Rx RTP Bytes per TPM, up to this point in time during the collection interval, as indicated by the time Interval. Mib name: acPMModuleRTPBytesTxMax
Rx RTP Packets Max	HIST	Gauge	Indicates the Max Rx RTP Packets per TPM, up to this point in time during the collection interval, as indicated by the time Interval. Mib name: acPMModuleRTPPacketsRxMax
Tx RTP Packets Max	HIST	Gauge	Indicates the Max Tx RTP Packets per TPM, up to this point in time during the collection interval, as indicated by the time Interval. Mib name: acPMModuleRTPPacketsTxMax
RTCP XR Average Conversational R Factor	HIST	Gauge	Average conversational R factor. Mib name: rtcpXrHistoryAvgRCQ
RTCP XR Maximum Conversational R Factor	HIST	Gauge	Maximum conversational R factor. Mib name: rtcpXrHistoryMaxRCQ
RTCP XR Minimum Conversational R Factor	HIST	Gauge	Minimum conversational R factor. Mib name: rtcpXrHistoryMinRCQ

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
Modem Relay Active Channels Average	HIST	Gauge	Average value within the period time. Mib name: acPMModemRelayActiveChannelsAverage
Modem Relay Active Channels Max	HIST	Gauge	Maximum value within the period time. Mib name: acPMModemRelayActiveChannelsMax
Modem Relay Active Channels Min	HIST	Gauge	Minimum value within the period time. Mib name: acPMModemRelayActiveChannelsMin
DSP Usage Average	HIST	Gauge	Average value within the period time. Mib name: acPMDSPUsageAverage
DSP Usage Max	HIST	Gauge	Maximum value within the period time. Mib name: acPMDSPUsageMax
DSP Usage Min	HIST	Gauge	Minimum value within the period time. Mib name: acPMDSPUsageMin
Registered Users Average	HIST	Gauge	Average value within the period time. Mib name: acPMSBCRegisteredUsersAverage
Registered Users Max	HIST	Gauge	Maximum value within the period time. Mib name: acPMSBCRegisteredUsersMax
Registered Users Min	HIST	Gauge	Minimum value within the period time. Mib name: acPMSBCRegisteredUsersMin
Media Legs Average	HIST	Gauge	Average value within the period time. Mib name: acPMSBCMediaLegsAverage
Media Legs Max	HIST	Gauge	Maximum value within the period time. Mib name: acPMSBCMediaLegsMax
Media Legs Min	HIST	Gauge	Minimum value within the period time. Mib name: acPMSBCMediaLegsMin
Transcoding Sessions Average	HIST	Gauge	Average value within the period time. Mib name: acPMSBCTranscodingSessionsAverage
Transcoding Sessions Max	HIST	Gauge	Maximum value within the period time. Mib name: acPMSBCTranscodingSessionsMax
Transcoding Sessions Min	HIST	Gauge	Minimum value within the period time. Mib name: acPMSBCTranscodingSessionsMin
ASR Average	HIST	Gauge	Average value within the period time. Mib name: acPMSBCAsrAverage
ASR Max	HIST	Gauge	Maximum value within the period time. Mib name: acPMSBCAsrMax
ASR Min	HIST	Gauge	Minimum value within the period time. Mib name: acPMSBCAsrMin
ACD Average	HIST	Gauge	Average value within the period time. Mib name: acPMSBCAcdAverage

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
ACD Max	HIST	Gauge	Maximum value within the period time. Mib name: acPMSBCAcdMax
ACD Min	HIST	Gauge	Minimum value within the period time. Mib name: acPMSBCAcdMin
NER Average	HIST	Gauge	Average value within the period time. Mib name: acPMSBCNerAverage
NER Max	HIST	Gauge	Maximum value within the period time. Mib name: acPMSBCNerMax
NER Min	HIST	Gauge	Minimum value within the period time. Mib name: acPMSBCNerMin
LAD Legs Average	HIST	Gauge	Average value within the period time. Mib name: acPMSBCLadLegsAverage
LAD Legs Max	HIST	Gauge	Maximum value within the period time. Mib name: acPMSBCLadLegsMax
LAD Legs Min	HIST	Gauge	Minimum value within the period time. Mib name: acPMSBCLadLegsMin
IN CAPS Average	HIST	Gauge	Average value within the period time. Mib name: acPMSBCInCapsAverage
IN CAPS Max	HIST	Gauge	Maximum value within the period time. Mib name: acPMSBCInCapsMax
IN CAPS Min	HIST	Gauge	Minimum value within the period time. Mib name: acPMSBCInCapsMin
OUT CAPS Average	HIST	Gauge	Average value within the period time. Mib name: acPMSBCOutCapsAverage
OUT CAPS Max	HIST	Gauge	Maximum value within the period time. Mib name: acPMSBCOutCapsMax
OUT CAPS Min	HIST	Gauge	Minimum value within the period time. Mib name: acPMSBCOutCapsMin

2.4.3   Tab: SIP IP to Tel

Frame: Gateway System Monitoring SIP (History), Tab: SIP IP to Tel

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
IP to Tel Number of Call Attempts	HIST	Counter	Indicates the number of attempted calls for IP to Tel direction, during last interval. Mib name: acPMSIPAttemptedCallsValIP2Tel
IP to Tel Number of Established Calls	HIST	Counter	Indicates the number of established calls for IP to Tel direction, during last interval. Mib name: acPMSIPEstablishedCallsValIP2Tel
IP to Tel Number of Calls Terminated due to a Busy Line	HIST	Counter	Indicates the number of calls that failed as a result of a busy line for IP to Tel direction, during last interval. Mib name: acPMSIPBusyCallsValIP2Tel
IP to Tel Number of Calls Terminated due to No Answer	HIST	Counter	Indicates the number of calls that weren't answered for IP to Tel direction, during last interval. Mib name: acPMSIPNoAnswerCallsValIP2Tel
IP to Tel Number of Calls Terminated due to Forward	HIST	Counter	Indicates the number of calls that were terminated due to a call forward for IP to Tel direction, during last interval. Mib name: acPMSIPForwardedCallsValIP2Tel
IP to Tel Number of Failed Calls due to No Route	HIST	Counter	Indicates the number of calls whose destinations weren't found for IP to Tel direction, during last interval. Mib name: acPMSIPNoRouteCallsValIP2Tel
IP to Tel Number of Failed Calls due to No Matched Capabilities	HIST	Counter	Indicates the number of calls that failed due to mismatched media server capabilities for IP to Tel direction, during last interval. Mib name: acPMSIPNoMatchCallsValIP2Tel
IP to Tel Number of Failed Calls due to No Resources	HIST	Counter	Indicates the number of calls that failed due to unavailable resources or a media server lock for IP to Tel direction, during last interval. Mib name: acPMSIPNoResourcesCallsValIP2Tel
IP to Tel Number of Failed Calls due to Other reasons	HIST	Counter	This counter is incremented as a result of calls that fail due to reasons not covered by the other counters for IP to Tel direction, during last interval. Mib name: acPMSIPFailCallsValIP2Tel
IP to Tel Fax Call Attempts	HIST	Counter	Indicates the number of attempted fax calls for IP to Tel direction, during last interval. Mib name: acPMSIPFaxAttemptedCallsValIP2Tel
IP to Tel Successful Fax Calls	HIST	Counter	Indicates the number of successful fax calls for IP to Tel direction, during last interval. Mib name: acPMSIPFaxSuccessCallsValIP2Tel

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
IP to Tel Average Call Duration [sec]	HIST	Gauge	Indicates the average call duration of established calls for IP to Tel direction, during last interval. Mib name: acPMSIPCallDurationAverageIP2Tel

2.4.4   Tab: SIP Tel to IP

Frame: Gateway System Monitoring SIP (History), Tab: SIP Tel to IP

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
Tel to IP Number of Call Attempts	HIST	Counter	Indicates the number of attempted calls for Tel to IP direction, during last interval. Mib name: acPMSIPAttemptedCallsValTel2IP
Tel to IP Number of Established Calls	HIST	Counter	Indicates the number of established calls for Tel to IP direction, during last interval. Mib name: acPMSIPEstablishedCallsValTel2IP
Tel to IP Number of Calls Terminated due to a Busy Line	HIST	Counter	Indicates the number of calls that failed as a result of a busy line for Tel to IP direction, during last interval. Mib name: acPMSIPBusyCallsValTel2IP
Tel to IP Number of Calls Terminated due to No Answer	HIST	Counter	Indicates the number of calls that weren't answered for Tel to IP direction, during last interval. Mib name: acPMSIPNoAnswerCallsValTel2IP
Tel to IP Number of Calls Terminated due to Forward	HIST	Counter	Indicates the number of calls that were terminated due to a call forward for Tel to IP direction, during last interval. Mib name: acPMSIPForwardedCallsValTel2IP
Tel to IP Number of Failed Calls due to No Route	HIST	Counter	Indicates the number of calls whose destinations weren't found for Tel to IP direction, during last interval. Mib name: acPMSIPNoRouteCallsValTel2IP
Tel to IP Number of Failed Calls due to No Matched Capabilities	HIST	Counter	Indicates the number of calls that failed due to mismatched media server capabilities for Tel to IP direction, during last interval. Mib name: acPMSIPNoMatchCallsValTel2IP
Tel to IP Number of Failed Calls due to No Resources	HIST	Counter	Indicates the number of calls that failed due to unavailable resources or a media server lock for Tel to IP direction, during last interval. Mib name: acPMSIPNoResourcesCallsValTel2IP
Tel to IP Number of Failed Calls due to Other reasons	HIST	Counter	This counter is incremented as a result of calls that fail due to reasons not covered by the other counters for Tel to IP direction, during last interval. Mib name: acPMSIPFailCallsValTel2IP

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
Tel to IP Fax Call Attempts	HIST	Counter	Indicates the number of attempted fax calls for Tel to IP direction, during last interval. Mib name: acPMSIPFaxAttemptedCallsValTel2IP
Tel to IP Successful Fax Calls	HIST	Counter	Indicates the number of successful fax calls for Tel to IP direction, during last interval. Mib name: acPMSIPFaxSuccessCallsValTel2IP
Tel to IP Average Call Duration [sec]	HIST	Gauge	Indicates the average call duration of established calls for Tel to IP direction, during last interval. Mib name: acPMSIPCallDurationAverageTel2IP

2.4.5   Tab: Trunk Statistics

Frame: Gateway System Monitoring SIP (History), Tab: Trunk Statistics

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
Trunk utilization Avg	HIST	Gauge	Indicates the Average of simultaneously busy DS0 channels on this Trunk up to this point in time during the collection interval, as indicated by the Time Interval. A busy channel is when the Physical DS0 Termination isn't in Null context or OOS. A Trunk is either E1 or T1. Mib name: acPMTrunkUtilizationAverage
Trunk utilization Min	HIST	Gauge	Indicates the Minimum of simultaneously busy DS0 channels on this Trunk up to this point in time during the collection interval, as indicated by the Time Interval. A busy channel is when the Physical DS0 Termination isn't in Null context or OOS. A Trunk is either E1 or T1. Mib name: acPMTrunkUtilizationMin
Trunk utilization Max	HIST	Gauge	Indicates the Maximum of simultaneously busy DS0 channels on this Trunk up to this point in time during the collection interval, as indicated by the Time Interval. A busy channel is when the Physical DS0 Termination isn't in Null context or OOS. A Trunk is either E1 or T1. Mib name: acPMTrunkUtilizationMax
Trunk Errored Seconds	HIST	Gauge	Indicates the number of Errored Seconds. Mib name: dsx1IntervalESs
Trunk Controlled Slip Seconds	HIST	Gauge	Indicates the number of Controlled Slip Seconds. Mib name: dsx1IntervalCSSs
Trunk Path Coding Violations	HIST	Gauge	Indicates the number of Path Coding Violations. Mib name: dsx1IntervalPCVs
Trunk Bursty Errored Seconds	HIST	Gauge	Indicates the number of Bursty Errored Seconds. Mib name: dsx1IntervalBESs

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
Tel to IP Trunk Established Calls	HIST	Gauge	Value of gauge or counter. Mib name: acPMSIPTel2IPTrunkEstablishedCallsVal
IP to Tel Trunk Established Calls	HIST	Gauge	Value of gauge or counter. Mib name: acPMSIPIP2TelTrunkEstablishedCallsVal

2.4.6   Tab: SRD Statistics

Frame: Gateway System Monitoring SIP (History), Tab: SRD Statistics

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
SIP SRD Dialogs Val	HIST	Counter	Value of gauge or counter. Mib name: acPMSIPSRDDialogsVal
SIP SRD Invite Dialogs Val	HIST	Counter	Value of gauge or counter. Mib name: acPMSIPSRDInviteDialogsVal
SIP SRD Subscribe Dialogs Val	HIST	Counter	Value of gauge or counter. Mib name: acPMSIPSRDSubscribeDialogsVal
SIP SRD Other Dialogs Val	HIST	Counter	Value of gauge or counter. Mib name: acPMSIPSRDOtherDialogsVal
ASR Average	HIST	Gauge	Average value with in the period time. Mib name: acPMSBCSrdAsrAverage
ASR Max	HIST	Gauge	Maximum value with in the period time. Mib name: acPMSBCSrdAsrMax
ASR Min	HIST	Gauge	Minimum value with in the period time. Mib name: acPMSBCSrdAsrMin
ACD Average	HIST	Gauge	Average value with in the period time. Mib name: acPMSBCSrdAcdAverage
ACD Max	HIST	Gauge	Maximum value with in the period time. Mib name: acPMSBCSrdAcdMax
ACD Min	HIST	Gauge	Minimum value with in the period time. Mib name: acPMSBCSrdAcdMin
NER Average	HIST	Gauge	Average value with in the period time. Mib name: acPMSBCSrdNerAverage
NER Max	HIST	Gauge	Maximum value with in the period time. Mib name: acPMSBCSrdNerMax
NER Min	HIST	Gauge	Minimum value with in the period time. Mib name: acPMSBCSrdNerMin

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
IN CAPS Average	HIST	Gauge	Average value with in the period time. Mib name: acPMSBCSrdInCapsAverage
IN CAPS Max	HIST	Gauge	Maximum value with in the period time. Mib name: acPMSBCSrdInCapsMax
IN CAPS Min	HIST	Gauge	Minimum value with in the period time. Mib name: acPMSBCSrdInCapsMin
OUT CAPS Average	HIST	Gauge	Average value with in the period time. Mib name: acPMSBCSrdOutCapsAverage
OUT CAPS Max	HIST	Gauge	Maximum value with in the period time. Mib name: acPMSBCSrdOutCapsMax
OUT CAPS Min	HIST	Gauge	Minimum value with in the period time. Mib name: acPMSBCSrdOutCapsMin

2.4.7   Tab: IP Group Statistics

Frame: Gateway System Monitoring SIP (History), Tab: IP Group Statistics

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
SIP IP Group Dialogs Val	HIST	Counter	Value of gauge or counter. Mib name: acPMSIPIPGroupDialogsVal
SIP IP Group Invite Dialogs Val	HIST	Counter	Value of gauge or counter. Mib name: acPMSIPIPGroupInviteDialogsVal
SIP IP Group Subscribe Dialogs Val	HIST	Counter	Value of gauge or counter. Mib name: acPMSIPIPGroupSubscribeDialogsVal
SIP IP Group Other Dialogs Val	HIST	Counter	Value of gauge or counter. Mib name: acPMSIPIPGroupOtherDialogsVal
SIP IP Group In Invite Dialogs	HIST	Counter	Value of gauge or counter. Mib name: acPMSIPIPGroupInInviteDialogsVal
SIP IP Group I nSubscribe Dialogs	HIST	Counter	Value of gauge or counter. Mib name: acPMSIPIPGroupInSubscribeDialogsVal
SIP IP Group Out Invite Dialogs	HIST	Counter	Value of gauge or counter. Mib name: acPMSIPIPGroupOutInviteDialogsVal
SIP IP Group Out Subscribe Dialogs	HIST	Counter	Value of gauge or counter. Mib name: acPMSIPIPGroupOutSubscribeDialogsVal
SIP IP Group Invite Dialogs IP Average	HIST	Gauge	Value of gauge or counter. Mib name: acPMSIPIPGroupInviteDialogsAverage

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
SIP IP Group Invite Dialogs IP Max	HIST	Gauge	Value of gauge or counter. Mib name: acPMSIPIPGroupInviteDialogsMax
SIP IP Group Invite Dialogs IP Min	HIST	Gauge	Value of gauge or counter. Mib name: acPMSIPIPGroupInviteDialogsMin
ASR Average	HIST	Gauge	Average value with in the period time. Mib name: acPMSBCIPGroupAsrAverage
ASR Max	HIST	Gauge	Maximum value with in the period time. Mib name: acPMSBCIPGroupAsrMax
ASR Min	HIST	Gauge	Minimum value with in the period time. Mib name: acPMSBCIPGroupAsrMin
ACD Average	HIST	Gauge	Average value with in the period time. Mib name: acPMSBCIPGroupAcdAverage
ACD Max	HIST	Gauge	Maximum value with in the period time. Mib name: acPMSBCIPGroupAcdMax
ACD Min	HIST	Gauge	Minimum value with in the period time. Mib name: acPMSBCIPGroupAcdMin
NER Average	HIST	Gauge	Average value with in the period time. Mib name: acPMSBCIPGroupNerAverage
NER Max	HIST	Gauge	Maximum value with in the period time. Mib name: acPMSBCIPGroupNerMax
NER Min	HIST	Gauge	Minimum value with in the period time. Mib name: acPMSBCIPGroupNerMin
IN CAPS Average	HIST	Gauge	Average value with in the period time. Mib name: acPMSBCIPGroupInCapsAverage
IN CAPS Max	HIST	Gauge	Maximum value with in the period time. Mib name: acPMSBCIPGroupInCapsMax
IN CAPS Min	HIST	Gauge	Minimum value with in the period time. Mib name: acPMSBCIPGroupInCapsMin
OUT CAPS Average	HIST	Gauge	Average value with in the period time. Mib name: acPMSBCIPGroupOutCapsAverage
OUT CAPS Max	HIST	Gauge	Maximum value with in the period time. Mib name: acPMSBCIPGroupOutCapsMax
OUT CAPS Min	HIST	Gauge	Minimum value with in the period time. Mib name: acPMSBCIPGroupOutCapsMin

2.4.8   Tab: Trunk Group Statistics

Frame: Gateway System Monitoring SIP (History), Tab: Trunk Group Statistics

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
Trunk Group Utilization (%)	HIST	Gauge	Value of gauge or counter. Mib name: acPMSIPTrunkGroupPercentageUtilizationVal
Trunk Group Utilization (channels)	HIST	Gauge	Value of gauge or counter. Mib name: acPMSIPTrunkGroupUtilizationVal
Tel to IP Trunk Group Established Calls Val	HIST	Counter	Value of gauge or counter. Mib name: acPMSIPTel2IPTrunkGroupEstablishedCallsVal
IP to Tel Trunk Group Established Calls Val	HIST	Counter	Value of gauge or counter. Mib name: acPMSIPIP2TelTrunkGroupEstablishedCallsVal
No Resources Calls	HIST	Gauge	Value of gauge or counter. Mib name: acPMSIPTrunkGroupNoResourcesCallsVal
Average Call Duration (sec)	HIST	Gauge	Value of gauge or counter. Mib name: acPMSIPTrunkGroupCallDurationAverage
Total Call Duration (sec)	HIST	Gauge	Value of gauge or counter. Mib name: acPMSIPTrunkGroupCallDurationTotal
Trunk Group All Trunks Busy (sec)	HIST	Counter	Value of gauge or counter. Mib name: acPMSIPTrunkGroupAllTrunksBusyVal
All Trunks Busy (%)	HIST	Gauge	Value of gauge or counter. Mib name: acPMSIPTrunkGroupAllTrunksBusyPercentageVal

2.5   Frame: IP Group Monitoring (History)

2.5.1   Tab: IP Group Statistics

Frame: IP Group Monitoring (History), Tab: IP Group Statistics

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
SIP IP Group Dialogs Val	HIST	Counter	Value of gauge or counter. Mib name: acPMSIPIPGroupDialogsVal
SIP IP Group Invite Dialogs Val	HIST	Counter	Value of gauge or counter. Mib name: acPMSIPIPGroupInviteDialogsVal

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
SIP IP Group Subscribe Dialogs Val	HIST	Counter	Value of gauge or counter. Mib name: acPMSIPIPGroupSubscribeDialogsVal
SIP IP Group Other Dialogs Val	HIST	Counter	Value of gauge or counter. Mib name: acPMSIPIPGroupOtherDialogsVal
SIP IP Group In Invite Dialogs	HIST	Counter	Value of gauge or counter. Mib name: acPMSIPIPGroupInInviteDialogsVal
SIP IP Group I nSubscribe Dialogs	HIST	Counter	Value of gauge or counter. Mib name: acPMSIPIPGroupInSubscribeDialogsVal
SIP IP Group Out Invite Dialogs	HIST	Counter	Value of gauge or counter. Mib name: acPMSIPIPGroupOutInviteDialogsVal
SIP IP Group Out Subscribe Dialogs	HIST	Counter	Value of gauge or counter. Mib name: acPMSIPIPGroupOutSubscribeDialogsVal
SIP IP Group Invite Dialogs IP Average	HIST	Gauge	Value of gauge or counter. Mib name: acPMSIPIPGroupInviteDialogsAverage
SIP IP Group Invite Dialogs IP Max	HIST	Gauge	Value of gauge or counter. Mib name: acPMSIPIPGroupInviteDialogsMax
SIP IP Group Invite Dialogs IP Min	HIST	Gauge	Value of gauge or counter. Mib name: acPMSIPIPGroupInviteDialogsMin
ASR Average	HIST	Gauge	Average value with in the period time. Mib name: acPMSBCIPGroupAsrAverage
ASR Max	HIST	Gauge	Maximum value with in the period time. Mib name: acPMSBCIPGroupAsrMax
ASR Min	HIST	Gauge	Minimum value with in the period time. Mib name: acPMSBCIPGroupAsrMin
ACD Average	HIST	Gauge	Average value with in the period time. Mib name: acPMSBCIPGroupAcdAverage
ACD Max	HIST	Gauge	Maximum value with in the period time. Mib name: acPMSBCIPGroupAcdMax
ACD Min	HIST	Gauge	Minimum value with in the period time. Mib name: acPMSBCIPGroupAcdMin
NER Average	HIST	Gauge	Average value with in the period time. Mib name: acPMSBCIPGroupNerAverage
NER Max	HIST	Gauge	Maximum value with in the period time. Mib name: acPMSBCIPGroupNerMax
NER Min	HIST	Gauge	Minimum value with in the period time. Mib name: acPMSBCIPGroupNerMin
IN CAPS Average	HIST	Gauge	Average value with in the period time. Mib name: acPMSBCIPGroupInCapsAverage

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
IN CAPS Max	HIST	Gauge	Maximum value with in the period time. Mib name: acPMSBCIPGroupInCapsMax
IN CAPS Min	HIST	Gauge	Minimum value with in the period time. Mib name: acPMSBCIPGroupInCapsMin
OUT CAPS Average	HIST	Gauge	Average value with in the period time. Mib name: acPMSBCIPGroupOutCapsAverage
OUT CAPS Max	HIST	Gauge	Maximum value with in the period time. Mib name: acPMSBCIPGroupOutCapsMax
OUT CAPS Min	HIST	Gauge	Minimum value with in the period time. Mib name: acPMSBCIPGroupOutCapsMin

2.6   Frame: IP Group Monitoring (Real-Time)

2.6.1   Tab: IP Group Statistics

Frame: IP Group Monitoring (Real-Time), Tab: IP Group Statistics

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
SIP IP Group Dialogs Val	RT	Counter	Value of gauge or counter. Mib name: acPMSIPIPGroupDialogsVal
SIP IP Group Invite Dialogs Val	RT	Counter	Value of gauge or counter. Mib name: acPMSIPIPGroupInviteDialogsVal
SIP IP Group Subscribe Dialogs Val	RT	Counter	Value of gauge or counter. Mib name: acPMSIPIPGroupSubscribeDialogsVal
SIP IP Group Other Dialogs Val	RT	Counter	Value of gauge or counter. Mib name: acPMSIPIPGroupOtherDialogsVal
SIP IP Group In Invite Dialogs	RT	Counter	Value of gauge or counter. Mib name: acPMSIPIPGroupInInviteDialogsVal
SIP IP Group I nSubscribe Dialogs	RT	Counter	Value of gauge or counter. Mib name: acPMSIPIPGroupInSubscribeDialogsVal
SIP IP Group Out Invite Dialogs	RT	Counter	Value of gauge or counter. Mib name: acPMSIPIPGroupOutInviteDialogsVal
SIP IP Group Out Subscribe Dialogs	RT	Counter	Value of gauge or counter. Mib name: acPMSIPIPGroupOutSubscribeDialogsVal
ASR	RT	Gauge	Value of gauge or counter. Mib name: acPMSBCIPGroupAsrVal

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
ACD	RT	Gauge	Value of gauge or counter. Mib name: acPMSBCIPGroupAcdVal
NER	RT	Gauge	Value of gauge or counter. Mib name: acPMSBCIPGroupNerVal
IN CAPS	RT	Gauge	Value of gauge or counter. Mib name: acPMSBCIPGroupInCapsVal
OUT CAPS	RT	Gauge	Value of gauge or counter. Mib name: acPMSBCIPGroupOutCapsVal

2.7   Frame: SRD Monitoring (History)

2.7.1   Tab: SRD Statistics

Frame: SRD Monitoring (History), Tab: SRD Statistics

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
SIP SRD Dialogs Val	HIST	Counter	Value of gauge or counter. Mib name: acPMSIPSRDDialogsVal
SIP SRD Invite Dialogs Val	HIST	Counter	Value of gauge or counter. Mib name: acPMSIPSRDInviteDialogsVal
SIP SRD Subscribe Dialogs Val	HIST	Counter	Value of gauge or counter. Mib name: acPMSIPSRDSubscribeDialogsVal
SIP SRD Other Dialogs Val	HIST	Counter	Value of gauge or counter. Mib name: acPMSIPSRDOtherDialogsVal
ASR Average	HIST	Gauge	Average value with in the period time. Mib name: acPMSBCSrdAsrAverage
ASR Max	HIST	Gauge	Maximum value with in the period time. Mib name: acPMSBCSrdAsrMax
ASR Min	HIST	Gauge	Minimum value with in the period time. Mib name: acPMSBCSrdAsrMin
ACD Average	HIST	Gauge	Average value with in the period time. Mib name: acPMSBCSrdAcdAverage
ACD Max	HIST	Gauge	Maximum value with in the period time. Mib name: acPMSBCSrdAcdMax
ACD Min	HIST	Gauge	Minimum value with in the period time. Mib name: acPMSBCSrdAcdMin

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
NER Average	HIST	Gauge	Average value with in the period time. Mib name: acPMSBCSrdNerAverage
NER Max	HIST	Gauge	Maximum value with in the period time. Mib name: acPMSBCSrdNerMax
NER Min	HIST	Gauge	Minimum value with in the period time. Mib name: acPMSBCSrdNerMin
IN CAPS Average	HIST	Gauge	Average value with in the period time. Mib name: acPMSBCSrdInCapsAverage
IN CAPS Max	HIST	Gauge	Maximum value with in the period time. Mib name: acPMSBCSrdInCapsMax
IN CAPS Min	HIST	Gauge	Minimum value with in the period time. Mib name: acPMSBCSrdInCapsMin
OUT CAPS Average	HIST	Gauge	Average value with in the period time. Mib name: acPMSBCSrdOutCapsAverage
OUT CAPS Max	HIST	Gauge	Maximum value with in the period time. Mib name: acPMSBCSrdOutCapsMax
OUT CAPS Min	HIST	Gauge	Minimum value with in the period time. Mib name: acPMSBCSrdOutCapsMin

2.8   Frame: SRD Monitoring (Real-Time)

2.8.1   Tab: SRD Statistics

Frame: SRD Monitoring (Real-Time), Tab: SRD Statistics

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
SIP SRD Dialogs Val	RT	Counter	Value of gauge or counter. Mib name: acPMSIPSRDDialogsVal
SIP SRD Invite Dialogs Val	RT	Counter	Value of gauge or counter. Mib name: acPMSIPSRDInviteDialogsVal
SIP SRD Subscribe Dialogs Val	RT	Counter	Value of gauge or counter. Mib name: acPMSIPSRDSubscribeDialogsVal
SIP SRD Other Dialogs Val	RT	Counter	Value of gauge or counter. Mib name: acPMSIPSRDOtherDialogsVal
ASR	RT	Gauge	Value of gauge or counter. Mib name: acPMSBCSrdAsrVal

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
ACD	RT	Gauge	Value of gauge or counter. Mib name: acPMSBCSrdAcdVal
NER	RT	Gauge	Value of gauge or counter. Mib name: acPMSBCSrdNerVal
IN CAPS	RT	Gauge	Value of gauge or counter. Mib name: acPMSBCSrdInCapsVal
OUT CAPS	RT	Gauge	Value of gauge or counter. Mib name: acPMSBCSrdOutCapsVal

2.9   Frame: System Monitoring SIP (History)

2.9.1   Tab: System IP

Frame: System Monitoring SIP (History), Tab: System IP

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
Number of Outgoing KBytes	HIST	Counter	Counts the total number of outgoing Kbytes (1000 bytes) from the interface during the last interval. Mib name: acPMNetUtilKBytesVolumeTx
Number of Incoming KBytes	HIST	Counter	Counts the total number of Kbytes (1000 bytes) received on the interface, including those received in error, during the last interval. Mib name: acPMNetUtilKBytesVolumeRx
Number of Outgoing Pkts	HIST	Counter	Counts the total number of outgoing Packets from the interface during the last interval. Mib name: acPMNetUtilPacketsVolumeTx
Number of Incoming Pkts	HIST	Counter	Counts the total number of Packets received on the interface, including those received in error, during the last interval. Mib name: acPMNetUtilPacketsVolumeRx
Number of Incoming Discarded Pkts	HIST	Counter	Counts the total number of malformed IP Packets received on the interface during the last interval. These are packets which are corrupted or discarded due to errors in their IP headers, including bad checksums, version number mismatch, other format errors, time-to-live exceeded, errors discovered in processing their IP options, etc. Mib name: acPMNetUtilDiscardedPacketsVal

2.9.2   Tab: VoIP Call Statistics

Frame: System Monitoring SIP (History), Tab: VoIP Call Statistics

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
Num of Active Contexts Avg	HIST	Gauge	Indicates the average number of voice calls connected on the gateway since the last clear. Mib name: acPMActiveContextCountAverage
Num of Active Contexts Min	HIST	Gauge	Indicates the minimum number of voice calls connected on the gateway since the last clear. Mib name: acPMActiveContextCountMin
Num of Active Contexts Max	HIST	Gauge	Indicates the maximum number of voice calls connected on the gateway since the last clear. Mib name: acPMActiveContextCountMax
G711 Active Calls Avg	HIST	Gauge	Indicates the average number of G.711 calls present on the TPM. Mib name: acPMChannelsPerCoderAverageG711
G723 Active Calls Avg	HIST	Gauge	Indicates the average number of G.723 calls present on the TPM. This attribute is only displayed if the G.723 Codec is provisioned on the DSP template. Mib name: acPMChannelsPerCoderAverageG723
G728 Active Calls Avg	HIST	Gauge	Indicates the average number of G.728 calls present on the TPM. This attribute is only displayed if the G.728 Codec is provisioned on the DSP template. Mib name: acPMChannelsPerCoderAverageG728
G729a Active Calls Avg	HIST	Gauge	Indicates the average number of G.729a calls present on the TPM. This attribute is only displayed if the G.729a Codec is provisioned on the DSP. Mib name: acPMChannelsPerCoderAverageG729a
G729e Active Calls Avg	HIST	Gauge	Indicates the average number of G.729e calls present on the TPM. This attribute is only displayed if the G.729e Codec is provisioned on the DSP template. Mib name: acPMChannelsPerCoderAverageG729e
AMR Active Calls Avg	HIST	Gauge	Indicates the average number of AMR calls present on the TPM. This attribute is only displayed if the AMR Codec is provisioned on the DSP template. Mib name: acPMChannelsPerCoderAverageAMR
EVRC Active Calls Avg	HIST	Gauge	Indicates the average number of EVRC calls present on the TPM. This attribute is only displayed if the EVRC Codec is provisioned on the DSP template. Mib name: acPMChannelsPerCoderAverageEVRC

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
G729EV Active Calls Avg	HIST	Gauge	Indicates the average number of G.729EV calls present on the TPM. Mib name: acPMChannelsPerCoderAverageG729EV
EG711 Active Calls Avg	HIST	Gauge	Indicates the average number of EG.711 calls present on the TPM. Mib name: acPMChannelsPerCoderAverageEG711
G726 Active Calls Avg	HIST	Gauge	Indicates the average number of G.726 calls present on the TPM. Mib name: acPMChannelsPerCoderAverageG726
RTA Active Calls Avg	HIST	Gauge	Indicates the average number of RTA calls present on the TPM. Mib name: acPMChannelsPerCoderAverageRTA
SILK Active Calls Avg	HIST	Gauge	Indicates the average number of SILK calls present on the TPM. Mib name: acPMChannelsPerCoderAverageSILK
AMR-WB Active Calls Avg	HIST	Gauge	Indicates the average number of AMR-WB calls present on the TPM. Mib name: acPMChannelsPerCoderAverageARMWB
G722 Active Calls Avg	HIST	Gauge	Indicates the average number of G.722 calls present on the TPM. Mib name: acPMChannelsPerCoderAverageG722
G727 Active Calls Avg	HIST	Gauge	Indicates the average number of G.727 calls present on the TPM. Mib name: acPMChannelsPerCoderAverageG727
GSM Active Calls Avg	HIST	Gauge	Indicates the average number of GSM calls present on the TPM. Mib name: acPMChannelsPerCoderAverageGSM
QCELP Active Calls Avg	HIST	Gauge	Indicates the average number of QCELP calls present on the TPM. Mib name: acPMChannelsPerCoderAverageQCELP
VOXADPCM Active Calls Avg	HIST	Gauge	Indicates the average number of VOXADPCM calls present on the TPM. Mib name: acPMChannelsPerCoderAverageVOXADPCM
ILBC Active Calls Avg	HIST	Gauge	Indicates the average number of ILBC calls present on the TPM. Mib name: acPMChannelsPerCoderAverageILBC
SPEEX Active Calls Avg	HIST	Gauge	Indicates the average number of SPEEX calls present on the TPM. Mib name: acPMChannelsPerCoderAverageSPEEX

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
Rx RTP Packet Loss Max	HIST	Gauge	Indicates the Max Rx RTP Packet loss (reported by RTCP) per TPM, up to this point in time during the collection interval, as indicated by the time Interval. Mib name: acPMModuleRTPPacketLossRxMax
Tx RTP Packet Loss Max	HIST	Gauge	Indicates the Max Tx RTP Packet loss (reported by RTCP) per TPM, up to this point in time during the collection interval, as indicated by the time Interval. Mib name: acPMModuleRTPPacketLossTxMax
RTP delay Average	HIST	Gauge	Indicates the average RTP packets delay per TPM, up to this point in time during the collection interval, as indicated by the time Interval. Mib name: acPMModulePacketDelayAverage
RTP delay Max	HIST	Gauge	Indicates the maximum RTP packets delay per TPM, up to this point in time during the collection interval, as indicated by the time Interval. Mib name: acPMModulePacketDelayMax
RTP delay Min	HIST	Gauge	Indicates the minimum RTP packets delay per TPM, up to this point in time during the collection interval, as indicated by the time Interval. Mib name: acPMModulePacketDelayMin
RTP jitter Average	HIST	Gauge	Indicates the average RTP packets jitter per TPM, up to this point in time during the collection interval, as indicated by the time Interval. Mib name: acPMModulePacketJitterAverage
RTP jitter Min	HIST	Gauge	Indicates the minimum RTP packets jitter per TPM, up to this point in time during the collection interval, as indicated by the time Interval. Mib name: acPMModulePacketJitterMin
RTP jitter Max	HIST	Gauge	Indicates the maximum RTP packets jitter per TPM, up to this point in time during the collection interval, as indicated by the time Interval. Mib name: acPMModulePacketJitterMax
Rx RTP Bytes Max	HIST	Gauge	Indicates the Max Tx RTP Bytes per TPM, up to this point in time during the collection interval, as indicated by the time Interval. Mib name: acPMModuleRTPBytesRxMax
Tx RTP Bytes Max	HIST	Gauge	Indicates the Max Rx RTP Bytes per TPM, up to this point in time during the collection interval, as indicated by the time Interval. Mib name: acPMModuleRTPBytesTxMax

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
Rx RTP Packets Max	HIST	Gauge	Indicates the Max Rx RTP Packets per TPM, up to this point in time during the collection interval, as indicated by the time Interval. Mib name: acPMModuleRTPPacketsRxMax
Tx RTP Packets Max	HIST	Gauge	Indicates the Max Tx RTP Packets per TPM, up to this point in time during the collection interval, as indicated by the time Interval. Mib name: acPMModuleRTPPacketsTxMax
RTCP XR Average Conversational R Factor	HIST	Gauge	Average conversational R factor. Mib name: rtcpXrHistoryAvgRCQ
RTCP XR Maximum Conversational R Factor	HIST	Gauge	Maximum conversational R factor. Mib name: rtcpXrHistoryMaxRCQ
RTCP XR Minimum Conversational R Factor	HIST	Gauge	Minimum conversational R factor. Mib name: rtcpXrHistoryMinRCQ
Modem Relay Active Channels Average	HIST	Gauge	Average value within the period time. Mib name: acPMModemRelayActiveChannelsAverage
Modem Relay Active Channels Max	HIST	Gauge	Maximum value within the period time. Mib name: acPMModemRelayActiveChannelsMax
Modem Relay Active Channels Min	HIST	Gauge	Minimum value within the period time. Mib name: acPMModemRelayActiveChannelsMin
DSP Usage Average	HIST	Gauge	Average value within the period time. Mib name: acPMDSPUsageAverage
DSP Usage Max	HIST	Gauge	Maximum value within the period time. Mib name: acPMDSPUsageMax
DSP Usage Min	HIST	Gauge	Minimum value within the period time. Mib name: acPMDSPUsageMin
Registered Users Average	HIST	Gauge	Average value within the period time. Mib name: acPMSBCRegisteredUsersAverage
Registered Users Max	HIST	Gauge	Maximum value within the period time. Mib name: acPMSBCRegisteredUsersMax
Registered Users Min	HIST	Gauge	Minimum value within the period time. Mib name: acPMSBCRegisteredUsersMin
Media Legs Average	HIST	Gauge	Average value within the period time. Mib name: acPMSBCMediaLegsAverage
Media Legs Max	HIST	Gauge	Maximum value within the period time. Mib name: acPMSBCMediaLegsMax
Media Legs Min	HIST	Gauge	Minimum value within the period time. Mib name: acPMSBCMediaLegsMin

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
Transcoding Sessions Average	HIST	Gauge	Average value within the period time. Mib name: acPMSBCTranscodingSessionsAverage
Transcoding Sessions Max	HIST	Gauge	Maximum value within the period time. Mib name: acPMSBCTranscodingSessionsMax
Transcoding Sessions Min	HIST	Gauge	Minimum value within the period time. Mib name: acPMSBCTranscodingSessionsMin
ASR Average	HIST	Gauge	Average value within the period time. Mib name: acPMSBCAsrAverage
ASR Max	HIST	Gauge	Maximum value within the period time. Mib name: acPMSBCAsrMax
ASR Min	HIST	Gauge	Minimum value within the period time. Mib name: acPMSBCAsrMin
ACD Average	HIST	Gauge	Average value within the period time. Mib name: acPMSBCAcdAverage
ACD Max	HIST	Gauge	Maximum value within the period time. Mib name: acPMSBCAcdMax
ACD Min	HIST	Gauge	Minimum value within the period time. Mib name: acPMSBCAcdMin
NER Average	HIST	Gauge	Average value within the period time. Mib name: acPMSBCNerAverage
NER Max	HIST	Gauge	Maximum value within the period time. Mib name: acPMSBCNerMax
NER Min	HIST	Gauge	Minimum value within the period time. Mib name: acPMSBCNerMin
LAD Legs Average	HIST	Gauge	Average value within the period time. Mib name: acPMSBCLadLegsAverage
LAD Legs Max	HIST	Gauge	Maximum value within the period time. Mib name: acPMSBCLadLegsMax
LAD Legs Min	HIST	Gauge	Minimum value within the period time. Mib name: acPMSBCLadLegsMin
IN CAPS Average	HIST	Gauge	Average value within the period time. Mib name: acPMSBCInCapsAverage
IN CAPS Max	HIST	Gauge	Maximum value within the period time. Mib name: acPMSBCInCapsMax
IN CAPS Min	HIST	Gauge	Minimum value within the period time. Mib name: acPMSBCInCapsMin
OUT CAPS Average	HIST	Gauge	Average value within the period time. Mib name: acPMSBCOutCapsAverage

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
OUT CAPS Max	HIST	Gauge	Maximum value within the period time. Mib name: acPMSBCOutCapsMax
OUT CAPS Min	HIST	Gauge	Minimum value within the period time. Mib name: acPMSBCOutCapsMin

2.9.3   Tab: SIP IP to Tel

Frame: System Monitoring SIP (History), Tab: SIP IP to Tel

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
IP to Tel Number of Call Attempts	HIST	Counter	Indicates the number of attempted calls for IP to Tel direction, during last interval. Mib name: acPMSIPAttemptedCallsValIP2Tel
IP to Tel Number of Established Calls	HIST	Counter	Indicates the number of established calls for IP to Tel direction, during last interval. Mib name: acPMSIPEstablishedCallsValIP2Tel
IP to Tel Number of Calls Terminated due to a Busy Line	HIST	Counter	Indicates the number of calls that failed as a result of a busy line for IP to Tel direction, during last interval. Mib name: acPMSIPBusyCallsValIP2Tel
IP to Tel Number of Calls Terminated due to No Answer	HIST	Counter	Indicates the number of calls that weren't answered for IP to Tel direction, during last interval. Mib name: acPMSIPNoAnswerCallsValIP2Tel
IP to Tel Number of Calls Terminated due to Forward	HIST	Counter	Indicates the number of calls that were terminated due to a call forward for IP to Tel direction, during last interval. Mib name: acPMSIPForwardedCallsValIP2Tel
IP to Tel Number of Failed Calls due to No Route	HIST	Counter	Indicates the number of calls whose destinations weren't found for IP to Tel direction, during last interval. Mib name: acPMSIPNoRouteCallsValIP2Tel
IP to Tel Number of Failed Calls due to No Matched Capabilities	HIST	Counter	Indicates the number of calls that failed due to mismatched media server capabilities for IP to Tel direction, during last interval. Mib name: acPMSIPNoMatchCallsValIP2Tel
IP to Tel Number of Failed Calls due to No Resources	HIST	Counter	Indicates the number of calls that failed due to unavailable resources or a media server lock for IP to Tel direction, during last interval. Mib name: acPMSIPNoResourcesCallsValIP2Tel

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
IP to Tel Number of Failed Calls due to Other reasons	HIST	Counter	This counter is incremented as a result of calls that fail due to reasons not covered by the other counters for IP to Tel direction, during last interval. Mib name: acPMSIPFailCallsValIP2Tel
IP to Tel Fax Call Attempts	HIST	Counter	Indicates the number of attempted fax calls for IP to Tel direction, during last interval. Mib name: acPMSIPFaxAttemptedCallsValIP2Tel
IP to Tel Successful Fax Calls	HIST	Counter	Indicates the number of successful fax calls for IP to Tel direction, during last interval. Mib name: acPMSIPFaxSuccessCallsValIP2Tel
IP to Tel Average Call Duration [sec]	HIST	Gauge	Indicates the average call duration of established calls for IP to Tel direction, during last interval. Mib name: acPMSIPCallDurationAverageIP2Tel

2.9.4   Tab: SIP Tel to IP

Frame: System Monitoring SIP (History), Tab: SIP Tel to IP

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
Tel to IP Number of Call Attempts	HIST	Counter	Indicates the number of attempted calls for Tel to IP direction, during last interval. Mib name: acPMSIPAttemptedCallsValTel2IP
Tel to IP Number of Established Calls	HIST	Counter	Indicates the number of established calls for Tel to IP direction, during last interval. Mib name: acPMSIPEstablishedCallsValTel2IP
Tel to IP Number of Calls Terminated due to a Busy Line	HIST	Counter	Indicates the number of calls that failed as a result of a busy line for Tel to IP direction, during last interval. Mib name: acPMSIPBusyCallsValTel2IP
Tel to IP Number of Calls Terminated due to No Answer	HIST	Counter	Indicates the number of calls that weren't answered for Tel to IP direction, during last interval. Mib name: acPMSIPNoAnswerCallsValTel2IP
Tel to IP Number of Calls Terminated due to Forward	HIST	Counter	Indicates the number of calls that were terminated due to a call forward for Tel to IP direction, during last interval. Mib name: acPMSIPForwardedCallsValTel2IP
Tel to IP Number of Failed Calls due to No Route	HIST	Counter	Indicates the number of calls whose destinations weren't found for Tel to IP direction, during last interval. Mib name: acPMSIPNoRouteCallsValTel2IP

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
Tel to IP Number of Failed Calls due to No Matched Capabilities	HIST	Counter	Indicates the number of calls that failed due to mismatched media server capabilities for Tel to IP direction, during last interval. Mib name: acPMSIPNoMatchCallsValTel2IP
Tel to IP Number of Failed Calls due to No Resources	HIST	Counter	Indicates the number of calls that failed due to unavailable resources or a media server lock for Tel to IP direction, during last interval. Mib name: acPMSIPNoResourcesCallsValTel2IP
Tel to IP Number of Failed Calls due to Other reasons	HIST	Counter	This counter is incremented as a result of calls that fail due to reasons not covered by the other counters for Tel to IP direction, during last interval. Mib name: acPMSIPFailCallsValTel2IP
Tel to IP Fax Call Attempts	HIST	Counter	Indicates the number of attempted fax calls for Tel to IP direction, during last interval. Mib name: acPMSIPFaxAttemptedCallsValTel2IP
Tel to IP Successful Fax Calls	HIST	Counter	Indicates the number of successful fax calls for Tel to IP direction, during last interval. Mib name: acPMSIPFaxSuccessCallsValTel2IP
Tel to IP Average Call Duration [sec]	HIST	Gauge	Indicates the average call duration of established calls for Tel to IP direction, during last interval. Mib name: acPMSIPCallDurationAverageTel2IP

2.10   Frame: System Monitoring SIP (Real-Time)

2.10.1   Tab: System IP

Frame: System Monitoring SIP (Real-Time), Tab: System IP

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
Number of Outgoing KBytes	RT	Gauge	This attribute counts the Current total number of outgoing Kbytes (1000 bytes) from the interface, so far from the beginning of the current collection interval as indicated by time Interval. Mib name: acPMNetUtilKBytesTotalTx
Number of Incoming KBytes	RT	Gauge	This attribute counts the total number of Kbytes (1000 bytes) received on the interface, including those received in error, so far from the beginning of the current collection interval as indicated by time Interval. Mib name: acPMNetUtilKBytesTotalRx

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
Number of Outgoing Pkts	RT	Gauge	This attribute counts the Current total number of outgoing Packets from the interface, so far from the beginning of the current collection interval as indicated by time Interval. Mib name: acPMNetUtilPacketsTotalTx
Number of Incoming Pkts	RT	Gauge	This attribute counts the Current total number of Packets received on the interface, including those received in error, so far from the beginning of the current collection interval as indicated by time Interval. Mib name: acPMNetUtilPacketsTotalRx
Number of Incoming Discarded Pkts	RT	Gauge	This attribute counts the Current total number of malformed IP Packets received on the interface from the beginning of the current collection interval. These are packets which are corrupted or discarded due to errors in their IP headers, including bad checksums, version number mismatch, other format errors, time-to-live exceeded, errors discovered in processing their IP options, etc. Mib name: acPMNetUtilDiscardedPacketsTotal

2.10.2   Tab: VoIP Call Statistics

Frame: System Monitoring SIP (Real-Time), Tab: VoIP Call Statistics

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
Num of Active Contexts	RT	Gauge	Indicates the current number of voice calls connected on the box since last clear. Mib name: acPMActiveContextCountVal
G711 Active Calls	RT	Gauge	This attribute indicates the current number of G711 calls present on the TPM. Mib name: acPMChannelsPerCoderValG711
G723 Active Calls	RT	Gauge	This attribute indicates the current number of G723 calls present on the TPM.This attribute is only displayed if the G723 Codec is provisioned on the DSP template. Mib name: acPMChannelsPerCoderValG723
G728 Active Calls	RT	Gauge	This attribute indicates the current number of G728 calls present on the TPM.This attribute is only displayed if the G728 Codec is provisioned on the DSP template. Mib name: acPMChannelsPerCoderValG728

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
G729a Active Calls	RT	Gauge	This attribute indicates the current number of G729a calls present on the TPM.This attribute is only displayed if the G729a Codec is provisioned on the DSP. Mib name: acPMChannelsPerCoderValG729a
G729e Active Calls	RT	Gauge	This attribute indicates the current number of G729e calls present on the TPM.This attribute is only displayed if the G729e Codec is provisioned on the DSP template. Mib name: acPMChannelsPerCoderValG729e
AMR Active Calls	RT	Gauge	This attribute indicates the current number of AMR calls present on the TPM.This attribute is only displayed if the AMR Codec is provisioned on the DSP template. Mib name: acPMChannelsPerCoderValAMR
EVRC Active Calls	RT	Gauge	This attribute indicates the current number of EVRC calls present on the TPM.This attribute is only displayed if the EVRC Codec is provisioned on the DSP template. Mib name: acPMChannelsPerCoderValEVRC
G729EV Active Calls	RT	Gauge	Indicates the value of active calls with G729EV coder. Mib name: acPMChannelsPerCoderValG729EV
EG711 Active Calls	RT	Gauge	Indicates the value of active calls with EG711 coder. Mib name: acPMChannelsPerCoderValEG711
G726 Active Calls	RT	Gauge	Indicates the value of active calls with G726 coder. Mib name: acPMChannelsPerCoderValG726
RTA Active Calls	RT	Gauge	Indicates the value of active calls with RTA coder. Mib name: acPMChannelsPerCoderValRTA
SILK Active Calls	RT	Gauge	Indicates the value of active calls with SILK coder. Mib name: acPMChannelsPerCoderValSILK
AMR-WB Active Calls	RT	Gauge	Indicates the value of active calls with AMR-WB coder. Mib name: acPMChannelsPerCoderValARMWB
G722 Active Calls	RT	Gauge	Indicates the value of active calls with G722 coder. Mib name: acPMChannelsPerCoderValG722
G727 Active Calls	RT	Gauge	Indicates the value of active calls with G727 coder. Mib name: acPMChannelsPerCoderValG727
GSM Active Calls	RT	Gauge	Indicates the value of active calls with GSM coder. Mib name: acPMChannelsPerCoderValGSM
QCELP Active Calls	RT	Gauge	Indicates the value of active calls with QCELP coder. Mib name: acPMChannelsPerCoderValQCELP

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
VOXADPCM Active Calls	RT	Gauge	Indicates the value of active calls with VOXADPCM coder. Mib name: acPMChannelsPerCoderValVOXADPCM
ILBC Active Calls	RT	Gauge	Indicates the value of active calls with ILBC coder. Mib name: acPMChannelsPerCoderValILBC
SPEEX Active Calls	RT	Gauge	Indicates the value of active calls with SPEEX coder. Mib name: acPMChannelsPerCoderValSPEEX
Rx Packet Loss current	RT	Gauge	The total number of RTP packet loss reported by RTCP since last reset. Mib name: acPMModuleRTPPacketLossRxTotal
Tx Packets Loss current	RT	Gauge	The total number of RTP packet loss reported by RTCP since last reset. Mib name: acPMModuleRTPPacketLossTxTotal
Rx Packets Current	RT	Gauge	The total number of packets recieved since last reset. Mib name: acPMModuleRTPPacketsRxTotal
Rx Packets Current	RT	Gauge	The total number of RTP packets transmited since last reset. Mib name: acPMModuleRTPPacketsTxTotal
Modem Relay Active Channels	RT	Gauge	Value of gauge or counter. Mib name: acPMModemRelayActiveChannelsVal
DSP Usage	RT	Gauge	Value of gauge or counter. Mib name: acPMDSPUsageVal
Registered Users	RT	Gauge	Value of gauge or counter. Mib name: acPMSBCRegisteredUsersVal
Media Legs	RT	Gauge	Value of gauge or counter. Mib name: acPMSBCMediaLegsVal
Transcoding Sessions	RT	Gauge	Value of gauge or counter. Mib name: acPMSBCTranscodingSessionsVal
ASR	RT	Gauge	Value of gauge or counter. Mib name: acPMSBCAsrVal
ACD	RT	Gauge	Value of gauge or counter. Mib name: acPMSBCAcdVal
NER	RT	Gauge	Value of gauge or counter. Mib name: acPMSBCNerVal
LAD Legs	RT	Gauge	Value of gauge or counter. Mib name: acPMSBCLadLegsVal
IN CAPS	RT	Gauge	Value of gauge or counter. Mib name: acPMSBCInCapsVal

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
OUT CAPS	RT	Gauge	Value of gauge or counter. Mib name: acPMSBCOutCapsVal

2.10.3   Tab: SIP IP to Tel

Frame: System Monitoring SIP (Real-Time), Tab: SIP IP to Tel

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
IP to Tel Number of Call Attempts	RT	Counter	Indicates the number of attempted calls for IP to Tel direction, during last interval. Mib name: acPMSIPAttemptedCallsValIP2Tel
IP to Tel Number of Established Calls	RT	Counter	Indicates the number of established calls for IP to Tel direction, during last interval. Mib name: acPMSIPEstablishedCallsValIP2Tel
IP to Tel Number of Calls Terminated due to a Busy Line	RT	Counter	Indicates the number of calls that failed as a result of a busy line for IP to Tel direction, during last interval. Mib name: acPMSIPBusyCallsValIP2Tel
IP to Tel Number of Calls Terminated due to No Answer	RT	Counter	Indicates the number of calls that weren't answered for IP to Tel direction, during last interval. Mib name: acPMSIPNoAnswerCallsValIP2Tel
IP to Tel Number of Calls Terminated due to Forward	RT	Counter	Indicates the number of calls that were terminated due to a call forward for IP to Tel direction, during last interval. Mib name: acPMSIPForwardedCallsValIP2Tel
IP to Tel Number of Failed Calls due to No Route	RT	Counter	Indicates the number of calls whose destinations weren't found for IP to Tel direction, during last interval. Mib name: acPMSIPNoRouteCallsValIP2Tel
IP to Tel Number of Failed Calls due to No Matched Capabilities	RT	Counter	Indicates the number of calls that failed due to mismatched media server capabilities for IP to Tel direction, during last interval. Mib name: acPMSIPNoMatchCallsValIP2Tel
IP to Tel Number of Failed Calls due to No Resources	RT	Counter	Indicates the number of calls that failed due to unavailable resources or a media server lock for IP to Tel direction, during last interval. Mib name: acPMSIPNoResourcesCallsValIP2Tel
IP to Tel Number of Failed Calls due to Other reasons	RT	Counter	This counter is incremented as a result of calls that fail due to reasons not covered by the other counters for IP to Tel direction, during last interval. Mib name: acPMSIPFailCallsValIP2Tel

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
IP to Tel Fax Call Attempts	RT	Counter	Indicates the number of attempted fax calls for IP to Tel direction, during last interval. Mib name: acPMSIPFaxAttemptedCallsValIP2Tel
IP to Tel Successful Fax Calls	RT	Counter	Indicates the number of successful fax calls for IP to Tel direction, during last interval. Mib name: acPMSIPFaxSuccessCallsValIP2Tel
IP to Tel Average Call Duration [sec]	RT	Gauge	Indicates the average call duration of established calls for IP to Tel direction, during last interval. Mib name: acPMSIPCallDurationAverageIP2Tel

2.10.4   Tab: SIP Tel to IP

Frame: System Monitoring SIP (Real-Time), Tab: SIP Tel to IP

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
Tel to IP Number of Call Attempts	RT	Counter	Indicates the number of attempted calls for Tel to IP direction, during last interval. Mib name: acPMSIPAttemptedCallsValTel2IP
Tel to IP Number of Established Calls	RT	Counter	Indicates the number of established calls for Tel to IP direction, during last interval. Mib name: acPMSIPEstablishedCallsValTel2IP
Tel to IP Number of Calls Terminated due to a Busy Line	RT	Counter	Indicates the number of calls that failed as a result of a busy line for Tel to IP direction, during last interval. Mib name: acPMSIPBusyCallsValTel2IP
Tel to IP Number of Calls Terminated due to No Answer	RT	Counter	Indicates the number of calls that weren't answered for Tel to IP direction, during last interval. Mib name: acPMSIPNoAnswerCallsValTel2IP
Tel to IP Number of Calls Terminated due to Forward	RT	Counter	Indicates the number of calls that were terminated due to a call forward for Tel to IP direction, during last interval. Mib name: acPMSIPForwardedCallsValTel2IP
Tel to IP Number of Failed Calls due to No Route	RT	Counter	Indicates the number of calls whose destinations weren't found for Tel to IP direction, during last interval. Mib name: acPMSIPNoRouteCallsValTel2IP
Tel to IP Number of Failed Calls due to No Matched Capabilities	RT	Counter	Indicates the number of calls that failed due to mismatched media server capabilities for Tel to IP direction, during last interval. Mib name: acPMSIPNoMatchCallsValTel2IP

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
Tel to IP Number of Failed Calls due to No Resources	RT	Counter	Indicates the number of calls that failed due to unavailable resources or a media server lock for Tel to IP direction, during last interval. Mib name: acPMSIPNoResourcesCallsValTel2IP
Tel to IP Number of Failed Calls due to Other reasons	RT	Counter	This counter is incremented as a result of calls that fail due to reasons not covered by the other counters for Tel to IP direction, during last interval. Mib name: acPMSIPFailCallsValTel2IP
Tel to IP Fax Call Attempts	RT	Counter	Indicates the number of attempted fax calls for Tel to IP direction, during last interval. Mib name: acPMSIPFaxAttemptedCallsValTel2IP
Tel to IP Successful Fax Calls	RT	Counter	Indicates the number of successful fax calls for Tel to IP direction, during last interval. Mib name: acPMSIPFaxSuccessCallsValTel2IP
Tel to IP Average Call Duration [sec]	RT	Gauge	Indicates the average call duration of established calls for Tel to IP direction, during last interval. Mib name: acPMSIPCallDurationAverageTel2IP

2.11   Frame: Trunk Group Monitoring (History)

2.11.1   Tab: Trunk Group Statistics

Frame: Trunk Group Monitoring (History), Tab: Trunk Group Statistics

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
Trunk Group Utilization (%)	HIST	Gauge	Value of gauge or counter. Mib name: acPMSIPTrunkGroupPercentageUtilizationVal
Trunk Group Utilization (channels)	HIST	Gauge	Value of gauge or counter. Mib name: acPMSIPTrunkGroupUtilizationVal
Tel to IP Trunk Group Established Calls Val	HIST	Counter	Value of gauge or counter. Mib name: acPMSIPTel2IPTrunkGroupEstablishedCallsVal
IP to Tel Trunk Group Established Calls Val	HIST	Counter	Value of gauge or counter. Mib name: acPMSIPIP2TelTrunkGroupEstablishedCallsVal
No Resources Calls	HIST	Gauge	Value of gauge or counter. Mib name: acPMSIPTrunkGroupNoResourcesCallsVal
Average Call Duration (sec)	HIST	Gauge	Value of gauge or counter. Mib name: acPMSIPTrunkGroupCallDurationAverage

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
Total Call Duration (sec)	HIST	Gauge	Value of gauge or counter. Mib name: acPMSIPTrunkGroupCallDurationTotal
Trunk Group All Trunks Busy (sec)	HIST	Counter	Value of gauge or counter. Mib name: acPMSIPTrunkGroupAllTrunksBusyVal
All Trunks Busy (%)	HIST	Gauge	Value of gauge or counter. Mib name: acPMSIPTrunkGroupAllTrunksBusyPercentageVal

2.12   Frame: Trunk Group Monitoring (Real-Time)

2.12.1   Tab: Trunk Group Statistics

Frame: Trunk Group Monitoring (Real-Time), Tab: Trunk Group Statistics

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
Trunk Group Utilization (%)	RT	Gauge	Value of gauge or counter. Mib name: acPMSIPTrunkGroupPercentageUtilizationVal
Trunk Group Utilization (channels)	RT	Gauge	Value of gauge or counter. Mib name: acPMSIPTrunkGroupUtilizationVal
Tel to IP Trunk Group Established Calls Val	RT	Counter	Value of gauge or counter. Mib name: acPMSIPTel2IPTrunkGroupEstablishedCallsVal
IP to Tel Trunk Group Established Calls Val	RT	Counter	Value of gauge or counter. Mib name: acPMSIPIP2TelTrunkGroupEstablishedCallsVal
No Resources Calls	RT	Gauge	Value of gauge or counter. Mib name: acPMSIPTrunkGroupNoResourcesCallsVal
Average Call Duration (sec)	RT	Gauge	Value of gauge or counter. Mib name: acPMSIPTrunkGroupCallDurationAverage
Total Call Duration (sec)	RT	Gauge	Value of gauge or counter. Mib name: acPMSIPTrunkGroupCallDurationTotal
Trunk Group All Trunks Busy (sec)	RT	Counter	Value of gauge or counter. Mib name: acPMSIPTrunkGroupAllTrunksBusyVal
All Trunks Busy (%)	RT	Gauge	Value of gauge or counter. Mib name: acPMSIPTrunkGroupAllTrunksBusyPercentageVal

2.13 Frame: Trunk Monitoring (History)

2.13.1 Tab: Trunk Performance

Frame: Trunk Monitoring (History), Tab: Trunk Performance

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
Trunk utilization Avg	HIST	Gauge	Indicates the Average of simultaneously busy DS0 channels on this Trunk up to this point in time during the collection interval, as indicated by the Time Interval. A busy channel is when the Physical DS0 Termination isn't in Null context or OOS. A Trunk is either E1 or T1. Mib name: acPMTrunkUtilizationAverage
Trunk utilization Min	HIST	Gauge	Indicates the Minimum of simultaneously busy DS0 channels on this Trunk up to this point in time during the collection interval, as indicated by the Time Interval. A busy channel is when the Physical DS0 Termination isn't in Null context or OOS. A Trunk is either E1 or T1. Mib name: acPMTrunkUtilizationMin
Trunk utilization Max	HIST	Gauge	Indicates the Maximum of simultaneously busy DS0 channels on this Trunk up to this point in time during the collection interval, as indicated by the Time Interval. A busy channel is when the Physical DS0 Termination isn't in Null context or OOS. A Trunk is either E1 or T1. Mib name: acPMTrunkUtilizationMax
Trunk Errored Seconds	HIST	Gauge	Indicates the number of Errored Seconds. Mib name: dsx1IntervalESs
Trunk Controlled Slip Seconds	HIST	Gauge	Indicates the number of Controlled Slip Seconds. Mib name: dsx1IntervalCSSs
Trunk Path Coding Violations	HIST	Gauge	Indicates the number of Path Coding Violations. Mib name: dsx1IntervalPCVs
Trunk Bursty Errored Seconds	HIST	Gauge	Indicates the number of Bursty Errored Seconds. Mib name: dsx1IntervalBESs
Tel to IP Trunk Established Calls	HIST	Gauge	Value of gauge or counter. Mib name: acPMSIPTel2IPTrunkEstablishedCallsVal
IP to Tel Trunk Established Calls	HIST	Gauge	Value of gauge or counter. Mib name: acPMSIPIP2TelTrunkEstablishedCallsVal

2.14   Frame: Trunk Monitoring (History)

2.14.1   Tab: Trunk Performance

Frame: Trunk Monitoring (History), Tab: Trunk Performance

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
Trunk utilization Avg	HIST	Gauge	Indicates the Average of simultaneously busy DS0 channels on this Trunk up to this point in time during the collection interval, as indicated by the Time Interval. A busy channel is when the Physical DS0 Termination isn't in Null context or OOS. A Trunk is either E1 or T1. Mib name: acPMTrunkUtilizationAverage
Trunk utilization Min	HIST	Gauge	Indicates the Minimum of simultaneously busy DS0 channels on this Trunk up to this point in time during the collection interval, as indicated by the Time Interval. A busy channel is when the Physical DS0 Termination isn't in Null context or OOS. A Trunk is either E1 or T1. Mib name: acPMTrunkUtilizationMin
Trunk utilization Max	HIST	Gauge	Indicates the Maximum of simultaneously busy DS0 channels on this Trunk up to this point in time during the collection interval, as indicated by the Time Interval. A busy channel is when the Physical DS0 Termination isn't in Null context or OOS. A Trunk is either E1 or T1. Mib name: acPMTrunkUtilizationMax
Trunk Errored Seconds	HIST	Gauge	Indicates the number of Errored Seconds. Mib name: dsx1IntervalESs
Trunk Controlled Slip Seconds	HIST	Gauge	Indicates the number of Controlled Slip Seconds. Mib name: dsx1IntervalCSSs
Trunk Path Coding Violations	HIST	Gauge	Indicates the number of Path Coding Violations. Mib name: dsx1IntervalPCVs
Trunk Bursty Errored Seconds	HIST	Gauge	Indicates the number of Bursty Errored Seconds. Mib name: dsx1IntervalBESs
Tel to IP Trunk Established Calls	HIST	Gauge	Value of gauge or counter. Mib name: acPMSIPTel2IPTrunkEstablishedCallsVal
IP to Tel Trunk Established Calls	HIST	Gauge	Value of gauge or counter. Mib name: acPMSIPIP2TelTrunkEstablishedCallsVal

2.15 Frame: Trunk Monitoring (Real-Time)

2.15.1 Tab: Trunk Performance

Frame: Trunk Monitoring (Real-Time), Tab: Trunk Performance

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
Trunk utilization	RT	Gauge	This attribute indicates the Current simultaneous busy DS0 channels on this Trunk. A busy channel is when the Physical DS0 Termination isn't in Null context or OOS. A Trunk is either E1 or T1. Mib name: acPMTrunkUtilizationVal
Trunk Calls Duration	RT	Gauge	Value of gauge or counter. Mib name: acPMPSTNTrunkActivitySecondsVal
Trunk Errored Seconds	RT	Gauge	This attribute indicates amount of Errored Seconds encountered by a DS1 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0. Mib name: dsx1TotalESs
Trunk Controlled Slip Seconds	RT	Gauge	This attribute indicates amount of Controlled Slip Seconds encountered by a DS1 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0. Mib name: dsx1TotalCSSs
Trunk Path Coding Violations	RT	Gauge	This attribute indicates amount of Path Coding Violations encountered by a DS1 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0. Mib name: dsx1TotalPCVs
Trunk Bursty Errored Seconds	RT	Gauge	This attribute indicates amount of Bursty Errored Seconds encountered by a DS1 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0. Mib name: dsx1TotalBESs
Tel to IP Trunk Established Calls	RT	Gauge	Value of gauge or counter. Mib name: acPMSIPTel2IPTrunkEstablishedCallsVal
IP to Tel Trunk Established Calls	RT	Gauge	Value of gauge or counter. Mib name: acPMSIPIP2TelTrunkEstablishedCallsVal

2.16   Frame: Trunk Monitoring (Real-Time)

2.16.1   Tab: Trunk Performance

Frame: Trunk Monitoring (Real-Time), Tab: Trunk Performance

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
Trunk utilization	RT	Gauge	This attribute indicates the Current simultaneous busy DS0 channels on this Trunk. A busy channel is when the Physical DS0 Termination isn't in Null context or OOS. A Trunk is either E1 or T1. Mib name: acPMTrunkUtilizationVal
Trunk Calls Duration	RT	Gauge	Value of gauge or counter. Mib name: acPMPSTNTrunkActivitySecondsVal
Trunk Errored Seconds	RT	Gauge	This attribute indicates amount of Errored Seconds encountered by a DS1 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0. Mib name: dsx1TotalESs
Trunk Controlled Slip Seconds	RT	Gauge	This attribute indicates amount of Controlled Slip Seconds encountered by a DS1 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0. Mib name: dsx1TotalCSSs
Trunk Path Coding Violations	RT	Gauge	This attribute indicates amount of Path Coding Violations encountered by a DS1 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0. Mib name: dsx1TotalPCVs
Trunk Bursty Errored Seconds	RT	Gauge	This attribute indicates amount of Bursty Errored Seconds encountered by a DS1 interface in the previous 24 hour interval. Invalid 15 minute intervals count as 0. Mib name: dsx1TotalBESs
Tel to IP Trunk Established Calls	RT	Gauge	Value of gauge or counter. Mib name: acPMSIPTel2IPTrunkEstablishedCallsVal
IP to Tel Trunk Established Calls	RT	Gauge	Value of gauge or counter. Mib name: acPMSIPIP2TelTrunkEstablishedCallsVal

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3   Alarms

Supported alarms / events can fall into one of the following categories:

■   Standard traps: traps originated by the media gateway / server - all the standard traps are treated are events.

■   Proprietary alarms / events: traps originated by the media gateway / server and defined in the gateway proprietary MIB.

■   EMS alarms / events: traps originated by the EMS application and defined in the EMS proprietary MIB.

To find out which traps are defined as Events refer to 'Alarm Name' or 'Alarm Title' fields in the table. All the events are marked with [Event] prefix. This is how events are marked in the EMS Alarms Browser and Alarms History windows.

Each alarm / event described in this section includes the following information:

Information Included in Each Alarm

Description	Description of specific problem. This value is displayed from the variable-binding tgTrapGlobalsTextualDescription. The document includes a few examples of the possible values of this field.
Alarm Name	The alarm name, as it appears in the EMS Alarm Browser.
SNMP Trap OID	NOTIFICATION-TYPE OID as it appears in the MIB.
Alarm Type	Alarm type according to ITU X.733 definition. This value is displayed from the variable-binding tgTrapGlobalsType.
Alarm Source	Possible values of sources if applicable to a specific alarm. This value is displayed from the variable-binding tgTrapGlobalsSource. For more information, refer to the *SNMP Reference Guide*.
Alarm Probable Cause	Alarm probable cause according to ITU X.733 definition. This value is displayed from the variable-binding tgTrapGlobalsProbableCause.
Severity	Possible values of severities. This value is displayed from the variable-binding tgTrapGlobalsSeverity.
Additional Info	Additional information fields provided by MG application, depending on the specific scenario. These values are displayed from tgTrapGlobalsAdditionalInfo1, tgTrapGlobalsAdditionalInfo2 and tgTrapGlobalsAdditionalInfo3. The document includes a few examples of the possible values of this field.
SNMP Trap Name	NOTIFICATION-TYPE Name as it appears in the MIB.
Corrective Action	Possible corrective action when applicable.

3.1 Standard Traps

3.1.1 Cold Start

Cold Start

Description	SNMPv2-MIB: A coldStart trap signifies that the SNMP entity, supporting a notification originator application, is reinitializing itself and that its configuration may have been altered.
SNMP Alarm	coldStart
SNMP OID	1.3.6.1.6.3.1.1.5.1
Alarm Title	[Event] Cold Start
Alarm Type	Communication Alarm
Alarm Source	
Probable Cause	Other
Severity	Clear
Additional Info1,2,3	
Corrective Action	

3.1.2 Link Down

This alarm is supported for Ethernet and DS1 links.

Link Down

Description	SNMPv2-MIB: A linkDown trap signifies that the SNMP entity, acting in an agent role, has detected that the ifOperStatus object for one of its communication links is about to enter the down state from some other state (but not from the notPresent state). This other state is indicated by the included value of ifOperStatus.
SNMP Alarm	linkDown
SNMP OID	1.3.6.1.6.3.1.1.5.3
Alarm Title	[Event] Link Down
Alarm Type	Communication Alarm
Alarm Source	
Probable Cause	Other
Severity	Major
Additional Info1,2,3	
Corrective Action	

3.1.3   Link Up

This alarm is supported for Ethernet and DS1 links.

Link Up

Description	SNMPv2-MIB: A linkUp trap signifies that the SNMP entity, acting in an agent role, has detected that the ifOperStatus object for one of its communication links left the down state and transitioned into some other state (but not into the notPresent state). This other state is indicated by the included value of ifOperStatus.
SNMP Alarm	linkUp
SNMP OID	1.3.6.1.6.3.1.1.5.4
Alarm Title	[Event] Link Up
Alarm Type	Communication Alarm
Alarm Source	
Probable Cause	Other
Severity	Clear
Additional Info1,2,3	
Corrective Action	

3.1.4   Authentication Failure

Authentication Failure

Description	SNMPv2-MIB: An authenticationFailure trap signifies that the SNMP entity has received a protocol message that is no properly authenticated. While all implementations of SNMP entities MAY be capable of generating this trap, the snmpEnableAuthenTraps object indicates whether this trap will be generated.
SNMP Alarm	authenticationFailure
SNMP OID	1.3.6.1.6.3.1.1.5.5
Alarm Title	[Event] Authentication Failure
Alarm Type	Communication Alarm
Alarm Source	
Probable Cause	Other
Severity	Major
Additional Info1,2,3	
Corrective Action	

3.1.5   DS1 Line Status

DS1 Line Status

Description	From RFC 3895 (Definitions of Managed Objects for the DS1, E1, DS2, and E2 Interface Types. O. Nicklass, Ed.. September 2004): A dsx1LineStatusChange trap is sent when the value of an instance dsx1LineStatus changes. It can be utilized by an NMS to trigger polls. When the line status change results from a higher level line status change (i.e., ds3), then no traps for the ds1 are sent.
SNMP Alarm	dsx1LineStatusChange
SNMP OID	1.3.6.1.2.1.10.18.15.0.1
Alarm Title	[Event] DS1 Line Status
Alarm Type	Communication Alarm
Alarm Source	Trunk# (number of trunk)
Probable Cause	Other
Severity	Major on raise, Clear on clear

Additional Info1,2,3	Updated DS1 Line Status.
	This variable indicates the Line Status of the interface. It contains loopback, failure, received 'alarm' and transmitted 'alarms' information.
	The dsx1LineStatus is a bit map represented as a sum, therefore, it can represent multiple failures (alarms) and a LoopbackState simultaneously. dsx1NoAlarm must be set if and only if no other flag is set. If the dsx1loopbackState bit is set, the loopback in effect can be determined from the dsx1loopbackConfig object. The various bit positions are:
	1 dsx1NoAlarm No alarm present
	2 dsx1RcvFarEndLOF Far end LOF (a.k.a., Yellow Alarm)
	4 dsx1XmtFarEndLOF Near end sending LOF Indication
	8 dsx1RcvAIS Far end sending AIS
	16 dsx1XmtAIS Near end sending AIS
	32 dsx1LossOfFrame Near end LOF (a.k.a., Red Alarm)
	64 dsx1LossOfSignal Near end Loss Of Signal
	128 dsx1LoopbackState Near end is looped
	256 dsx1T16AIS E1 TS16 AIS
	512 dsx1RcvFarEndLOMF Far End Sending TS16 LOMF
	1024 dsx1XmtFarEndLOMF Near End Sending TS16 LOMF
	2048 dsx1RcvTestCode Near End detects a test code
	4096 dsx1OtherFailure Any line status not defined here
	8192 dsx1UnavailSigState Near End in Unavailable Signal State
	16384 dsx1NetEquipOOS Service Carrier Equipment Out of
	32768 dsx1RcvPayloadAIS DS2 Payload AIS
	65536 dsx1Ds2PerfThreshold DS2 Performance Threshold Exceeded
Corrective Action	-

3.2 EMS Alarms

3.2.1 EMS Trap Receiver Binding Error

EMS Trap Receiver Binding Error

Description	This alarm is generated during server startup if an error occurs indicating that the SNMP trap receiver port is already taken.
SNMP OID	acEMSSnmpCannotBindError- 1.3.6.1.4.1.5003.9.20.3.2.0.1
AlarmTitle	[Event] EMS Trap Receiver Binding Error
ItuAlarmType	Environmental Alarm
AlarmSource	EMS Server
Probable Cause	Application Subsystem Failure
Severity	Critical
Additional Info	-
Corrective Action	Run netstats command to verify which application uses the alarms reception port (by default UDP post 162). • EMS application: If it's busy, check which application uses this port. If it's not freed by the EMS application, restart the EMS Server application according to the equipment installation manual. • Other network management application: change the EMS application and all managed gateways' default alarm reception ports.
Media Gateways	All the gateways managed by the EMS

3.2.2 GW Connection Alarm

GW Connection Alarm

Description	Originated by the EMS when an SNMP Timeout occurs for the first time in the Media Gateway.
SNMP OID	acEMSNodeConnectionLostAlarm - 1.3.6.1.4.1.5003.9.20.3.2.0.3
AlarmTitle	GW Connection Alarm
ItuAlarmType	Communications Alarm
AlarmSource	Media Gateway
Probable Cause	Communications Subsystem Failure
Severity	Critical
Additional Info	When an SBA is configured, displays the 'SBA Description' field.
Corrective Action	Communication problem: Try to ping the gateway to check if there is network communication. • Default gateway alive: Open the network screen. Check the default gateway IP address and ping it. • SNMP Community Strings: Verify that the community string defined in the EMS for the gateway matchs the actual gateway community strings. To check the community string, right-click on the gateway, select the 'Details' menu. Default community strings: read = public, write = private. • Hardware Problem: Check that the gateway is alive according to the LEDs. Verify that network and power cables are in place and plugged in.
Media Gateways	All the gateways managed by the EMS

3.2.3   GW Mismatch Alarm

GW Mismatch Alarm

Description	Activated when the EMS detects a hardware, software, predefine or configuration mismatch.
	• Software Mismatch:
	Activated when the EMS detects a software version mismatch between the actual and the previous definition of the Media Gateway (for example, Version 4.0.353 instead of the previously defined 4.0.278). This is also the case when the new version is not defined in the Software Manager.
	• Hardware Mismatch:
	Activated when the EMS detects a hardware mismatch between the actual and the previous definition of a Media Gateway.
	• Configuration Mismatch:
	Activated when the EMS detects a configuration mismatch between the actual parameter values provisioned and previous parameter values provisioned.
SNMP OID	acEMSNoMismatchNodeAlarm - 1.3.6.1.4.1.5003.9.20.3.2.0.9
AlarmTitle	GW Mismatch Alarm
ItuAlarmType	Equipment Alarm
AlarmSource	Media Gateway/Software
	Media Gateway/Hardware
	Media Gateway/Configuration
Probable Cause	Other
Severity	Clear
Additional Info	-

Corrective Action	- Software Mismatch: ✔ Define the detected version in the EMS Software Manager ✔ Perform a Software Upgrade on the gateway with one of the supported versions. - Hardware Mismatch: ✔ Perform remove / add a gateway from the EMS tree in order to resync EMS and the gateway status ✔ Verify in the Software Manager that an appropriate version exists for the hardware type displayed in the error message - Configuration Mismatch: ✔ Run Configuration Verification command in order to compare EMS configuration and actual MG configuration: **-MG configuration is incorrect**: use configuration download to update MG with correct configuration saved in the EMS database. **-MG is correct, EMS is not updated**: use configuration upload to save a correct MG configuration in the EMS database. - Check the Actions Journal for recent updates of the gateway.
Media Gateways	All the gateways managed by the EMS.

3.2.4   EMS Server Started

EMS Server Started

Description	Originated each time the server is started or restarted (warm boot/reboot) by the EMS Watchdog Process
SNMP OID	acEMSServerStartup- 1.3.6.1.4.1.5003.9.20.3.2.0.11
AlarmTitle	[Event] EMS Server Started
ItuAlarmType	Communications Alarm
AlarmSource	EMS Server
Probable Cause	Other
Severity	Major
Additional Info	-
Corrective Action	-
Media Gateways	All the gateways managed by the EMS.

3.2.5   Software Replaced

Software Replaced

Description	Originates when the EMS discovers a software version replace between board versions, for example, from V4.6.009.004 to V4.6.152.003 (when both versions are managed by the EMS). Software Replace old version : <old version> new version <new version>
SNMP OID	acEMSSoftwareReplaceAlarm- 1.3.6.1.4.1.5003.9.20.3.2.0.14
AlarmTitle	[Event] Software Replaced
ItuAlarmType	Communications Alarm
AlarmSource	EMS Server
Probable Cause	Other
Severity	Info
Additional Info	If you initiated a performance measurements polling process before you initiated the software replacement process, the polling process is stopped.
Corrective Action	No action should be taken; this is an information alarm.
Media Gateways	All the gateways managed by the EMS.

3.2.6   Hardware Replaced

Hardware Replaced

Description	Originated when the EMS discovers a different gateway (according to the MAC address) to what was initially defined, while the Hardware Type remains the same. Hardware Replace is discovered by the MAC address and performed during Board Started trap.
SNMP OID	acEMSHardwareReplaceAlarm - 1.3.6.1.4.1.5003.9.20.3.2.0.15
AlarmTitle	[Event] Hardware Replaced
ItuAlarmType	Equipment Alarm
AlarmSource	Media Gateway
Probable Cause	Other
Severity	Major
Additional Info	-
Corrective Action	-

Media Gateways	MediaPacks, Mediant 1000, Mediant 2000, Mediant 3000

3.2.7 HTTP/HTTPS Access Disabled

HTTP/HTTPS Access Disabled

Description	Originated when HTTP access is disabled by EMS hardening but the EMS manages media gateways that require HTTP access for software upgrade. Originated on server startup.
SNMP OID	acEMSHTTPDisabled - 1.3.6.1.4.1.5003.9.20.3.2.0.16
AlarmTitle	[Event] HTTP/HTTPS Access Disabled
ItuAlarmType	Environmental Alarm
AlarmSource	EMS Server
Probable Cause	Application Subsystem Failure
Severity	Major
Additional Info	-
Corrective Action	Separate the gateways between two EMS servers (secured & unsecured)
Media Gateways	Gateways using the HTTP server for the software upgrade procedure: MediaPacks, Mediant 1000, Mediant 2000, Mediant 3000

3.2.8 PM File Generated

PM File Generated

Description	Originated when a PM file is generated in the EMS server, and it can be retrieved by a higher level management system.
SNMP OID	acEMSPmFileGenerate - 1.3.6.1.4.1.5003.9.20.3.2.0.18
AlarmTitle	[Event] PM File Generated
ItuAlarmType	Other
AlarmSource	EMS Server
Probable Cause	Other
Severity	Info
Additional Info	The performance summary data from<start polling interval time> to<timeStempFileTo> of media gateway<nodeIPAdd> was saved in PM file <fileName>.

Description	Originated when a PM file is generated in the EMS server, and it can be retrieved by a higher level management system.
Corrective Action	-
Media Gateways	All Gateways

3.2.9 PM Polling Error

PM Polling Error

Description	Originated when a PM History stops collecting performance summary data from MG. Possible reasons are: NTP synchronization lost, Connection Loss, SW Mismatch, etc..
SNMP OID	acEMSPmHistoryAlarm - 1.3.6.1.4.1.5003.9.20.3.2.0.19
AlarmTitle	[Event] PM Polling Error
ItuAlarmType	Other
AlarmSource	EMS Server
Probable Cause	Other
Severity	Minor
Additional Info	
Corrective Action	Verify in the 'Description' (see above) the reason why the PM history stopped. • When the reason is 'NTP synchronization lost', verify that the gateway and the EMS Server machine are synchronized to the same NTP server and have accurate time definitions. • When the reason is 'Software Mismatch', you can stop the PM history collection until the new version is added to the Software Manager. • When the reason is 'Connection Loss' between the EMS Server and the gateway, polling continues automatically when the connection is re-established; the purpose of the alarm in this case is to inform users of missing samples. Note: The alarm continues to activate every 15 minutes unless you fix the problem or manually stop PM polling of the Gateway.
Media Gateways	All Gateways

3.2.10   Cold Start Missed

Cold Start Missed

Description	Originated when Carrier Grade Alarm System recognizes coldStart trap has been missed.
SNMP OID	acEMSNodeColdStartMissedEvent - 1.3.6.1.4.1.5003.9.20.3.2.0.20
AlarmTitle	[Event] Cold Start Missed
ItuAlarmType	Other
AlarmSource	
Probable Cause	Receive failure
Severity	Clear
Additional Info	
Corrective Action	
Media Gateways	All the managed Gateways

3.2.11   Security Alarm

Security Alarm

Description	Activated when one of more Radius servers are not reachable. When none of the radius servers can be reached, a Critical Severity alarm is generated.
SNMP OID	acEMSSecurityAlarm - 1.3.6.1.4.1.5003.9.20.3.2.0.23
AlarmTitle	Security Alarm
ItuAlarmType	Processing Error Alarm
AlarmSource	EMS Server / Radius <#>
Probable Cause	Other
Severity	Minor, Major, Critical
Additional Info	
Corrective Action	
Media Gateways	

3.2.12 Security Event

Security Event

Description	This event is generated when a specific user is blocked after reaching the maximum number of login attempts, or when the EMS failed to sync EMS and Mediant 5000 / 8000 users.
SNMP OID	acEMSSecurityEvent - 1.3.6.1.4.1.5003.9.20.3.2.0.24
AlarmTitle	[Event] Security Event
ItuAlarmType	Other
AlarmSource	EMS Server / User Name, EMS Sever / User Sync
Probable Cause	Other
Severity	Indeterminate
Additional Info	
Corrective Action	
Media Gateways	

3.2.13 Topology Update Event

Topology Update Event

Description	This event is issued by the EMS when a Gateway or Region is added/removed/updated in the EMS application and includes the following information: 　　Action: Add / Remove / Update GW or Region 　　Region Name 　　GW Name 　　GW IP Note: For opening an EMS client in the MG context, the gateway IP address should be provided.
SNMP OID	acEMSTopologyUpdateEvent - 1.3.6.1.4.1.5003.9.20.3.2.0.25
Alarm Title	[Event] Topology Update
Alarm Source	EMS Server
Severity	Indeterminate
Alarm Type	Other
Probable Cause	Other

Additional Info	Additional Info 1 field will include following details:
	Region: X1 'X2' [GW: Y1 'Y2' 'Y3' 'Y4']
	X1 = Region ID (unique identifier in the EMS data base used for region identification)
	X2 = Region name as it defined by EMS operator
	Y1 = GW ID (unique identifier in the EMS data base used for GW identification)
	Y2 = GW Name as it defined by EMS operator
	Y3 = GW IP as it defined by EMS operator
	Y4 = GW Type as it identified by EMS during the first connection to the GW. If first connection was not successful during the add operation, it will trigger an 'Add GW' event with Unknown GW type, and 'Update GW' event once the initial connection to the GW has been successfull. The following GWs will be supported: MP,M1K, M2K, M3K, M5K, M8K
	Region details will always be part of the alarm, while GW info will be displayed when event is GW related.
	All the fields related to the GW will always be displayed to allow easy parsing.
	Examples:
	(Description=Add Region) Region: 7 'Test Lab'
	(Description=Update Region) Region: 7 'My Updated Region'
	(Description=Add GW) Region: 7 'My Updated Region', GW: 22 'MG14' '1.2.3.4' 'Unknown', PM Polling: disabled
	(Description=Update GW) Region: 7 'My Updated Region', GW: 22 'My MG 15' '4.5.6.7' 'M3K'
	(Description=Update GW) Region: 7 'My Updated Region', GW: 22 'My MG 15' '4.5.6.7', PM Polling: enabled
	(Description=Remove GW) Region: 7 'My Updated Region', GW: 22 'My MG 15' '4.5.6.7' 'M3K', Polling: enabled
	(Description=Remove Region) Region: 7 'My Updated Region'
Corrective Action	
Media Gateways	

3.2.14 Topology File Event

Topology File Event

Description	This event is issued by the EMS when the Topology File is updated on the EMS Server machine.The Topology file is automatically updated upon the addition /removal of a Media Gateway or upon updates to the Media Gateway properties. For more information, refer to the *OAMP Integration Guide*.
SNMP OID	acEMSTopologyFileEvent- 1.3.6.1.4.1.5003.9.20.3.2.0.26
Alarm Title	[Event] Topology File
Alarm Source	
Severity	Indeterminate
Alarm Type	Other
Probable Cause	Other
Additional Info	File Name: MGsTopologyList.csv
Corrective Action	
Media Gateways	

3.2.15   Synchronizing Alarms Event

Synchronizing Alarms Event

Description	This event is issued when the EMS is not able to retrieve the entire missing alarms list from the History table. Information regarding the number of retrieved alarms, and number of alarms EMS failed to retrieve is provided in the Additional Info field.
SNMP OID	acEMSSyncAlarmEvent - 1.3.6.1.4.1.5003.9.20.3.2.0.27
Alarm Title	[Event] Synchronizing Alarms
Alarm Source	EMS Server
Severity	Indeterminate
Alarm Type	Other
Probable Cause	Other
Additional Info	Retrieved x missed alarms, failed to retrieve y alarms.
Corrective Action	
Media Gateways	

3.2.16   Synchronizing Active Alarms Event

Synchronizing Active Alarms Event

Description	This event is issued when the EMS is not able to perform synchronization with the History alarms table, and instead performs synchronization with the Active Alarms Table.
SNMP OID	acEMSSyncActiveAlarmEvent - 1.3.6.1.4.1.5003.9.20.3.2.0.28
Alarm Title	[Event] Synchronizing Active Alarms
Alarm Source	
Severity	Indeterminate
Alarm Type	Other
Probable Cause	Other
Additional Info	
Corrective Action	
Media Gateways	

3.2.17   Alarm Supression Alarm

Description	This alarm is sent when the EMS suppresses alarms (of the same alarm type and alarm source), once the number of such alarms reaches a configured threshold level in a configured interval (configured in the EMS in the Alarms Settings screen). When this alarm is sent, such alarms are not added to the EMS database and are not forwarded to configured destinations.
SNMP Alarm	AlarmSuppressionAlarm
SNMP OID	1.3.6.1.4.1.5003.9.20.3.2.0.42
Default Severity	Indeterminate
Alarm Type	Other
Probable Cause	Threshold crossed.
Alarm Text	Alarm Suppression activated
Status Changes	The alarm is cleared when in the subsequent interval, the number of such alarms falls below the configured threshold. Once the alarm is cleared, then these alarms are once more added to the EMS database and forwarded to configured destinations.
Additional Info	
Corrective Action	Investigate the recurrence of such alarms.

3.2.18   EMS Keep Alive Alarm

Description	This alarm indicates that an SNMP Keep-alive trap has been sent from EMS to a third-party destination such as a Syslog server to indicate EMS liveness (configured in the EMS Alarms Settings window).
SNMP Alarm	EMSKeepAliveAlarm
SNMP OID	1.3.6.1.4.1.5003.9.20.3.2.0.45
Default Severity	Indeterminate
Alarm Type	Other
Probable Cause	Other
Alarm Text	EMS Server Keep-Alive
Status Changes	
Additional Info	
Corrective Action	

3.2.19   Pre-provisioning Alarm

Description	This alarm is generated when the operation for pre-provisioning the device upon initial connection to the EMS fails.
SNMP OID	1.3.6.1.4.1.5003.9.20.3.2.0.46
AlarmTitle	Pre-Provisioning
AlarmType	operational/Violation
AlarmSource	EMS server
Probable Cause	The template file could not be applied to the device because there was a mismatch between the template file and the device's existing ini file or there was a mismatch between the device type and the firmware file applied to the device.
Severity	Critical
Additional Info	-

Corrective Action	• When this alarm is raised, you cannot reload configuration or firmware files to the device as it has already been connected to the EMS. Instead download these files to the device using the Software Manager and then use the 'Software Upgrade' action. OR • Remove the device from the EMS and then reconnect it i.e. repeat the pre-provisioning process.
Media Gateways	All gateways managed by EMS.

3.2.20 Disk Space Alarm

Disk Space Alarm

Description	This alarm is issued in one of the following cases: • The Archive Logs directory capacity has reached {0}%. • The Oracle partition capacity has reached {0}%.
SNMP Alarm	acEMSDiskSpaceAlarmCheck
SNMP OID	1.3.6.1.4.1.5003.9.20.3.2.0.51
AlarmTitle	Disk Space Alarm
AlarmType	Equipment Alarm
AlarmSource	EMS Server
Probable Cause	Storage Capacity Problem
Severity	• 70% < Minor • 80% < Major • 90% < Critical
Additional Info	
Corrective Action	• The Archive Logs directory: Free space in /ACEMS/NBIF/emsBackup/DBEMS/archivelog/ to avoid system failure. • The Oracle partition: Free space using the command rm -f /oracle/DIAG/diag/rdbms/dbems/dbems/trace/*.tr* to avoid system failure.
Media Gateways	

3.2.21   Oracle Disk Space Alarm

Oracle Disk Space Alarm

Description	This alarm is issued when the Oracle partition capacity has reached {0}%.
SNMP Alarm	acEMSNotEnoughOracleSpaceAlarm
SNMP OID	1.3.6.1.4.1.5003.9.20.3.2.0.52
AlarmTitle	Oracle Disk Space Alarm
AlarmType	Equipment Alarm
AlarmSource	EMS Server
Probable Cause	Storage Capacity Problem
Severity	• 70% < Minor • 80% < Major • 90% < Critical
Additional Info	
Corrective Action	Free space using the command rm -f /oracle/DIAG/diag/rdbms/dbems/dbems/trace/*.tr* to avoid system failure.
Media Gateways	

3.2.22 License Alarm

License Alarm

Description	This alarm is issued when the EMS License approaches or reaches it's expiration date or the EMS server machine ID is no longer valid.
SNMP Alarm	acLicenseAlarm
SNMP OID	1.3.6.1.4.1.5003.9.20.3.2.0.53
AlarmTitle	License Alarm
AlarmType	Other
AlarmSource	EMS Server
Probable Cause	Other
Additional Info	Info1: • Machine ID In The License Is {0} • Expiration Date In The License Is {0}
Corrective Action	Contact your AudioCodes partner ASAP. Note that when notification that this license has expired is received, the server remains connected for a few minutes in order to allow the forwarding traps to northbound destinations.
Media Gateways	

Alarm Severity	Condition	Alarm Text
Critical	The license expiration date is less than equal to 7 days.	• EMS License is about to expire in {0} days. • EMS License is about to expire in 1 day. • EMS License Will Expire Today
Major	The license expiration date is more than 7 days and less than equal to 30 days.	EMS License is about to expire in {0} days.
Clear	The license expiration date is greater than 30 days.	

3.3   SEM Alarms

3.3.1   SEM – Failed Calls Alarm

SEM – Failed Calls Alarm

Description	This alarm is raised when the failed calls threshold is crossed and is cleared when the failed calls ratio returns below the threshold value. The description field includes the info: Failed X1% of calls, X2 of X3 calls.
SNMP Alarm	acSEMRuleFailedCallsAlarm
SNMP OID	1.3.6.1.4.1.5003.9.20.3.2.0.30
Alarm Title	SEM - Failed Calls Alarm
Alarm Source	SEM/<Device Name> or SEM/<Link Name> (According to provisioned scope)
alarm type	Quality of service alarm.
Probable Cause	The minimum or maximum threshold is crossed.
Severity	According to provisioned thresholds: critical, major or clear
Additional Info	Critical or Major severity threshold is Y%: • Critical Threshold: **5**% of calls (default) • Major Threshold: **3**% of calls (default
Corrective Action	Investigate the source (device or link) of the failed calls.

3.3.2   SEM – Voice Quality Alarm

SEM – Voice Quality Alarm

Description	This alarm is raised when the poor quality calls threshold is crossed and is cleared when the poor quality calls ratio returns below the threshold value. The description field includes the info: Poor Quality X1% of calls, X2 of X3 calls.
SNMP Alarm	acSEMRulePoorQualityCallsAlarm
SNMP OID	1.3.6.1.4.1.5003.9.20.3.2.0.31
Alarm Title	SEM – Voice Quality Alarm
Alarm Source	SEM/<Device Name> or SEM/<Link Name> (According to provisioned scope)
Alarm Type	Quality of service alarm.
Probable Cause	The minimum or maximum threshold is crossed.
Severity	According to provisioned thresholds: critical, major or clear

Additional Info	Critical or Major severity threshold is Y%:
	• Critical Threshold: **10**% of calls (default).
	• Major Threshold: **8**% of calls (default);
Corrective Action	Investigate the source (device or link) of the poor quality calls.

3.3.3 SEM – Average Call Duration Alarm

SEM – Average Call Duration Alarm

Description	This alarm is raised when the average call duration time threshold is crossed and is cleared when the average call duration time ratio returns below the threshold value. The description field includes the info: Average Call Duration is X sec.
SNMP Alarm	acSEMRuleAvrgCallDurationAlarm
SNMP OID	1.3.6.1.4.1.5003.9.20.3.2.0.32
Alarm Title	SEM – Average Call Duration Alarm
Alarm Source	SEM/<Device Name> or SEM/<Link Name> (According to provisioned scope)
Alarm Type	Quality of service alarm.
Probable Cause	The minimum or maximum threshold is crossed.
Severity	According to provisioned thresholds: critical, major or clear
Additional Info	Critical or Major severity threshold is Y sec.
Corrective Action	Investigate the source (device or link) reporting the excessive average call duration.

3.3.4 SEM – License Key Alarm

SEM – License Key Alarm

Description	This alarm is sent in the following circumstances: ▪ When the number of devices connected to the SEM server approaches or reaches license capacity (shown as 'Devices Number' in the EMS Server Manager License screen). • When the number of sessions running on the SEM server approaches or reaches license capacity (shown as 'SEM Sessions' in the EMS Server Manager License screen).
SNMP Alarm	acSEMLicenseKeyAlarm
SNMP OID	1.3.6.1.4.1.5003.9.20.3.2.0.33
Alarm Title	SEM License key alarm.
Alarm Source	SEM server
Alarm Type	Other
Probable Cause	Key Expired
Corrective Action	Contact your AudioCodes representitve to obtain the requiredt license key.

Alarm Severity	Condition	Alarm Text	Corrective Action
Critical	The number of currently running sessions/devices has reached 100% of the SEM servers license capacity.	Current server load reached 100% of SEM License capacity.	
Major	The number of currently running sessions/devices has reached 80% of SEM servers license capacity.	Current server load reached 80% of SEM License capacity.	
Clear	The number of currently running sessions/devices has dropped below 80% of SEM servers license capacity.	Clearing currently active device alarm.	

3.3.5 SEM – System Load Alarm

SEM – System Load Alarm

Description	This alarm is sent when the SEM system capacity is high and the system consequently becomes loaded.
	Three levels are supported:
	• Minor - > Events are not stored for green calls. Trend Info will not be displayed.
	• Major -> Events are not stored. Trend Info will not be displayed.
	• Critical -> Green calls are not stored.
SNMP Alarm	acSEMCallDroppedAlarm
SNMP OID	1.3.6.1.4.1.5003.9.20.3.2.0.34
Alarm Title	SEM – System Load Alarm
Alarm Source	SEM Server
Alarm Type	Quality of service alarm.
Probable Cause	AlarmProbableCauseType.THRESHOLDCROSSED
Severity	MINOR/ MAJOR/ CRITICAL
Additional Info	• Medium load level is reached - {0}%, {1} calls of {2}. /
	• High load level is reached - {0}%, {1} calls of {2}. /
	• Approaching maximal system capacity - {0}%, {1} calls of {2}.
Corrective Action	Reduce the system load.

3.3.6 SEM – Call Details Storage Level has Changed

SEM – Call Details Storage Level has Changed

Description	This alarm is sent when the operator changes the Call Details Storage Level from one level to another.
SNMP Alarm	acSEMClientLoadFlagAlarm
SNMP OID	1.3.6.1.4.1.5003.9.20.3.2.0.35
Alarm Title	SEM – Call Details Storage Level has been changed.
Alarm Source	SEM Server
Alarm Type	Quality of service alarm
Probable Cause	Threshold crossed.
Severity	Indeterminate
Additional Info	
Corrective Action	

3.3.7   SEM – Time Synchronization Alarm

SEM – Time Synchronization Alarm

Description	This alarm is sent when Device and Server are not synchronized: Server Time: {0}, Device Time: {1}.
SNMP Alarm	acSEMTimeSynchronizationAlarm
SNMP OID	1.3.6.1.4.1.5003.9.20.3.2.0.36
Alarm Title	SEM – Time Synchronization Alarm
Alarm Source	SEM/<Device Name> or SEM/<Link Name> (According to provisioned scope)
Alarm Type	Timedomainviolational
Probable Cause	Timing Problem
Severity	Critical
Additional Info	One of the following reasons will appear: • Check your NTP configuration on the device. • NTP servers are not configured on the device. • Ensure that the SEM server and device time is properly synchronized. • Verify that the NTP configuration is correct; verify your network conditions (Firewalls, Ports, etc ..) and make sure that the NTP sync of the SEM server and/or the devices is performed correctly. • Refer to the EMS client / Help menu / EMS Server Configuration frame to verify the network configuration.
Corrective Action	See above.

3.3.8   SEM AD Lync Connection Alarm

Description	This alarm is sent when there is no connectivity with the Lync SQL Server database.
SNMP Alarm	acMSLyncConnectionAlarm
SNMP OID	1.3.6.1.4.1.5003.9.20.3.2.0.37
Alarm Title	SEM AD Lync Connection Alarm
Alarm Source	Lync SQL Server
Alarm Type	Communications alarm
Probable Cause	Communications sub-system failure
Severity	Critical
Additional Info	
Corrective Action	Check the Lync SQL server for problems.

3.3.9   SEM MS Lync AD Server Alarm

Description	This alarm is sent when there is no connectivity with the Active Directory LDAP server.
SNMP Alarm	acSEMMSLyncADServerAlarm
SNMP OID	1.3.6.1.4.1.5003.9.20.3.2.0.38
Alarm Title	SEM MS Lync AD Server Alarm
Alarm Source	Active Directory LDAP server
Alarm Type	Communications alarm
Probable Cause	Communications sub-system failure
Severity	Critical
Additional Info	SEM - AD Lync connection alarm
Corrective Action	Check the MS Lync AD server for problems.

3.3.10   SEM Rule Bandwidth Alarm

Description	This alarm is sent when the media bandwidth for the node or link falls below or exceeds the threshold values configured in the SEM Quality Alerts window.
SNMP Alarm	acSEMRuleBandwidthAlarm
SNMP OID	1.3.6.1.4.1.5003.9.20.3.2.0.43
Alarm Title	SEM Rule Bandwidth Alarm
Default Severity	According to provisioned thresholds: critical, major or clear.
Alarm Type	Quality of service alarm
Probable Cause	Threshold crossed
Alarm Text	Maximum Bandwidth of X Kb/sec
Status Changes	
Additional Info	
Corrective Action	Check the node's or link's maximum bandwidth capacity matches the required capacity.

3.3.11 SEM Rule Max Concurrent Calls Alarm

Description	This alarm is sent when the maximum concurrent calls for the node or link falls below or exceeds the threshold values configured in SEM Quality Alerts window.
SNMP Alarm	acSEMRuleMaxConcurrentCallsAlarm
SNMP OID	1.3.6.1.4.1.5003.9.20.3.2.0.44
Default Severity	According to provisioned thresholds: critical, major or clear
Alarm Type	Quality of service alarm
Probable Cause	Threshold crossed.
Alarm Text	Max Concurrent Calls of X
Status Changes	
Additional Info	
Corrective Action	Check that the node's or link's maximum number of concurrent calls matches the required capacity.

3.4   Endpoint Alarms

3.4.1   Registration Failure Alarm

IP Phone Registration Failure Alarm

Description	This alarm is raised when a SIP registration (with a PBX) for the IP Phone fails.
SNMP Alarm	IPPhoneRegisterFailure
OID	1.3.6.1.4.1.5003.9.20.3.2.0.39
Alarm Title	Registration Failure
Alarm Source	IP Phone
Alarm Type	communicationsAlarm(1)
Probable Cause	communicationsProtocolError(5)
Severity	Critical
Corrective Action	The problem is typically not related to the phone, but to the server. The user/phone may not be defined, or may be incorrectly defined, or may previously have been defined but the username (for example) may have been changed, causing the registration to fail. Make sure the username and password credentials are identical in the server and phone, and weren't changed; server-phone credentials must be synchronized. Make sure the server is responsive.

3.4.2   Lync Survivable Mode Start Alarm

IP Phone Survivable Mode Start Alarm

Description	This alarm is raised when the IP Phone enters Survivable mode state with limited services in the Microsoft Lync environment.
SNMP Alarm	IPPhoneSurvivableModeStart
OID	1.3.6.1.4.1.5003.9.20.3.2.0.40
Alarm Title	Survivable Mode Start
Alarm Source	IP Phone
Alarm Type	Other(0)
Probable Cause	other (0)
Severity	Major
Corrective Action	The problem is typically not related to the phone, but to the server or network. Make sure all servers in the enterprise's network are up. If one is down, limited service will result.

3.4.3 Lync Login Failure Alarm

IP Phone Lync Login Failure Alarm

Description	This alarm is raised when the IP Phone fails to connect to Microsoft Lync Server during sign in.
SNMP Alarm	IPPhoneLyncLoginFailure
OID	1.3.6.1.4.1.5003.9.20.3.2.0.41
Alarm Title	Lync Login Failure
Alarm Source	IP Phone
Alarm Type	communicationsAlarm(1)
Probable Cause	communicationsProtocolError(5)
Severity	Critical
Additional Info	TlsConnectionFailure NtpServerError
Corrective Action	This alarm may typically occur if the user is not registered - or is registered incorrectly - in the Lync Server. Make sure that username, password and PIN code are correctly configured and valid in the Lync Server. Try resetting them. Try redefining the user.

3.4.4 Endpoint License Alarm

Endpoint License Alarm

Description	This alarm is issued for the following scenarios: • When the number of endpoints currently running on the SEM server (shown as 'IP Phones Number' under 'SEM' in the EMS Server Manager License screen) approaches or reaches its license capacity. • When the number of endpoints currently running on the EMS server (shown as 'IP Phones Number' under 'EMS for IP Phones' in the EMS Server Manager License screen) approaches or reaches its license capacity.
SNMP Alarm	acEndpointLicenseAlarm
SNMP OID	1.3.6.1.4.1.5003.9.20.3.2.0.48
Alarm Title	Endpoint License Alarm
Alarm Source	SEM Server/EMS Server
Alarm Type	Other
Probable Cause	Key Expired
Additional Info	Endpoint License capacity {0} devices.

Corrective Action	Contact your AudioCodes partner ASAP		
Alarm Severity	**Condition**	**Alarm Text**	**Corrective Action**
Critical	Currently connected devices are equivelant to 100% of Endpoints License capacity.	Currently running devices reached 100% of Endpoints License capacity.	
Major	Currently connected devices are equivelant to reached 80% of Endpoints License capacity.	Currently running devices reached 80% of Endpoints License capacity.	
Clear	Clearing currently active alarm	Clear - Clearing currently active alarm.	

3.4.5   Endpoint Server Overloaded Alarm

Endpoint Server Overloaded Alarm

Description	This alarm is issued when the SEM Endpoint server process is overloaded with RFC 6035 Publish messages. This causes new RFC 6035 SIP PUBLISH messages () to be dropped from the queue for this process.
SNMP Alarm	acEndpointServerOverloadAlarm
SNMP OID	1.3.6.1.4.1.5003.9.20.3.2.0.49
Alarm Title	Endpoint Server Overloaded Alarm
Alarm Text	SEM Endpoint Server Overloaded! New Publish Messages Dropped
Alarm Source	SEM Server
Alarm Type	Other
Probable Cause	Queue Size exceeded
Severity	Critical
Additional Info	Maximum Endpoint Server waiting queue size {0}.
Corrective Action	Reduce the endpoint traffic load on the EMS server.

3.5 Device Alarms

3.5.1 Board Fatal Error

Board Fatal Error

Description	Sent whenever a fatal device error occurs.		
SNMP Alarm	acBoardFatalError		
SNMP OID	1.3.6.1.4.1.5003.9.10.1.21.2.0.1		
Alarm Title	Board Fatal Error		
Alarm Type	equipmentAlarm		
Probable Cause	underlyingResourceUnavailable (56)		
Alarm Severity	**Condition**	**<text>**	**Corrective Action**
Critical (default)	Any fatal error	Board Fatal Error: A run-time specific string describing the fatal error	1. Capture the alarm information and the Syslog clause, if active. 2. Contact AudioCodes' Support Center at support@audiocodes.com which will want to collect additional data from the device and perform a reset.
Stays 'Critical' until reboot. A 'Clear' trap is not sent.	After fatal error	-	

3.5.2   Configuration Error

Configuration Error

Description	Sent when the device's settings are invalid. The trap contains a message stating/detailing/explaining the invalid setting.		
SNMP Alarm	acBoardConfigurationError		
SNMP OID	1.3.6.1.4.1.5003.9.10.1.21.2.0.2		
Alarm Title	[Event] Configuration Error		
AlarmType	equipmentAlarm		
Probable Cause	underlyingResourceUnavailable (56)		
Alarm Severity	**Condition**	**<text>**	**Corrective Action**
Critical(default)	A configuration error was detected	Board Config Error: A run-time specific string describing the configuration error	1. Check the run-time specific string to determine the nature of the configuration error.
Stays 'Critical' until reboot. A 'Clear' trap is not sent.	After configuration error	-	2. Fix the configuration error using the appropriate tool: Web interface, EMS, or *ini* file. 3. Save the configuration and if necessary reset the device.

3.5.3   Initialization Ended

Initialization Ended

Description	This alarm is sent when the device is initialized and ready to run.
SNMP Alarm	acBoardEvBoardStarted
SNMP OID	1.3.6.1.4.1.5003.9.10.1.21.2.0.4
Alarm Title	[Event] Initialization Ended
Alarm Type	Equipment Alarm
Alarm Source	
Probable Cause	Other
Severity	Major
Additional Info1,2,3	NULL

3.5.4 Board Resetting Following Software Reset

Board Resetting Following Software Reset

Description	This alarm indicates that the device has started the reset process - following a software reset.
SNMP Alarm	acBoardEvResettingBoard
SNMP OID	1.3.6.1.4.1.5003.9.10.1.21.2.0.5
Alarm Title	Board Resetting Following Software Reset
Alarm Type	Other
Alarm Source	
Probable Cause	Other
Severity	Critical
Additional Info1,2,3	'AdditionalInfo1', 'AdditionalInfo2', 'AdditionalInfo3',
Corrective Action	A network administrator has taken action to reset the device. No corrective action is needed.

3.5.5 Feature Key Related Error

Feature Key Related Error

Description	Sent to relay Feature Key errors etc.
SNMP Alarm	acFeatureKeyError
SNMP OID	1.3.6.1.4.1.5003.9.10.1.21.2.0.6
Alarm Title	Feature Key Related Error
Severity	Critical
Alarm Type	processingErrorAlarm
Probable Cause	configurationOrCustomizationError (7)
Alarm Text	Feature key error
Note	Support for this alarm is pending.

3.5.6   Gateway Administrative State Changed

Gateway Administrative State Changed

Description	This alarm indicates that the administrative state of the gateway has been changed to a new state.
	Note that all state changes are instigated by the parameter acgwAdminState.
	▪ Time limit set in the parameter acgwAdminStateLockControl - 'GateWay shutting down. Max time to LOCK %d sec'
	▪ No time limit in the parameter acgwAdminStateLockControl - 'GateWay is shutting down. No time limit.'
	▪ When reaching lock state - 'GateWay is locked'
	• When the gateway is SET to unlocked - 'GateWay is unlocked (fully active again)'
SNMP Alarm	acgwAdminStateChange
SNMP OID	1.3.6.1.4.1.5003.9.10.1.21.2.0.7
Alarm Title	Administrative State Change
Alarm Type	processingErrorAlarm
Probable Cause	outOfService (71)

Alarm Severity	Condition	<text>	Corrective Action
Major (default)	Admin state changed to shutting down	Network element admin state change alarm: Gateway is shutting down. No time limit.	No corrective action is required. A network administrator took an action to gracefully lock the device.
Major	Admin state changed to locked	Locked	No corrective action is required. A network administrator took an action to lock the device, or a graceful lock timeout occured.
Cleared	Admin state changed to unlocked	-	No corrective action is required. A network administrator has taken an action to unlock the device.

3.5.7 No Free Channels Available

No Free Channels Available

Description	This alarm indicates that almost no free resources for the call are available. Activated only if the parameter EnableRai is set. The threshold is determined according to parameters RAIHIGHTHRESHOLD and RAILOWTHRESHOLD.		
SNMP Alarm	acBoardCallResourcesAlarm		
SNMP OID	1.3.6.1.4.1.5003.9.10.1.21.2.0.8		
Alarm Title	No Free Channels Available		
AlarmType	processingErrorAlarm		
Alarm Source	'GWAPP'		
Probable Cause	softwareError (46)		
Alarm Severity	**Condition**	**\<text\>**	**Corrective Action**
Major(default)	Percentage of busy channels exceeds the predefined RAI high threshold	Call resources alarm	Expand system capacity by adding more channels (trunks) -OR- Reduce traffic
Cleared	Percentage of busy channels falls below the predefined RAI low threshold	-	Note that to enable this alarm, the Remote Alarm Indication (RAI) mechanism must be activated (EnableRAI = **1**).

3.5.8   Gatekeeper/Proxy not Found or Registration Failed

Proxy not Found or Registration Failed

Description	The alarm is sent in the following scenarios: ▪ Physical FXO port is up or down (Out-of-Service or OOS). The FXO line can be down due to, for example, port disconnected or insufficient current and voltage. (Syslog message event is ANALOG_IF_LINE_DISCONNECTED.) ▪ Physical BRI or PRI (E1/T1) port is up or down (OOS). ▪ Proxy is not found or registration fails. In such a case, the device's routing table may be used for routing instead of the Proxy. ▪ Connection to the Proxy is up or down. ▪ Failure in TDM-over-IP call - transparent E1/T1 without signalling. ▪ Connection to the Proxy Set associated with the trunk/line is up/down. ▪ Failure in server registration for the trunk/line. ▪ Failure in a Serving IP Group for the trunk. ▪ Failure in a Proxy Set.
SNMP Alarm	acBoardControllerFailureAlarm
SNMP OID	1.3.6.1.4.1.5003.9.10.1.21.2.0.9
Alarm Source	'GWAPP'
Alarm Title	Proxy not Found or Registration Failed
Alarm Type	processingErrorAlarm
Probable Cause	softwareError (46)

Alarm Severity	**Condition**	**Text**	**Additional Information**
Major(default)	FXO physical port is down	"BusyOut Line *n* Link failure" Where *n* represents the FXO port number (0 for the first port).	▪ Verify that the FXO line is securely cabled to the device's FXO port.
	BRI or PRI physical port is down	"BusyOut Trunk *n* Link failure" Where *n* represents the BRI or PRI port number (0 for the first port).	Verify that the digital trunk is securely cabled to the device's digital port.
	Proxy has not been found or registration failure	"Proxy not found. Use internal routing" -OR- "Proxy lost. Looking for another Proxy"	▪ Check the network layer ▪ Make sure that the proxy IP and port are configured correctly.

	Connection to Proxy is down	"BusyOut Trunk/Line *n* Connectivity Proxy failure"	-
	Connection to the Proxy Set associated with the trunk or line is down	"BusyOut Trunk/Line *n* Proxy Set Failure" Where *n* represents the BRI/ PRI trunk or FXO line.	-
	Failure in a Proxy Set	"Proxy Set ID *n*" Where *n* represents the Proxy Set ID.	-
	Failure in TDM-over-IP call	"BusyOut Trunk *n* TDM over IP failure (Active calls x Min y)" Where *n* represents the BRI/ PRI trunk.	-
	Failure in server registration for the trunk/line	"BusyOut Trunk/Line *n* Registration Failure" Where *n* represents the BRI/ PRI trunk or FXO line.	-
	Failure in a Serving IP Group for the trunk	"BusyOut Trunk *n* Serving IP Group Failure" Where *n* represents the BRI or PRI trunk ID.	-
Cleared	Proxy is found. The 'Cleared' message includes the IP address of this Proxy.	-	-

3.5.9 Ethernet Link Down Alarm

Ethernet Link Down Alarm

Description	This alarm indicates that the Ethernet link is down or remote Ethernet link is down and the board has no communication to any other host.
	• No link at all.
	• Link is up again.
	• Primary link is down only - 'Primary Link is lost. Switching to Secondary Link'
SNMP Alarm	acBoardEthernetLinkAlarm
SNMP OID	1.3.6.1.4.1.5003.9.10.1.21.2.0.10
Alarm Title	Ethernet Link Down Alarm
Alarm Source	All except Mediant 3000: Board#<n>/EthernetLink#0 (where n is the slot number)
	Mediant 3000: Chassis#0/Module#<n>/EthernetLink#0 (where n is the blade's slot number)
	This trap relates to the Ethernet Link Module (the #0 numbering doesn't apply to the physical Ethernet link).
Alarm Type	equipmentAlarm
Probable Cause	underlyingResourceUnavailable (56)

Alarm Severity	Condition	<text>	Corrective Action
Major	Fault on single interface	Ethernet link alarm: Redundant link is down	**1.** Ensure that both Ethernet cables are plugged into the back of the system.
Critical(default)	Fault on both interfaces	No Ethernet link	**2.** Observe the system's Ethernet link lights to determine which interface is failing.
			3. Reconnect the cable or fix the network problem
Cleared	Both interfaces are operational	-	Note that the alarm behaves differently when coming from the redundant or the active modules of a High Availability (HA) system. The alarm from the redundant is raised when there is an operational HA configuration in the system. There is no critical severity for the redundant module losing both its Ethernet links as that is conveyed in the no HA alarm that follows such a case.

3.5.10 System Component Overloaded

System Component Overloaded

Description	This alarm is raised when there is an overload in one or more of the system's components.		
SNMP Alarm	acBoardOverloadAlarm		
SNMP OID	1.3.6.1.4.1.5003.9.10.1.21.2.0.11		
Severity	Major		
Alarm Type	processingErrorAlarm		
Alarm Source	'GWAPP'		
Probable Cause	softwareError (46)		
Alarm Severity	**Condition**	**<text>**	**Corrective Action**
Major(default)	An overload condition exists in one or more of the system components	"System CPU overload condition - IdleUtilization percentage=%d" Where *%d* is the percentage of available CPU resources remaining	1. Make sure that the syslog level is 0 (or not high). 2. Make sure that DebugRecording is not running. 3. If the system is configured correctly, reduce traffic.
Cleared	The overload condition passed	"System CPU overload condition - IdleUtilization percentage=%"	-

3.5.11 Active Alarms Table Overflow

Active Alarms Table Overflow

Description	This alarm is raised when there are too many alarms to fit into the active alarm table. The status stays major until reboot as it denotes a possible loss of information until the next reboot. If an alarm was raised when the table was full, it is possible that the alarm is active, but does not appear in the active alarm table.
SNMP Alarm	acActiveAlarmTableOverflow
SNMP OID	1.3.6.1.4.1.5003.9.10.1.21.2.0.12
Alarm Title	[Event] Active Alarm Table Overflow
Alarm Type	Processing Error Alarm
Alarm Source	MG

Probable Cause	resourceAtOrNearingCapacity (43)
Severity	Major
Additional Info1,2,3	-
Corrective Action	Some alarm information may have been lost, but the ability of the device to perform its basic operations has not been impacted. A reboot is the only way to completely clear a problem with the active alarm table. Contact your first-level group.

3.5.12   Operational State Change

Operational State Change

Description	This alarm is raised if the operational state of the node is disabled. The alarm is cleared when the operational state of the node is enabled.		
SNMP Alarm	acOperationalStateChange		
SNMP OID	1.3.6.1.4.1.5003.9.10.1.21.2.0.15		
Alarm Title	Operational State Change		
Alarm Source			
Alarm Type	processingErrorAlarm		
Probable Cause	outOfService (71)		
Alarm Severity	**Condition**	**<text>**	**Corrective Action**
Major(default)	Operational state changed to disabled	Network element operational state change alarm. Operational state is disabled.	▪ The alarm is cleared when the operational state of the node goes to enabled. ▪ In IP systems, check for initialization errors - in IP systems the operational state of the node is disabled if the device fails to properly initialize. ▪ Look for other alarms and Syslogs that might provide additional information about the error.
Cleared	Operational state changed to enabled	-	-

3.5.13 Keep Alive Trap

Keep Alive Trap

Description	Part of the NAT traversal mechanism. If the STUN application in the device detects a NAT, this trap is sent on a regular time laps - 9/10 of the acSysSTUNBindingLifeTime object. The AdditionalInfo1 varbind has the MAC address of the device.
SNMP Alarm	acKeepAlive
SNMP OID	1.3.6.1.4.1.5003.9.10.1.21.2.0.16
Alarm Title	[Event] Keep Alive Trap
Alarm Source	
Alarm Type	other (0)
Probable Cause	other (0)
Default Severity	Indeterminate
Event Text	Keep alive trap
Status Changes	
Condition	The STUN client is enabled and identified as a NAT device or doesn't locate the STUN server. The *ini* file contains the following line 'SendKeepAliveTrap=1'
Trap Status	Trap is sent
Note	Keep-alive is sent every 9/10 of the time defined in the parameter NatBindingDefaultTimeout.

3.5.14 NAT Traversal Alarm

NAT Traversal Alarm

Description	This alarm is sent when the NAT is placed in front of a device and is identified as a symmetric NAT. It is cleared when a non-symmetric NAT or no NAT replace the symmetric one.
SNMP Alarm	acNATTraversalAlarm
SNMP OID	1.3.6.1.4.1.5003.9.10.1.21.2.0.17
Alarm Title	NAT Traversal Alarm
Alarm Type	other (0)
Alarm Source	MG
Probable Cause	other (0)
Severity	Indeterminate
Additional Info1,2,3	-

Status Changes	The STUN client in the device is enabled and has either identified a NAT or is not finding the STUN server.
	Keep-alive is sent out every 9/10 of the time defined in the 'NatBindingDefaultTimeout' parameter.
Corrective Action	See http://tools.ietf.org/html/rfc5389

3.5.15   Enhanced BIT Status Trap

Enhanced BIT Status

Description	Sent for the status of the BIT (Built In Test). The information in the trap contains blade hardware elements being tested and their status. The information is presented in the Additional Info fields.
SNMP Alarm	acEnhancedBITStatus
SNMP OID	1.3.6.1.4.1.5003.9.10.1.21.2.0.18
Alarm Title	Enhanced BIT Status
Severity	Indeterminate
Alarm Source	BIT
Alarm Type	Other
Probable Cause	other (0)
Alarm Text	Notification on the board hardware elements being tested and their status.
Status Changes	
Additional Info-1	BIT Type: Offline, startup, periodic
Additional Info-2	BIT Results: BIT_RESULT_PASSED BIT_RESULT_FAILED
Additional Info-3	Buffer: Number of bit elements reports
Corrective Action	Not relevant

3.5.16   Threshold of Performance Monitored Object Exceeded

Threshold of Performance Monitored Object Exceeded

Description	Sent every time the threshold of a Performance Monitored object (counter or gauge) ('Minimum', 'Average', 'Maximum', 'Distribution below/above/between thresholds', and 'Low and high thresholds') is crossed. The severity field is 'Indeterminate' when the crossing is above the threshold and 'Cleared' when it goes back under the threshold. The 'Source' varbind in the trap indicates the object for which the threshold is being crossed.
SNMP Alarm	acPerformanceMonitoringThresholdCrossing
SNMP OID	1.3.6.1.4.1.5003.9.10.1.21.2.0.27
Alarm Title	Threshold of Performance Monitored Object Exceeded
Alarm Type	Other

Alarm Source	MO Path
Probable Cause	Other
Severity	Indeterminate (this is a notification; it's not automatically cleared)
Additional Info1,2,3	-
Corrective Action	-

3.5.17   HTTP Download Result

HTTP Download Result

Description	This is a log message (not alarm) indicating both sucessful and failed HTTP Download result.
SNMP Alarm	acHTTPDownloadResult
SNMP OID	1.3.6.1.4.1.5003.9.10.1.21.2.0.28
Alarm Title	[Event] HTTP Download Result
Alarm Source	
Alarm Type	processingErrorAlarm (3) for failures and other (0) for success
Probable Cause	Other
Severity	Indeterminate
Additional Info	There are other possible textual messages describing NFS failures or success, FTP failure or success.
Corrective Action	-

3.5.18   HA System Fault Alarm

HA System Fault Alarm

Description	This alarm originates when:
	▪ HA feature is active but the system is NOT working in HA mode. Reason is specified (for example: SW WD exception error, HW WD exception error, SAT device is missing, SAT device error, DSP error, BIT tests error, etc).
	▪ HA feature is active and the redundant module is in start up mode but hasn't connected yet
	▪ HA system is active
SNMP Alarm	acHASystemFaultAlarm
SNMP OID	1.3.6.1.4.1.5003.9.10.1.21.2.0.33
Alarm Title	HA System Fault Alarm

Alarm Source	System#0/Module#<m>, where *m* is the blade module's slot number		
AlarmType	qualityOfServiceAlarm		
Probable Cause	outOfService		
Alarm Severity	**Condition**	**<text>**	**Corrective Action**
Critical (default)	HA feature is active but the system is not working in HA mode	Fatal exception error	High Availability (HA) was lost due to *switchover* and should return automatically after a few minutes. Corrective action is not required.
		TCPIP exception error	HA was lost due to *switchover* and should return automatically after a few minutes. Corrective action is not required.
		Network processor exception error (applicable only to Mediant 3000)	HA was lost due to *switchover* and should return automatically after a few minutes. Corrective action is not required.
		SW WD exception error	HA was lost due to *switchover* and should return automatically after a few minutes. Corrective action is not required.
		HW WD exception error	HA was lost due to *switchover* and should return automatically after a few minutes. Corrective action is not required.
		SAT device is missing (applicable only to Mediant 3000)	HA was lost due to *switchover* and should return automatically after a few minutes. Corrective action is not required.
		SAT device error (applicable only to Mediant 3000)	HA was lost due to *switchover* and should return automatically after a few minutes. Corrective action is not required.
		DSP error (applicable only to Mediant 3000 and Mediant 4000)	HA was lost due to *switchover* and should return automatically after a few minutes. Corrective action is not required.
		BIT tests error	HA was lost due to *switchover* and should return automatically after a few minutes. Corrective action is not required.

		PSTN stack error (applicable only to Mediant 3000)	HA was lost due to *switchover* and should return automatically after a few minutes. Corrective action is not required.
		Keep Alive error	HA was lost due to *switchover* and should return automatically after a few minutes. Corrective action is not required.
		Software upgrade	HA was lost due to *switchover* and should return automatically after a few minutes. Corrective action is not required.
		Manual switch over	HA was lost due to *switchover* and should return automatically after a few minutes. Corrective action is not required.
		Manual reset	HA was lost due to a *system reset* and should return automatically after few minutes. Corrective action is not required.
		Board removal (applicable only to Mediant 3000)	Return the removed board to the system.
		TER misplaced (applicable only to Mediant 3000)	Place the TER card according to the *User's Manual*
		HW fault. TER in slot 2 or 3 is missing (applicable only to Mediant 3000)	Place the TER card according to the *User's Manual*
		HW fault. TER has old version or is not functional (applicable only to Mediant 3000)	Replace the TER card.
		HW fault. invalid TER Type (applicable only to Mediant 3000)	Replace the TER card.
		HW fault. invalid TER active/redundant state (applicable only to Mediant 3000)	Replace the TER card.
		HW fault. Error reading GbE state (applicable only to Mediant 3000)	Replace the TER card.

		Redundant module is missing (applicable only to Mediant 3000)	1. Insert the redundant module into the system. 2. If the error continues, reset / replace the module.
		Redundant is not connecting (applicable only to Mediant 3000)	Reset / replace the redundant module.
		Redundant is not reconnecting after deliberate restart	Reset / replace the redundant module.
		No Ethernet Link in redundant module	Connect Ethernet links to the redundant module
		SA module faulty or missing (applicable only to Mediant 3000)	Make sure the Shelf Alarm module is inserted correctly.
		Eth link error	HA was lost due to switchover, Connect the Eth link back.
		Higher HA priority (Not applicable to Mediant 3000)	HA was lost due to switchover to unit with higher HA priority and should return automatically after a few minutes. Corrective action is not required.
		Network watchdog error	HA was lost due to switchover , Fix the network connectivity from failed unit
Minor	HA feature is active and the redundant module is in startup mode and hasn't connected yet	Waiting for redundant to connect (applicable only to Mediant 3000)	Corrective action is not required.
Cleared	HA system is active	-	-

3.5.19   HA System Configuration Mismatch Alarm

HA System Configuration Mismatch Alarm

Description	HA feature is active. The active module was unable to transfer the License Key to the redundant module.		
SNMP Alarm	acHASystemConfigMismatchAlarm		
SNMP OID	1.3.6.1.4.1.5003.9.10.1.21.2.0.34		
Alarm Source	System#0/Module#<m>, where *m* is the blade module's slot number		
Alarm Type	processingErrorAlarm		
Probable Cause	configurationOrCustomizationError		
Alarm Severity	**Condition**	**<text>**	**Corrective Action**
Major (default)	HA feature is active:	Configuration mismatch in the system:	The actions for the conditions are described below.
	License Keys of Active and Redundant modules are different.	Active and Redundant modules have different feature keys.	Update the Feature Keys of the Active and Redundant modules.
	The Active module was unable to pass on to the Redundant module the License Key.	Fail to update the redundant with feature key.	Replace the Feature Key of the Redundant module – it may be invalid.
	License key of the Redundant module is invalid.	Feature key did not update in redundant module.	Replace the Feature Key of the Redundant module – it may be invalid.
Cleared	Successful License Key update	The feature key was successfully updated in the redundant module	-

3.5.20 HA System Switch Over Alarm

HA System Switch Over Alarm

Description	Sent when a switchover from the active to the redundant module has occurred.
SNMP Alarm	acHASystemSwitchOverAlarm
SNMP OID	1.3.6.1.4.1.5003.9.10.1.21.2.0.35
Default Severity	Critical
Alarm Source	System#0/Module#<m>, where *m* is the blade module's slot number
Event Type	qualityOfServiceAlarm
Probable Cause	outOfService

Alarm Severity	Condition	<text>	Corrective Action
Critical (default)	A switchover from the active to the redundant unit has occurred	Switch-over: See the acHASystemFaultAlarm table above	See Section 0 for details.
Cleared	10 seconds have passed since the switchover	-	-

3.5.21 D-Channel Status

This alarm applies to digital media gateways.

D-Channel Status

Description	Non-alarm trap sent at the establishment, re-establishment or release of LAPD link with its peer connection occurs. The trap is sent with one of the following textual descriptions: • D-channel synchronized • D-channel not-synchronized
SNMP Alarm	acDChannelStatus
SNMP OID	1.3.6.1.4.1.5003.9.10.1.21.2.0.37
Alarm Title	D-Channel Status
Alarm Source	Trunk no.<m> where m is the trunk number (from 0 up).
Alarm Type	Communications Alarm
Probable Cause	Communications Protocol Error

Severity	Minor on raise, Clear on clear
Additional Info	-
Corrective Action	-

3.5.22 Dial Plan File Replaced Trap

This alarm applies to the Analog Series and Mediant Digital Series.

Dial Plan File Replaced

Description	This event informs that the dial plan file has been successfully replaced.
SNMP Alarm	acDialPlanFileReplaced
SNMP OID	1.3.6.1.4.1.5003.9.10.1.21.2.0.45
Alarm Title	Dial Plan File Replaced
Default Severity	Indeterminate
Event Type	Other (0)
Probable Cause	Other (0)
Status Change	
Condition	Successful dial plan file replacement
Trap Text	Dial plan file replacement complete.

3.5.23 Analog Port SPI Out of Service

This alarm applies to analog ports running SIP control protocol.

Analog Port SPI Out of Service

Description	This alarm indicates that the analog port is out of service.		
SNMP Alarm	acAnalogPortSPIOutOfService		
SNMP OID	1.3.6.1.4.1.5003.9.10.1.21.2.0.46		
Alarm Title	Analog Port SPI Out of Service		
Alarm Source	System#0/analogports#<n>, where *n* is the port number		
Alarm Type	physicalViolation		
Probable Cause	equipmentMalfunction		
Alarm Severity	Condition	<text>	Corrective Action

Description	This alarm indicates that the analog port is out of service.		
SNMP Alarm	acAnalogPortSPIOutOfService		
Major(default)	Analog port has gone out of service	Analog Port SPI out of service	▪ No corrective action is required. ▪ The device shuts down the port and activates it again when the Serial Peripheral Interface (SPI) connection returns.
Cleared	Analog port is back in service	-	**-**

3.5.24   Analog Port High Temperature

This alarm applies to analog ports (only FXS ports) running the SIP control protocol.

Analog Port High Temperature

Description	This alarm indicates that the analog FXS port has a high temperature.		
SNMP Alarm	acAnalogPortHighTemperature		
SNMP OID	1.3.6.1.4.1.5003.9.10.1.21.2.0.47		
Alarm Title	Analog Port High Temperature		
Alarm Source	Port#<m> where m is the analog port number		
Alarm Type	physicalViolation		
Probable Cause	equipmentMalfunction		
Source Varbind Text	System#0/analogports#<n>, where *n* is the port number		
Alarm Severity	**Condition**	**<text>**	**Corrective Action**
Major(default)	Analog device has reached critical temperature. Device is automatically disconnected.	Analog Port High Temperature	▪ No corrective action is required. ▪ The device shuts down the analog port and tries to activate it again later when the device's temperature drops.
Cleared	Temperature is back to normal - analog port is back in service.	-	-

3.5.25   Trunk LOS Alarm

This alarm applies to E1/T1Trunks.

Trunk LOS Alarm

Description	This alarm indicates a loss of signal at the trunk's near end.		
SNMP Alarm	acTrunksAlarmNearEndLOS		
SNMP OID	1.3.6.1.4.1.5003.9.10.1.21.2.0.49		
Alarm Title	Trunk LOS Alarm		
Alarm Source	Interfaces#0/Trunk#<m>, where m is the trunk interface number, 1 being the first trunk		
Alarm Type	communicationsAlarm		
Probable Cause	lossOfSignal		
Alarm Severity	**Condition**	**<text>**	**Corrective Action**
Critical (default)	Near-end LOS	Trunk LOS Alarm	Los of Signal (LOS) indicates a physical problem. 1. Check that the cable is connected on the board. 2. Check that the correct cable type is being used (crossed/straight). 3. Contact AudioCodes' Support Center at support@audiocodes.com.
Cleared	End of LOS	-	-

3.5.26   Trunk LOF Alarm

This alarm applies to E1/T1Trunks.

Trunk LOF Alarm

Description	This alarm indicates a loss of frame at the trunk's near end.		
SNMP Alarm	acTrunksAlarmNearEndLOF		
SNMP OID	1.3.6.1.4.1.5003.9.10.1.21.2.0.50		
Alarm Title	Trunk LOF Alarm		
Alarm Source	Interfaces#0/Trunk#<m>, where m is the trunk interface number, 1 being the first trunk		
Alarm Type	communicationsAlarm		
Probable Cause	lossOfFrame		
Alarm Severity	**Condition**	**<text>**	**Corrective Action**

Critical (default)	Near end LOF	Trunk LOF Alarm	Make sure that the trunk is connected to a proper follow-up device. 1. Make sure that both sides are configured with the same (E1 / T1) link type. 2. Make sure that both sides are configured with the same framing method. 3. Make sure that both sides are configured with the same line code. 4. Make sure that the clocking setup is correct. 5. Contact AudioCodes' Support Center at support@audiocodes.com.
Cleared	End of LOF	-	-

3.5.27 Trunk AIS Alarm

This alarm applies to E1/T1Trunks.

Trunk AIS Alarm

Description	This alarm indicates that an AIS is received from the trunk's far end.		
SNMP Alarm	acTrunksAlarmRcvAIS		
SNMP OID	1.3.6.1.4.1.5003.9.10.1.21.2.0.51		
Alarm Source	Interfaces#0/Trunk#<m>, where m is the trunk interface number, 1 being the first trunk		
Alarm Title	Trunk AIS Alarm		
Alarm Type	communicationsAlarm		
Probable Cause	PSTN provider has stopped the trunk (receiveFailure)		
Alarm Severity	Condition	<text>	Corrective Action
Critical	Receive AIS	Trunk AIS Alarm	6. Contact your PSTN provider to activate the trunk. 7. If the alarm persists, contact the AudioCodes Support Center at support@audiocodes.com
Cleared	End of AIS	-	-

3.5.28   Trunk RAI Alarm

This alarm applies to E1/T1Trunks.

Trunk RAI Alarm

Description	This alarm indicates a loss of frame at the trunk's far end.
SNMP Alarm	acTrunksAlarmFarEndLOF
SNMP OID	1.3.6.1.4.1.5003.9.10.1.21.2.0.52
Alarm Title	Trunk RAI Alarm
Alarm Source	Port#<n> where n is the digital trunk number
Alarm Type	communicationsAlarm
Probable Cause	transmitFailure
Severity	Critical
Additional Info	
Corrective Action	Check trunk's connectivity

3.5.29   IPv6

Description	This alarm indicates when an IPv6 address already exists or an IPv6 configuration failure has occurred. The description generated is "IP interface alarm. IPv6 Configuration failed, IPv6 will be disabled".		
SNMP Alarm	acIPv6ErrorAlarm		
SNMP OID	1.3.6.1.4.1.5003.9.10.1.21.2.0.53		
Default Severity	Critical		
Alarm Source	System#0/Interfaces#<n>.		
Alarm Type	operationalViolation		
Probable Cause	communicationsProtocolError		
Additional Info	Status stays critical until reboot. A clear trap is not sent.		
Corrective Action	▪ Find a new IPV6 address and reboot.		
Alarm Severity	**Condition**	**<text>**	**Corrective Action**
Critical (default)	Bad IPv6 address (already exists)	IP interface alarm: IPv6 configuration failed, IPv6 will be disabled.	▪ Find a new IPV6 address. ▪ Reboot the device.
Stays 'Critical' until reboot. A 'Clear' trap is not sent.	After the alarm is raised.	-	-

3.5.30   SAS Emergency Mode Alarm

This alarm applies to SIP Gateways.

GW SAS Emergency Mode Alarm

Description	This alarm is sent by the Stand-Alone Survivability (SAS) application when switching from "Normal" mode to "Emergency" mode. This alarm is cleared once the SAS returns to "Normal" mode.
SNMP Alarm	acGWSASEmergencyModeAlarm
SNMP OID	1.3.6.1.4.1.5003.9.10.1.21.2.0.59
Alarm Title	GW SAS Emergency Mode Alarm
Alarm Source	
Alarm Type	Other
Probable Cause	Other
Severity	
Additional Info	
Corrective Action	Check network communication with the Proxy

3.5.31   NTP Server Status Alarm

NTP Server Status Alarm

Description	This alarm is raised when the connection to the NTP server is lost. It is cleared when the connection is reestablished. Unset time (as a result of no connection to NTP server) may result in functionality degradation and failure in device.
SNMP Alarm	acNTPServerStatusAlarm
SNMP OID	1.3.6.1.4.1.5003.9.10.1.21.2.0.71
Alarm Title	NTP Server Status Alarm
Alarm Source	
Alarm Type	communicationsAlarm
Probable Cause	communicationsSubsystemFailure

Alarm Severity	Condition	<text>	Corrective Action
Major(default)	No initial communication to Network Time Protocol (NTP) server.	NTP server alarm. No connection to NTP server.	Repair NTP communication (the NTP server is down or its IP address is configured incorrectly in the device).
Minor	No communication to NTP server after the time was already set once.	-	-

3.5.32   LDAP Lost Connection

LDAP Lost Connection

Description	This alarm is raised when there is no connection to the LDAP server.
SNMP Alarm	acLDAPLostConnection
SNMP OID	1.3.6.1.4.1.5003.9.10.1.21.2.0.75
Alarm Title	LDAP Lost Connection
Alarm Source	
Alarm Type	communicationsAlarm
Probable Cause	communicationsSubsystemFailure If a connection is idle for more than the maximum configured time in seconds that the client can be idle before the LDAP server closes the connection, the LDAP server returns an LDAP disconnect notification and this alarm is raised.
Severity	Minor / Clear
Additional Info	
Corrective Action	

3.5.33 Analog Port Ground Fault Out of Service

Analog Port Ground Fault Out of Service

Description	This alarm is raised when the FXS port is inactive due to a ground fault.
SNMP Alarm	**acAnalogPortGroundFaultOutOfService**
SNMP OID	1.3.6.1.4.1.5003.9.10.1.21.2.0.76
Alarm Title	Analog Port Ground Fault Out Of Service
Alarm Source	
Alarm Type	physicalViolation
Probable Cause	equipmentMalfunction
Severity	Major / Clear
Additional Information	
Corrective Action	

3.5.34   SSH Connection Status [Event]

[Event] SSH Connection Status

Description	This trap indicates the result of a recent SSH connection attempt.
SNMP Alarm	**acSSHConnectionStatus**
SNMP OID	1.3.6.1.4.1.5003.9.10.1.21.2.0.77
Alarm Title	[Event] SSH Connection Status
Alarm Source	
Alarm Type	environmentalAlarm
Probable Cause	unauthorizedAccessAttempt/other
Severity	indeterminate
Additional Info	
Corrective Action	

3.5.35   OCSP Server Status Alarm

OCSP Server Status Alarm

Description	This alarm is raised when the OCSP connection is not available.
SNMP Alarm	**acOCSPServerStatusAlarm**
SNMP OID	1.3.6.1.4.1.5003.9.10.1.21.2.0.78
Alarm Title	OCSP server alarm.
Alarm Source	
Alarm Type	communicationsAlarm
Probable Cause	communicationsSubsystemFailure
Severity	Major / Clear
Additional Information	
Corrective Action	

3.5.36 Media Process Overload Alarm

Media Process Overload Alarm

Description	This alarm is raised when the media process overloads and is cleared when the load returns to normal.
SNMP Alarm	**acMediaProcessOverloadAlarm**
SNMP OID	1.3.6.1.4.1.5003.9.10.1.21.2.0.81
Alarm Title	Media Process Overload Alarm
Alarm Source	Board#x or System#x
Alarm Type	processingErrorAlarm
Probable Cause	resourceAtOrNearingCapacity
Severity	Major / Clear
Additional Info	
Corrective Action	

3.5.37 NFAS Group Alarm

NFAS Group Alarm

Description	This alarm is raised when an NFAS group goes Out-Of-Service and is cleared when an NFAS Group is back In-Service.
SNMP Alarm	acNFASGroupAlarm
SNMP OID	1.3.6.1.4.1.5003.9.10.1.21.2.0.84
Alarm Source	Interfaces#0/Trunk#<m>, where *m* is the trunk interface number, 1 being the first trunk
Alarm Type	communicationsAlarm
Probable Cause	degradedSignal

Alarm Severity	Condition	<text>	Corrective Action
Major(default)	Raised when an NFAS group goes out-of-service	NFAS Group Alarm. %s	▪ The alarm is sent only when the backup Non-Facility Associated Signaling (NFAS) D-channel also falls, i.e., when *both* D-channels are down. ▪ When at least one of the

			D-channels (primary or backup) returns to service, the alarm is cleared. ▪ Corrective action is not necessary.
Clear	NFAS group state goes to in- service	%s– Additional information	-

3.5.38   B Channel Alarm

B Channel Alarm

Description	This alarm is raised when the B-Channel service state changes and is cleared when the B-Channel is back in service.
SNMP Alarm	acBChannelAlarm
SNMP OID	1.3.6.1.4.1.5003.9.10.1.21.2.0.85
Alarm Title	B-Channel Alarm.
Alarm Source	Interface#%d/trunk#%d/BChannel#%d
Default Severity	Minor
Source Varbind Text	Interfaces#0/Trunk#<m>, where *m* is the trunk interface number, 1 being the first trunk
AlarmType	communicationsAlarm
Probable Cause	degradedSignal

Alarm Severity	Condition	<text>	Corrective Action
Major	Raised when B-channel service state changes to 'Out of Service' or 'Maintenance'	B-Channel Alarm. %s	Corrective action is not necessary
Clear	B-channel status changes to 'In Service'	%s – additional information	-

3.5.39 Ethernet Group Alarm

Ethernet Group Alarm

Description	This alarm is raised when the in an Ethernet port-pair group (1+1) has no Ethernet port with its link up and is cleared when at least one port has established a link.
SNMP Alarm	acEthernetGroupAlarm
SNMP OID	1.3.6.1.4.1.5003.9.10.1.21.2.0.86
Alarm Title	Ethernet Group alarm.
Alarm Source	Board#%d/EthernetGroup#%d
Alarm Type	equipmentAlarm
Probable Cause	underlyingResourceUnavailable
Severity	major
Additional Info	
Corrective Action	

3.5.40 Media Realm BW Threshold Alarm

Media Realm BW Threshold Alarm

Description	This alarm is raised when a BW threshold is crossed and is cleared when the BW threshold returns to normal range.
SNMP Alarm	acMediaRealmBWThresholdAlarm
SNMP OID	1.3.6.1.4.1.5003.9.10.1.21.2.0.87
Alarm Title	Media Realm BW Threshold Alarm.
Alarm Source	Board#%d/MediaRealm#%d
Alarm Type	processingErrorAlarm
Probable Cause	resourceAtOrNearingCapacity
Severity	major
Additional Info	
Corrective Action	

3.5.41   Certificate Expiry Notification

Certificate Expiry Notification

Description	This alarm is sent before the expiration of the installed credentials, which cannot be renewed automatically (the credentials should be updated manually).
SNMP Alarm	acCertificateExpiryNotification
SNMP OID	1.3.6.1.4.1.5003.9.10.1.21.2.0.92
Alarm Title	Certificate Expiry Notification
Alarm Source	tls#\<num>
Alarm Text	Device's TLS certificate of security context #%d will expire in %d days
Alarm Type	environmentalAlarm
Probable Cause	The certificate key expired (keyExpired)

Alarm Severity	Condition	\<text>	Corrective Action
Intermediate	The certificate key is about to expire.	Either: ▪ The device certificate has expired %d days ago ▪ The device certificate will expire in %d days ▪ The device certificate will expire in less than 1 day %d – number of days %d – TLS Context to which certificate belongs	Load a new certificate to the device before the expiration of the installed certificate (which cannot be renewed automatically). To replace certificates, refer to the *User's Manual*.

3.5.42   Web User Access Disabled

WEB User Access Disabled

Description	This alarm is sent when the Web user has been disabled due to inactivity.
SNMP Alarm	acWEBUserAccessDisabled
SNMP OID	1.3.6.1.4.1.5003.9.10.1.21.2.0.93
Alarm Title	
Alarm Source	
Alarm Type	other
Probable Cause	The Web user was disabled due to inactivity (denialOfService).
Severity	indeterminate
Additional Info	
Corrective Action	Contact your Web security administrator. Only the Web security administrator can unblock a user whose access to the Web interface was denied (for example, because the user made 3 unsuccessful attempts at access). The Web security administrator must: ▪ In the Web interface, access the Accounts page (**Configuration** > **System** > **Management** > **Web User Accounts**). ▪ Identify in the list of users table that user whose access has been denied. Change the status of that user from **Blocked** to **Valid** or **New**.

3.5.43   Proxy Connection Lost

Proxy Connection Lost

Description	This alarm is sent when all connections in a specific Proxy Set are down. The trap is cleared when one of the Proxy Set connections is up.
SNMP Alarm	acProxyConnectionLost
SNMP OID	1.3.6.1.4.1.5003.9.10.1.21.2.0.94
Alarm Title	Proxy Connection Lost
Alarm Source	System#0
Alarm Text	Proxy Set Alarm <text>
Alarm Type	communicationsAlarm

Probable Cause	• Network issue (connection fail due to network/routing failure). • Proxy issue (proxy is down). • AudioCodes device issue.		
Alarm Severity	**Condition**	**<text>**	**Corrective Action**
Major	When connection to the Proxy Set is lost and this Proxy Set is configured with fallback to routing table.	Proxy Set %d: Proxy not found. Use internal routing	1. Ping the proxy server. If there is no ping, contact your proxy provider. The probable reason is the proxy is down. 2. Ping between the proxy and AudioCodes device. If there is no ping, the problem could be a network/router issue. 3. If you have more than one device connected to this same proxy, check if there are more AudioCodes devices with the same Alarm. If this is the case, this could confirm that this is not AudioCodes device issue. 4. Check that routing using the device's (internal) routing table is functioning correctly. 5. Contact AudioCodes support center (support@audiocodes.com) and send a syslog and network capture for this issue.

Major	When Proxy Set includes more than one proxy IP with redundancy and connection to one of them is lost.	Proxy Set %d: Proxy lost. looking for another proxy	1. Ping the proxy server. If there is no ping, contact your proxy provider. The probable reason is the proxy is down. 2. Ping between the proxy and AudioCodes device. If there is no ping, the problem could be a network/router issue. 3. If you have more than one device connected to this same proxy, check if there are more AudioCodes devices with the same Alarm. If this is the case, this could confirm that this is not AudioCodes device issue. 4. Check if routing via the redundant proxy is operating correctly. If it is, then this could mean that it's not a network issue. 5. Contact AudioCodes support center (support@audiocodes.com) and send a syslog and network capture for this issue.
Cleared	When connection to proxy is available again	Proxy found. ip:<IP address>:<port #> Proxy Set ID %d	-

3.5.44 Redundant Board Alarm

Redundant Board Alarm

Description	The active board sends a notification when an alarm or notification is raised on the redundant board.
SNMP Alarm	acRedundantBoardAlarm
SNMP OID	1.3.6.1.4.1.5003.9.10.1.21.2.0.97
Alarm Title	Redundant Board Status
Alarm Source	
Alarm Type	Notification
Probable Cause	
Severity	Indeterminate
Additional Info	
Corrective Action	

3.5.45 HA Network Watchdog Status Alarm

HA Network Watchdog Status Alarm

Description	This alarm indicates that the device's HA Network Reachability (network watchdog) feature is configured, but is not functioning correctly due to, for example, the Ethernet Group being down from where the ping is sent to the network entity.
	The device's HA Network Reachability feature is used to configure a network IP address to test reachability using pings. When the tested peer stops replying to the Active unit, a switchover is made to the Redundant unit. For configuring the HA Network Reachability feature, refer to the *User's Manual*.
SNMP Alarm	acHANetworkWatchdogStatusAlarm
SNMP OID	1.3.6.1.4.1.5003.9.10.1.21.2.0.98
Alarm Title	acHANetworkWatchdogStatusAlarm
Alarm Source	System#0/Module#<m>, where *m* is the blade module's slot number
Alarm Type	alarmTrap
Probable Cause	outOfService
Default Severity	Major

Trap Text	Condition	Corrective Action
Failed sending ping	Some network configuration error	-
Network watchdog is disabled while HA priority is in use	When HA Priority is in use, the network watchdog module is disabled	-
Network watchdog is disabled while Redundant units has less Eth groups available	One or more of the Redundant unit's Ethernet Groups are down	-
Disabling network watchdog due to network interface error in Redundant unit	One or more of the Redundant unit's Ethernet Groups are down	-

3.5.46   IDS Policy Alarm

IDS Policy Alarm

Description	The alarm is raised whenever a threshold is crossed in the IDS system. The alarm is associated with the MO pair IDSMatch & IDSRule.
SNMP Alarm	acIDSPolicyAlarm
SNMP OID	1.3.6.1.4.1.5003.9.10.1.21.2.0.99
Default Severity	
Alarm Type	Other
Probable Cause	
Alarm Text	Policy NUM (NAME) minor/major/critical threshold (NUM) of REASON cross in global/ip/ip+port scope (triggered by IP)
Status Changes	
Corrective Action	1. Identify additional traps (acIDSThresholdCrossNotification) that were sent alongside this Intrusion Detection System (IDS) alarm. 2. Locate the remote hosts (IP addresses) that are specified in the traps. 3. Examine the behavior of those hosts (with regard to the reason specified in the alarm), and attempt to fix incorrect operation. 4. If necessary, change the configured thresholds in the IDS Rule table under the IDS Policy table.

3.5.47   IDS Threshold Cross Notification

IDS Threshold Cross Notification

Description	This notiofication is sent for each scope (IP or IP+Port) crossing a threshold of an active alarm.
SNMP Alarm	acIDSThresholdCrossNotification
SNMP OID	1.3.6.1.4.1.5003.9.10.1.21.2.0.100
Default Severity	
AlarmType	Other
Probable Cause	
Alarm Text	Threshold cross for scope value IP. Severity=minor/major/critical. Current value=NUM
Status Changes	
Corrective Action	1. Identify the remote host (IP address / port) on the network which the Intrusion Detection System (IDS) has indicated is malicious. Note that the IDS determines a host to be malicious if it has reached or exceeded a user-defined threshold of malicious attacks (counter). 2. Block the malicious activity.

3.5.48   IDS Blacklist Notification

IDS Blacklist Notification

Description	This alarm notifies when an IP address has been added or removed from a blacklist.
SNMP Alarm	acIDSBlacklistNotification
SNMP OID	1.3.6.1.4.1.5003.9.10.1.21.2.0.101
Default Severity	
Alarm Type	securityServiceOrMechanismViolation
Probable Cause	thresholdCrossed
Alarm Text	Added IP * to blacklist Removed IP * from blacklist
Status Changes	

Description	This alarm notifies when an IP address has been added or removed from a blacklist.
SNMP Alarm	acIDSBlacklistNotification
Corrective Action	Identify the malicious remote host (IP address / port) that the Intrusion Detection System (IDS) has automatically blacklisted or removed from the blacklist. Note that a host is determined to be malicious if it has reached or exceeded a user-defined threshold of malicious attacks (counter). The malicious source is automatically blacklisted for a user-defined period, after which it is removed from the blacklist.

3.5.49   Proxy Connectivity

Proxy Connectivity

Description	Sent when a connection to a specific proxy in a specific Proxy Set is down. The trap is cleared when the proxy connections is up.
SNMP Alarm	acProxyConnectivity
SNMP OID	1.3.6.1.4.1.5003.9.10.1.21.2.0.102
Alarm Source	System#0
Alarm Title	Proxy Connectivity
Alarm Text	Proxy Set Alarm <text>
Alarm Type	communicationsAlarm
Probable Cause	▪ Network issue (connection fail due to network/routing failure). ▪ Proxy issue (proxy is down). ▪ AudioCodes device issue.

Alarm Severity	Condition	<text>	Corrective Action
Indeterminate	When connection to the proxy server is lost.	Proxy Server <IP address>:<port> is now OUT OF SERVICE	1. Ping the proxy server. If there is no ping, contact your proxy provider. The probable reason is the proxy is down. 2. Ping between the proxy and AudioCodes device. If there is no ping, the problem could be a network/router issue. 3. If you have more than one device connected to this same proxy, check if there are more AudioCodes devices with the same trap event. If this is the case, this could confirm that this is not AudioCodes device issue. 4. Contact AudioCodes support center (support@audiocodes.com) and send a syslog and network capture for this issue.
Cleared	When connection to the proxy is available again	Proxy Server <IP address>:<port> is now IN SERVICE	-

3.5.50 Web User Activity Log Trap

acActivityLog

Description	Sent upon log (Syslog) generated by device indicating a Web user action (configured by ActivityListToLog). The SNMP trap notification functionality is enabled by the EnableActivityTrap parameter (refer to the *User's Manual*).
SNMP Alarm	acActivityLog
SNMP OID	1.3.6.1.4.1.5003.9.10.1.21.2.0.105
Severity	Indeterminate
Event Type	other (0)
Probable Cause	other (0)
Trap Text	[description of activity].User:<username>. Session: <session type>[IP address of client (user)]. For example: "Auxiliary file loading was changed from '0' to '1', User:Admin. Session: WEB [172.17.125.12]
Note	Activity log event is applicable to the following OAMP interfaces: SNMP, Web, CLI and REST. For SNMP activity, the username refers to the SNMP community string.

3.5.51 License Pool Infra Alarm

acLicensePoolInfraAlarm

Description	This alarm is raised under the following circumstances: • The device was unable to access the SBC License Pool Manager. • The device license has expired. • The device is no longer managed by the SBC License Pool Manager.			
SNMP Alarm	acLicensePoolInfraAlarm			
SNMP OID	1.3.6.1.4.1.5003.9.10.1.21.2.0.106			
Alarm Source	system0Mo			
Event Type	communicationsAlarm			
Probable Cause	keyExpired, failure to connect to license pool server			
Alarm Severity	**Condition**	**\<text\>**	**Corrective Action**	
Major	The last attempt to establish an HTTPS REST connection with the EMS SBC License Pool Manager server was not successful.	Device was unable to access the License Server.	• Wait for the next connection attempt. • In the SBC License Pool Manager, perform the 'MG Update' action to reestablish REST connection with device and send the current license.	
	The device has been configured as Non-Managed in the SBC License Pool Manager. If there are active licensed sessions for this device, the device automatically performs a reset or hitless upgrade.	Device is no longer managed by the SBC License Pool.	If you wish, reconfigure the device as managed by the SBC License Pool Manager.	
Critical	Device unable to establish an HTTPS REST connection with the EMS SBC License Pool Manager server after successive attempts.	License-pool is about to expire.	In the SBC License Pool Manager, perform the 'MG Update' action to reestablish REST connection with device and send the latest license.	

	The device license has expired.	The device license has expired! Use of this device is strictly prohibited.	
Clear	This alarm is cleared when: • Connection has been restablished with the SBC License Pool Manager, an updated license has been loaded to device and apply/reset has been performed. • The device has been reconfigured as managed by the SBC License Pool Manager, a new license has been loaded to the device, and and apply/reset has been performed.		

3.5.52   License Pool Application Alarm

Table 3-1: acLicensePoolApplicationAlarm

Description	This alarm is raised when the device requires a reset or a hitless upgrade after receiving a new license.		
SNMP Alarm	acLicensePoolApplicationAlarm		
SNMP OID	1.3.6.1.4.1.5003.9.10.1.21.2.0.107		
Alarm Source	system0Mo		
Event Type	communicationsAlarm		
Probable Cause	New license pool		
Alarm Severity	**Condition**	**<text>**	**Corrective Action**
Major	SBC License key has been received from SBC License Pool Manager Server.	New license pool allocations received	Perform one of the following actions in the SBC License Pool Manager to apply the new license: • For stand-alone devices, reset the device. • For HA devices, apply a hitless upgrade or reset the device.

3.5.53   Answer-Seizure Ratio Threshold Alarm

ASR Threshold Crossed

Description	The Answer-Seizure Ratio (ASR) measures the percentage of answered calls relative to the total number of attempted calls (seizures). The alarm is raised when the configured ASR minor and major thresholds are crossed (configured in the *Performance Profile* table).
SNMP Alarm	acASRThresholdAlarm
SNMP OID	1.3.6.1.4.1.5003.9.10.1.21.2.0.111
Alarm Title	ASR Threshold Crossed
Alarm Source	The object for which the threshold is crossed can be any of the following: ▪ PM_gwSBCASR ▪ PM_gwSBCIPGroupASR ▪ PM_gwSBCSRDASR
Alarm Text	
Alarm Type	QualityOfServiceAlarm

Probable Cause	ThresholdCrossed		
Severity	**Condition**	**<text>**	**Corrective Action**
Major	ASR is equal or less than the configured Major threshold.	"ASR threshold crossed."	
Minor	ASR is equal or less than the configured Minor threshold (but greater than the Major threshold).	"ASR threshold crossed."	
Cleared	ASR is above the configured Minor threshold plus the hysteresis.		

3.5.54   Average Call Duration Threshold Alarm

ACD Threshold Crossed

Description	The Average Call Duration (ACD) plus the SDD (Session Disconnect time) measures the average call duration from the time from when the sip Bye is sent to the time when the 200 OK is received. The alarm is raised when the configured ACD minor and major thresholds are crossed (configured in the Performance Profile table).		
SNMP Alarm	acACDThresholdAlarm		
SNMP OID	1.3.6.1.4.1.5003.9.10.1.21.2.0.112		
Alarm Title	ACD Threshold Crossed		
Alarm Source	The object for which the threshold is crossed can be any one of the following: ▪ PM_gwSBCACD ▪ PM_gwSBCIPGroupACD ▪ PM_gwSBCSRDACD		
Alarm Text			
AlarmType	Quality Of Service Alarm		
Probable Cause	The threshold has been crossed.		
Alarm Severity	**Condition**	**<text>**	**Corrective Action**

Major	ACD is equal or less than the configured Major threshold.	"ACD threshold crossed."	
Minor	ACD is equal or less than the configured Minor threshold (but greater than the Major threshold).		
Cleared	ACD is above the configured Minor threshold plus the hysteresis.		

3.5.55   Network Effectiveness Ratio Threshold Alarm

NER Threshold Crossed

Description	The NER (Network Effectiveness Ratio) measures the percentage of successfully connected calls relative to the total number of seizures. The alarm is raised when the configured NER minor and major thresholds are crossed (configured in the Performance Profile table).		
SNMP Alarm	acNERThresholdAlarm		
SNMP OID	1.3.6.1.4.1.5003.9.10.1.21.2.0.113		
Alarm Title	NER Threshold Crossed		
Alarm Source	The object for which the threshold is crossed, which can be one of the following: ▪ PM_gwSBCNER ▪ PM_gwSBCIPGroupNER ▪ PM_gwSBCSRDNER		
Alarm Text			
Alarm Type	Quality Of Service Alarm		
Probable Cause	The threshold has been crossed.		
Severity	**Condition**	**<text>**	**Corrective Action**
Major	NER is equal or less than the configured Major threshold.	"NER threshold crossed."	

Minor	NER is equal or less than the configured Minor threshold (but greater than the Major threshold).		
Cleared	NER is above the configured Minor threshold plus the hysteresis.		

3.5.56 No Route to IP Group Alarm

IP Group Blocked

Description	The alarm is raised when the device rejects calls to an IP Group due to the following reasons: ▪ IP Group keep-alive failure (Gateway and SBC) ▪ Poor Voice Quality - MOS (SBC only) ▪ Bandwidth threshold has been crossed (SBC only) ▪ ASR threshold has been crossed (SBC only) ▪ ACD threshold has been crossed (SBC only) ▪ NER threshold has been crossed (SBC only)
SNMP Alarm	acIpGroupNoRouteAlarm
SNMP OID	1.3.6.1.4.1.5003.9.10.1.21.2.0.114
Alarm Title	IP Group Blocked
Alarm Source	The object for which the threshold is crossed according to one of the above mentioned reasons: ▪ IP Group keep alive failure (acProxyConnectivity trap is raised) ▪ Poor Quality of Experience ▪ Bandwidth ▪ ASR (see acASRThresholdAlarm) ▪ ACD (see acACDThresholdAlarm) ▪ NER (see acNERThresholdAlarm)
Alarm Text	<Alarm Description Reason> as described above.
Alarm Type	Quality Of Service Alarm
Probable Cause	One of the reasons described above.

Severity	Condition	<text>	Corrective Action

| Major | When calls rejected to IP Group due to any of the above-mentioned reasons. | "IP Group is temporarily blocked." | - |
| Cleared | When calls are no longer rejected due to the above mentioned reasons (i.e. when none of the above reasons prevent a route to the IP Group from being established). | | - |

3.5.57 Module Service Alarm

This alarm is relevant for the MP-1288 device.

acModuleServiceAlarm

Description	This alarm is raised in the following circumstances:
	• Multiple FXS ports on a specific FXS blade are Out-Of-Service.
	• Hardware faults with the blades DSP.
SNMP Alarm	acModuleServiceAlarm
SNMP OID	1.3.6.1.4.1.5003.9.10.1.21.2.0.122
Alarm Source	Chassis/Module# (Analog)
Event Type	equipmentAlarm
Probable Cause	equipmentMalfunction
Alarm Severity	**Condition**	**<text>**	**Corrective Action**
Minor	More than five FXS ports and less than 33% of FXS ports are Out-Of-Service on a this blade.	Multiple FXS ports are Out-Of-Service.	Service the faulty blade.

Major	• More than 33% of FXS ports are Out-Of-Service on this blade. • There is a hardware fault on the DSP blade. If the fault is due to the exceeding of the high temperature limit, all FXS ports on this blade are Out-Of-Service.	Multiple FXS ports are Out-Of-Service.	Service the faulty blade.
Clear	*Major to Minor:* Less than 25% of FXS ports are Out-Of-Service on the blade. The FXS module has less than 4 FXS ports that are Out-Of-Service on the blade.		If this alarm has been raised as a result of a high DSP temperature as described above, then you must power reset the device to return the blade to service.

3.5.58 Module Operation Alarm

This alarm is relevant for the MP-1288 device.

acModuleOperationAlarm

Description	This alarm is raised when there is operational hardware failure on FXS port or the blades DSP/CPU.
SNMP Alarm	acModuleOperationalAlarm
SNMP OID	1.3.6.1.4.1.5003.9.10.1.21.2.0.123
Alarm Source	Chassis/Module# (Analog / CPU)
Event Type	equipmentAlarm

Probable Cause	equipmentMalfunction		
Alarm Severity	**Condition**	**<text>**	**Corrective Action**
Minor	An operational hardware failure has been detected on between one port to 33% of FXS ports on a specific blade.	Operational failure was detected on Analog/CPU blade.	Service the faulty blade.
Major	An operational hardware failure has been detected on more than 33% of FXS ports on the blade.	Operational failure was detected on Analog/CPU blade.	Service the faulty blade.
	An operational hardware failure has been detected on the blades DSP/CPU. The problem could not be resolved after successive reset attempts.	"Blade is out-of-service due to operational failure"	
Clear	*Major to Minor:* hardware faults have been detected on less than 25% of the blades FXS ports. *Clear:* No hardware faults have been detected on any of the blades FXS ports.		If this alarm has been raised as a result of DSP or CPLD failure as described above, then you must power reset the device to return the blade to service.

3.5.1 Port Service Alarm

This alarm is relevant for the MP-1288 device.

acPortServiceAlarm

Description	This alarm is raised when an FXS port is out of service due to the following:
	• The Serial Peripheral Interface (SPI) connection with the port is lost.
	• The temperature threshold on an FXS port has been exceeded.
	• An FXS port is inactive due to a ground fault.
SNMP Alarm	acPortServiceAlarm
SNMP OID	1.3.6.1.4.1.5003.9.10.1.21.2.0.124
Alarm Source	Chassis/Module#/FXS Port #
Event Type	equipmentAlarm
Probable Cause	outOfService

Alarm Severity	Condition	<text>	Corrective Action
Minor	The relevant FXS ports is faulty due to the reasons described above. In addition, note the following: • If the number of faulty FXS ports is above four on the same module, then the acModuleOperationAlarm alarm is raised (see above). • If there were active sessions on the device, then these calls are disconnected. No new SIP outbound calls will be initiated towards these FXS lines on this device.	"FXS Port state was changed to Out of Service" (the detailed reason will be provided in: Syslog, in the Web detailed port status description and in WEB tooltip per FXS port)	Service the faulty FXS port.

Clear	This alarm is cleared when:		
	• The Serial Peripheral Interface (SPI) connection is restored. • The FXS port temperature falls within the threshold. • The ground fault is cleared. • The acModuleServiceAlarm (see above) is raised i.e. the number of faulty FXS ports on the module is above four.		

3.5.1 License Pool Over Allocation Alarm

acLicensePoolOverAllocationAlarm

Description	This alarm is raised when the SBC license received from the SBC License Pool Manager has exceeded the maximum capacity supported by the device.		
SNMP Alarm	acLicensePoolOverAllocationAlarm		
SNMP OID	1.3.6.1.4.1.5003.9.10.1.21.2.0.125		
Alarm Source	system0Mo		
Event Type	communicationsAlarm		
Probable Cause	Overallocation		
Alarm Severity	**Condition**	**\<text\>**	**Corrective Action**
Warning (displayed after the configuration has been applied in the SBC License Pool Manager; however, prior to device reset or hitless upgrade).	The SBC license received from the License Pool Manager has exceeded the maximum capacity supported by the device.	"Some of the license pool allocations exceed maximum capability and will not be applied"	In the SBC License Pool Manager, do one of the following: • Apply the new license (reset device or apply hitless upgrade); the device sets its SBC capacity to maximum and disregards the excess configured sessions. • Reconfigure the license sessions with values that fall within the device capacity and then apply the new license (reset device or apply hitless upgrade).

Warning (displayed after device restart).	The SBC license received from the License Pool Manager Server has exceeded the maximum capacity supported by the device	"Some of the license pool allocations will not be used because of over-allocation"	In the SBC License Pool Manager, reconfigure the license sessions with values that fall within the device capacity and then apply the new license (reset device or apply hitless upgrade).

3.5.2   SBA Services Status Alarm

⚠️ **Note:** Applicable only to the Mediant 800B SBA and Mediant 1000B SBA devices.

SBA Services Status Alarm

Description	Services status alarm. The services are Front End Server, Mediation Server, Replica Server, and Centralized Logging Service for Microsoft Lync 2013 (Centralized Logging is not available for Lync 2010).
SNMP Alarm	acSBAServicesStatusAlarm
SNMP OID	1.3.6.1.4.1.5003.9.30.2.2.0.1
Alarm Title	SBA Services Status Alarm
Alarm Source	SBA Server
Alarm Text	Indicates which of the above mentioned services is down.
Alarm Type	Other
Probable Cause	Other
Additional Info	When an SBA is configured, displays the 'SBA Description' field.

Severity	Condition	\<text\>	Corrective Action
Critical	Service is down	SERVICE_STOPPED	Start the service and check why the service stopped, using the event viewer.
Major	Service is paused	SERVICE_PAUSED	Start the service and check why the service paused, using the event viewer.
Cleared	Service is running	SERVICE_RUNNING	-
Indeterminate	Service in indeterminate state	SERVICE_CONTINUE_PENDING SERVICE_PAUSE_PENDING SERVICE_START_PENDING SERVICE_STOP_PENDING	Start the service and check why the service is in indeterminate state, using the event viewer.

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