

EMS

Element Management System

MediaPack OAM Guide

MEGACO Version 6.6

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Notice

This document describes the Provisioning parameters, Performance Monitoring parameters and alarms for the MediaPack product.

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Abbreviations and Terminology

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

Document Revision Record

LTRT	Description
32206	Initial document release for Version 6.6
32207	Update to support provisioning only for products supporting the MEGACO protocol.

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1 Introduction


This guide incorporates Provisioning Parameters, Performance Monitoring Parameters and Alarms for the MediaPack.



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2 Provisioning Parameters

The following tables can be used as a reference for the screens, tabs and parameters displayed in the EMS GUI.

Note that with regard to the column 'Type' in the tables in this section, the first line indicates whether the parameter is an integer, string or enumerator. The lines below it indicate the range / possible values that can be configured for the parameter.

Note that all parameters that are of provisioning type Offline (in column 'Provisioning Type') are graphically indicated in the EMS GUI screens by the icon .

Online	To configure an 'Online' mode parameter (indicated in the EMS by the icon  adjacent to the parameter), you need to lock <i>only the entity containing the parameter</i> . <i>You do not need to lock the board/media gateway containing the entity</i> . The mode is called ' Online ' because the parameter can be configured without resetting any board in the media gateway.
Offline	To configure an 'Offline' mode parameter (indicated in the EMS by the icon  adjacent to the parameter), you need to lock the board/media gateway containing the entity as well as the entity in order to configure the entity's parameter. The mode is called 'Offline' because all calls active on the board/media gateway containing the entity's parameter are dropped when you lock the board/media gateway and entity in order to configure the parameter.
Instant	An 'Instant' mode parameter can be configured on the fly; the configuration takes effect immediately. No icon is displayed adjacent to the parameter in the EMS GUI. No locking or unlocking of the entity or of the board/media gateway is required to perform the configuration.
Offline_create	'Offline_create' will sometimes appear as 'Online' and at other times as 'Offline', depending on the user's specific configuration.
Instant_apply	From the EMS user's point of view, 'Instant_apply' is identical to 'Instant'.

2.1 Frame: CLI Terminals Provisioning

2.1.1 Tab: CLI Terminals Provisioning

Frame: CLI Terminals Provisioning, Tab: CLI Terminals Provisioning

Parameter Name	Type	Provisioning Type	Default Value	Description
Telnet & SSH				
Server Enable	Enum: disable(0), enable(1), ssl(2)	Instant	0	Enables or disables the embedded Telnet server. Telnet is disabled by default for security reasons. 0 = Disable 1= Enable 2 = SSL mode (if available - requires an SSL-aware Telnet client software) SSL mode is not available on the MP-108 / MP-124 media gateways Mib name: acSysTelnetServerEnable INI Name: TELNETSERVERENABLE Profile name: CLI Terminals Profile
Server Port	Integer 0-65535	Online	23	Defines the port number for the embedded Telnet server. Range = Valid port number Mib name: acSysTelnetServerPort INI Name: TELNETSERVERPORT Profile name: CLI Terminals Profile
Server Idle Disconnect	Integer 0-2147483647	Offline	0	This parameter is used to set the timeout for disconnection of an idle Telnet session (minutes). When set to zero, idle sessions are not disconnected. Range: Any number Mib name: acSysTelnetServerIdleDisconnect INI Name: TELNETSERVERIDLEDISCONNECT Profile name: CLI Terminals Profile
SSH Server Port	Integer 0-65535	Online	22	Defines the port number for the embedded SSH server. Range = Valid port number Mib name: acSysTelnetSSHServerPort INI Name: SSHSERVERPORT Profile name: CLI Terminals Profile
SSH Server Enable	Enum: Disable(0), Enable(1)	Online	0	Enables or disables the embedded SSH server. 0 = Disable 1= Enable Mib name: acSysTelnetSSHServerEnable INI Name: SSHSERVERENABLE Profile name: CLI Terminals Profile

Parameter Name	Type	Provisioning Type	Default Value	Description
SSH Admin Key	String Up to 510 chars.	Instant		This parameter holds an RSA public key for strong authentication to the SSH interface (if enabled). The value should be a base64-encoded string; see the Security appendix for additional information. Mib name: acSysTelnetSSHAdminKey INI Name: SSHADMINKEY Profile name: CLI Terminals Profile
SSH Require Public Key	Enum: Disable(0), Enable(1)	Instant	0	Enables or disables RSA public keys in SSH. When set to 0, RSA public keys are optional (if SSHAdminKey is set). When set to 1, RSA public keys are mandatory. Mib name: acSysTelnetSSHRequirePublicKey INI Name: SSHREQUIREPUBLICKEY Profile name: CLI Terminals Profile
Telnet SSH Max Sessions	Integer 1-2	Online	2	Configure maximum allowed number of SSH sessions. Mib name: acSysTelnetSSHMaxSessions INI Name: SSHMAXSESSIONS Profile name: CLI Terminals Profile
SSH Max Payload Size	Integer 550-32768	Online	32768	Configure maximum uncompressed payload size for SSH packets, in bytes. Mib name: acSysTelnetSSHMaxPayloadSize INI Name: SSHMAXPAYLOADSIZE Profile name: CLI Terminals Profile
SSH Max Binary Packet Size	Integer 582-35000	Online	35000	Configure maximum packet size for SSH packets, in bytes. Mib name: acSysTelnetSSHMaxBinaryPacketSize INI Name: SSHMAXBINARYPACKETSIZE Profile name: CLI Terminals Profile
Serial IF				
Baud Rate	Enum: r1200(1200), r2400(2400), r4800(4800), r9600(9600), r14400(14400), r19200(19200), r38400(38400), r57600(57600), r115200(115200)	Offline	9600	Enables changes to the Serial Baud Rate for Simplified Message Desk Interface (SMDI). Standard values: 1200, 2400, 9600, 14400, 19200, 38400, 57600, 115200. Mib name: acSysSerialIFBaudRate INI Name: SERIALBAUDRATE Profile name: CLI Terminals Profile

Parameter Name	Type	Provisioning Type	Default Value	Description
Data	Integer 7-8	Offline	8	Changes the serial data bit for the Simplified Message Desk Interface (SMDI). 7 = 7 Bit 8 = 8 Bit Mib name: acSysSerialIFData INI Name: SERIALDATA Profile name: CLI Terminals Profile
Parity	Enum: none(0), odd(1), even(2)	Offline	0	Changes the serial parity for the Simplified Message Desk Interface (SMDI). 0 = None 1 = Odd 2 = Even Mib name: acSysSerialIFParity INI Name: SERIALPARITY Profile name: CLI Terminals Profile
Stop	Integer 1-2	Offline	1	Changes the serial stop for the Simplified Message Desk Interface (SMDI). 1 = 1 Bit 2 = 2 Bit Mib name: acSysSerialIFStop INI Name: SERIALSTOP Profile name: CLI Terminals Profile
Flow Control	Enum: none(0), hardware(1)	Offline	0	Changes the serial flow control for the Simplified Message Desk Interface (SMDI). 0 = None 1 = Hardware Mib name: acSysSerialIFFlowControl INI Name: SERIALFLOWCONTROL Profile name: CLI Terminals Profile

2.2 Frame: Media Provisioning

2.2.1 Tab: General Settings

Frame: Media Provisioning, Tab: General Settings

Parameter Name	Type	Provisioning Type	Default Value	Description
Index	Integer 0-1	NA	0	Entry number in the table. Mib name: acMediaDspIndex INI Name: DSPTEMPLATES_INDEX Profile name: Not Profiled
Media Aggregation				
Row Status	Enum:	NA	0	ROWSTATUS field for line. Internal parameter. Mib name: acMediaDspRowStatus Profile name: VoP Media DSP Table Profile
Remote Base UDP Port	Integer 0-65535	Offline	0	Remote Base UDP Port For Aggrigation Mib name: acMediaAggregationRemoteBaseUDPPort INI Name: REMOTEBASEUDPPORT Profile name: VoP Media Profile
Template Number	Integer 0-16	Offline	0	DSP template number. Mib name: acMediaDspTemplateName INI Name: DSPTEMPLATES_DSPTEMPLATENUMBER Profile name: VoP Media DSP Table Profile
DSP				
Resources Percentage	Integer 0-100	Offline	0	Percentage use for the specified template. Mib name: acMediaDspResourcesPercentage INI Name: DSPTEMPLATES_DSPRESOURCESPERCENTAGE Profile name: VoP Media DSP Table Profile
Version Template Number	Integer 0-255	Offline	0	Selects the DSP load number. Each load has a different coder list, a different channel capacity and different features supported. Range = 0 to 255 Mib name: acMediaDSPConfigVersionTemplateName INI Name: DSPVERSIONTEMPLATENUMBER Profile name: VoP Media Profile
Media Realm				

Parameter Name	Type	Provisioning Type	Default Value	Description
Default Realm Name	String Up to 39 chars.	Offline		By default, the default CP media realm is the first realm appearing in the CP media realm table. The parameter enables the user to set any of the realms appearing in the table as the default realm. Mib name: acCPMediaDefaultRealmName INI Name: CPDEFAULTMEDIAREALMNAME Profile name: VoP Media Profile

2.2.2 Tab: Voice Settings

Frame: Media Provisioning, Tab: Voice Settings

Parameter Name	Type	Provisioning Type	Default Value	Description
Jitter Buffer				
Minimal Delay (ms)	Integer 0-150	Online	0	Defines the Dynamic Jitter Buffer Minimum Delay (in msec). Recommended value for a regular voice call is 10. Mib name: acJitterBufferMinDelay INI Name: DJBUFMINDELAY Profile name: VoP Media Profile
Opt Factor	Integer 0-13	Online	0	Defines the Dynamic Jitter Buffer frame error/delay optimization. Recommended value for a regular voice call is 10. Mib name: acJitterBufferOptFactor INI Name: DJBUFOPTFACTOR Profile name: VoP Media Profile
General Settings				
Volume (dB)	Integer -32-31	Online	-32	Defines the voice output gain control. Range: -32 dB to +31 dB in 1 dB steps -32 = mute Default = 0 = No Gain Mib name: acVoiceVolume INI Name: VOICEVOLUME Profile name: VoP Media Profile
Payload Format	Enum: VoicePayloadFormatRTP(0), VoicePayloadFormatATM(1)	Online	0	Sets the voice payload format. Choose either 0 = RTP or 1 = ATM (which enables working with vendors that use G.726 ATM Payload Format over RTP). Uses the enum acTVoicePayloadFormat. 0 = VoicePayloadFormatRTP 1 = VoicePayloadFormatATM 2 = VoicePAYloadFormatIllegal Mib name: acVoicePayloadFormat INI Name: VOICEPAYLOADFORMAT Profile name: VoP Media Profile
Input Gain (dB)	Integer -32-31	Online	-32	Defines the PCM input gain. Range = -32 dB to +31 dB in 1 dB steps. Default = No Gain Mib name: acVoiceInputGain INI Name: INPUTGAIN Profile name: VoP Media Profile
Echo Canceller Enable	Enum: Disable(0), Enable(1)	Online	0	Enables or disables the Echo Canceller. 0 = Disable 1 = Enable Mib name: acVoiceECEnable INI Name: ENABLEECHOCANCELLER Profile name: VoP Media Profile

Parameter Name	Type	Provisioning Type	Default Value	Description
Echo Canceller Hybrid Loss	Enum: ECHybridLoss6DBM(0), ECHybridLoss0DBM(2), ECHybridLoss3DBM(3)	Online	0	<p>Sets the worst case ratio between the signal level transmitted to the hybrid and the echo level returning from hybrid. Set this per worst hybrid in the system in terms of echo return loss. Refer to the enumeration acTECHybridLoss.</p> <p>0 = 6 dBm 2 = 0 dBm 3 = 3 dBm</p> <p>Mib name: acVoiceECHybridLoss INI Name: ECHYBRIDLOSS Profile name: VoP Media Profile</p>
Tone Detector	Enum: Disable(0), Enable(1)	Online	0	<p>Used to configure the Echo Canceller Tone Detector. Detects a 2100 Hz tone at the input signal to the TDM (received signal). Improves Echo Canceller operation accordingly. Detects 2100, 2100 with phase reversals and 2100 with AM. Improves the operation of the Echo Canceller by slowing adaptation when the signal is detected. This data is also used by the fax state machine.</p> <p>0 = Disable 1 = Enable</p> <p>Mib name: acVoiceECToneDetector INI Name: ECENABLETONEDETECTOR Profile name: VoP Media Profile</p>
Comfort Noise Generation	Enum: Disable(0), Enable(1)	Online	0	<p>Use this parameter to enable or enable Echo Canceller Comfort Noise Generation, which generates comfort noise when the Non Linear Processor (NLP) is active.</p> <p>When the NLP ascertains that the signal is echo and not doubletalk and decides to clip, instead of transmitting silence it transmits a synthesized signal similar to the background noise.</p> <p>0 = Disable 1 = Enable</p> <p>Mib name: acVoiceECComfortNoiseGeneration INI Name: ECENABLECOMFORTNOISEGENERATION Profile name: VoP Media Profile</p>

Parameter Name	Type	Provisioning Type	Default Value	Description
Silence Compression Mode	Enum: SILENCE-COMPRESION-DISABLE(0), SILENCE-COMPRESION-ENABLE(1), SILENCE-COMPRESION-ENABLE-NOISE-ADAPTATION-DISABLE(2)	Online	0	Enables or disables Silence Suppression Mode. 0 = Disable = SILENCE_COMPRESION_DISABLE 1 = Enable = SILENCE_COMPRESION_ENABLE 2 = Enable without adaptation = SILENCE_COMPRESION_ENABLE_NOISE_ADAPTATION_DISABLE Mib name: acVoiceSCMode INI Name: ENABLESILENCECOMPRESSION Profile name: VoP Media Profile
Automatic Gain Control				
AGC Enable	Enum: Disable(0), Enable(1)	Online	0	Activates the AGC (Automatic Gain Control). 0 = Disable 1 = Enable Mib name: acVoiceAGCEnable INI Name: ENABLEAGC Profile name: VoP Media Profile
Gain Slope	Integer 0-31	Online	0	Determines the AGC (Automatic Gain Control) convergence rate. Range = 0 to 31 (according to acTAGCGainSlope) Default = 3 (= 1 db/sec) Mib name: acVoiceAGCGainSlope INI Name: AGCGAINSLOPE Profile name: VoP Media Profile
Redirection	Integer 0-1	Online	0	Determines the AGC (Automatic Gain Control) direction. 0 = AGC works on signals from the TDM side 1 = AGC works on signals coming from the Network side Mib name: acVoiceAGCRedirection INI Name: AGCREDIRECTION Profile name: VoP Media Profile
Target Energy	Integer 0-63	Online	0	Determines the signal energy value [-dBm] that the AGC (Automatic Gain Control) attempts to attain. Range = 0 to 63 Mib name: acVoiceAGCTargetEnergy INI Name: AGCTARGETENERGY Profile name: VoP Media Profile

Parameter Name	Type	Provisioning Type	Default Value	Description
Minimal Gain (dB)	Integer 0-31	Offline	20	Defines the minimum gain by the AGC when activated [- db]. Range = 0 to -31 Mib name: acVoiceAGCMinGain INI Name: AGCMINGAIN Profile name: VoP Media Profile
Maximal Gain (dB)	Integer 0-18	Offline	15	Defines the maximum gain by the AGC when activated [db]. Range = 0 to 18 Mib name: acVoiceAGCMaxGain INI Name: AGCMAXGAIN Profile name: VoP Media Profile
Disable Fast Adaptation	Enum: Disable(0), Enable(1)	Offline	0	Disables the AGC Fast Adaptation mode. Enable = 1 Disable = 0 Mib name: acVoiceAGCDisableFastAdaptation INI Name: AGCDISABLEFASTADAPTATION Profile name: VoP Media Profile
Coders				
EVRC	Enum: variableRate(0), ac1kbps(1), ac4kbps(2), ac8kbps(3)	Online	1	This parameter is used to configure the EVRC coder bit rate. 0 = Variable Rate 1 = 1 kbps 2 = 4 kbps 3 = 8 kbps Mib name: acVoiceCoderRateEVRC INI Name: EVRCRATE Profile name: VoP Media Profile
QCELP8	Enum: variableRate(0), ac1kbps(1), ac2kbps(2), ac4kbps(3), ac8kbps(4)	Online	1	This parameter is used to configure the QCELP8 coder bit rate. 0 = Variable Rate 1 = 1 kbps 2 = 2 kbps 3 = 4 kbps 4 = 8 kbps Mib name: acVoiceCoderRateQCELP8 INI Name: QCELP8RATE Profile name: VoP Media Profile

Parameter Name	Type	Provisioning Type	Default Value	Description
QCELP13	Enum: variableRate(0), ac1kbps(1), ac3kbps(2), ac7kbps(3), ac13kbps(4)	Online	1	This parameter is used to configure the QCELP13 coder bit rate. 0 = Variable Rate 1 = 1 kbps 2 = 3 kbps 3 = 7 kbps 4 = 13 kbps Mib name: acVoiceCoderRateQCELP13 INI Name: QCELP13RATE Profile name: VoP Media Profile

2.2.3 Tab: Caller ID Settings

Frame: Media Provisioning, Tab: Caller ID Settings

Parameter Name	Type	Provisioning Type	Default Value	Description
Caller Id Types	Enum: Bellcore (0), ETSI (1), NTT (2), BT (4), DTMF-Based-ETSI (16), Denmark (17), Indian (18), Brazilian (19)	Online	0	Defines the supported Caller ID standard. 0 = Bellcore 1 = ETSI 2 = NTT 4 = British 16 = ETSI_ETS 17 = Denmark 18 = Indian 19 = Brazilian Mib name: acCallerIDTypes INI Name: CALLERIDTYPE Profile name: VoP Media Profile
Transport Type	Enum: CallerID-DISABLE(0), CallerID-RELAY(1), CallerID-MUTE(3)	Online	0	Defines the CallerID Transport type. 0 = Disable 1 = Relay 3 = Mute Mib name: acCallerIDTransportType INI Name: CALLERIDTRANSPORTTYPE Profile name: VoP Media Profile
DTMF Based Max Digits	Integer 0-26	Online	0	Determines the maximum number of DTMF digits in a DTMF-based Caller ID string. Range = 0 to 26 Mib name: acCallerIDDTMFBasedMaxDigits INI Name: MAXDTMFDIGITSINCIDSTRING Profile name: VoP Media Profile

Parameter Name	Type	Provisioning Type	Default Value	Description
DTMF Based Min Digits	Integer 0-26	Online	0	<p>Determines the minimum number of DTMF digits in a DTMF-based Caller ID string.</p> <p>Range = 0 to 26 Mib name: acCallerIDDTMFBasedMinDigits INI Name: MINDTMFDIGITSINCIDSTRING Profile name: VoP Media Profile</p>
NTT DID Signaling Form	Enum: NttDidFskSignalling (0), NttDidDtmfBasedSignalling (1)	Online	1	<p>Configures the signalling format used when generating an NTT DID.</p> <p>0 = FSK Signal 1 = DTMF Based Signal Mib name: acCallerIDNTTDIDSignallingForm INI Name: NTTDIDSIGNALLINGFORM Profile name: VoP Media Profile</p>

2.2.4 Tab: Bypass Settings

Frame: Media Provisioning, Tab: Bypass Settings

Parameter Name	Type	Provisioning Type	Default Value	Description
Coder Type	Enum: G711Alaw-64(0), G711Mulaw(1)	Online	0	Users can use this parameter to set the fax/modem bypass coder (according to acTCoders). 0 = G.711 A-Law 1 = G.711 Mu-Law Mib name: acFMByPassCoderType INI Name: FAXMODEMBYPASSCODERTYPE Profile name: VoP Media Profile
Packetization Period	Integer 1-12	Online	1	Defines the number of basic frames to generate one RTP fax/modem bypass packet. Mib name: acFMByPassPacketizationPeriod INI Name: FAXMODEMBYPASSM Profile name: VoP Media Profile
Basic Packet Interval	Enum: PACKET-INTERVAL-DEFAULT(0), PACKET-INTERVAL-5-MSEC(1), PACKET-INTERVAL-10-MSEC(2), PACKET-INTERVAL-20-MSEC(3)	Online	0	Sets the basic Fax / Modem Bypass RTP packet rate. 0 = Default (set internally) (PACKET_INTERVAL_DEFAULT) 1 = 5 msec (PACKET_INTERVAL_5_MSEC) 2 = 10 msec (PACKET_INTERVAL_10_MSEC) 3 = 20 msec (PACKET_INTERVAL_20_MSEC) Mib name: acFMByPassBasicPacketInterval INI Name: FAXMODEMBYPASSBASICRTPPACKETINTERVAL Profile name: VoP Media Profile
Dynamic Jitter Buffer Minimal Delay (ms)	Integer 0-150	Online	0	Determines the Jitter Buffer constant delay (in milliseconds) during a Fax And Modem Bypass session. (The minimum Jitter Buffer Size). Range = 0 to 150 Mib name: acFMByPassDJBufMinDelay INI Name: FAXMODEMBYPASDJBUFFMINDELAY Profile name: VoP Media Profile
NSE Payload Type	Integer 96-127	Online	96	Users can use this parameter to modify the NSE packet's payload type. Range = 96 to 127 Mib name: acFMNSEPayloadType INI Name: NSEPAYLOADTYPE Profile name: VoP Media Profile

Parameter Name	Type	Provisioning Type	Default Value	Description
NSE Mode	Enum: Disable(0), Enable(1)	Online	0	<p>Enables or disables Cisco's NSE fax / modem automatic pass-through mode.</p> <p>0 = Disable 1 = Enable Mib name: acFMNSEMode INI Name: NSEMODE Profile name: VoP Media Profile</p>
Enable Inband Network Detection	Enum: Disable(0), Enable(1)	Online	0	<p>Enables or disables inband network detection related to fax/modem.</p> <p>0 = Disable 1 = Enable Mib name: acFMCommonEnableInbandNetworkDetection INI Name: ENABLEFAXMODEMINBANDNETWORKDETECTION Profile name: VoP Media Profile</p>
Fax Bypass Payload Type	Integer 0-127	Online	0	<p>Users can use this parameter to modify the Fax Bypass Mode RTP packet's payload type. In the case of congestion (if the selected payload type is already used for other coders/modes), then a TP_SETUP_PARAMETER_INVALID_ERROR is issued and the payload type is set to the default value (102). It is the user's responsibility to avoid congestion with other payload types.</p> <p>Range = 0 to 127 Mib name: acFaxBypassPayloadType INI Name: FAXBYPASSPAYLOADTYPE Profile name: VoP Media Profile</p>
Modem Bypass Payload Type	Integer 0-127	Online	0	<p>Users can use this parameter to modify the Modem Bypass Mode RTP packet's payload type. In the case of congestion (if the selected payload type is already used for other coders/modes), then a TP_SETUP_PARAMETER_INVALID_ERROR is issued and the payload type is set to the default value (103). It is the user's responsibility to avoid congestion with other payload types.</p> <p>Range = 0 to 127 Mib name: acModemBypassPayloadType INI Name: MODEMBYPASSPAYLOADTYPE Profile name: VoP Media Profile</p>
Fax Bypass Output Gain	Integer -31-31	Online	-31	<p>Defines the fax bypass output gain control. Range: -31 dB to +31 dB in 1 dB steps Default = 0 = No Gain.</p> <p>Mib name: acFMBypassFaxBypassOutputGain INI Name: FAXBYPASSOUTPUTGAIN Profile name: VoP Media Profile</p>

Parameter Name	Type	Provisioning Type	Default Value	Description
Modem Bypass Output Gain	Integer -31-31	Online	-31	Defines the modem bypass output gain control. Range: -31 dB to +31 dB in 1 dB steps Default = 0 = No Gain Mib name: acFMBypassModemBypassOutputGain INI Name: MODEMBYPASSOUTPUTGAIN Profile name: VoP Media Profile

2.2.5 Tab: FAX Settings

Frame: Media Provisioning, Tab: FAX Settings

Parameter Name	Type	Provisioning Type	Default Value	Description
Transport Mode	Enum: Disable(0), RelayEnable(1), ByPassEnable(2), EventsOnly(3)	Online	0	Sets the Fax over IP transport method. 0 = Transparent 1 = Relay 2 = Bypass 3 = Transparent with Events Mib name: acFaxTransportMode INI Name: FAXTRANSPORTMODE Profile name: VoP Media Profile
Relay ECM Enable	Enum: Disable(0), Enable(1)	Online	0	Enables or disables the using of ECM mode during Fax Relay. 0 = Disable 1 = Enable Mib name: acFaxRelayECMEnable INI Name: FAXRELAYECMENABLE Profile name: VoP Media Profile

Parameter Name	Type	Provisioning Type	Default Value	Description
Relay Max Rate	Enum: acRate2400bps(0), acRate4800bps(1), acRate7200bps(2), acRate9600bps(3), acRate12000bps(4), acRate14400bps(5), acRate16800bps(6), acRate19200bps(7), acRate21600bps(8), acRate24000bps(9), acRate26400bps(10), acRate28800bps(11), acRate31200bps(12), acRate33600bps(13)	Online	0	Limits the maximum rate at which fax messages are transmitted. 0 = 2400 bps 1 = 4800 bps 2 = 7200 bps 3 = 9600 bps 4 = 12000 bps 5 = 14400 bps 6 = 16800 bps 7 = 19200 bps 8 = 21600 bps 9 = 24000 bps 10 = 26400 bps 11 = 28800 bps 12 = 31200 bps 13 = 33600 bps Mib name: acFaxRelayMaxRate INI Name: FAXRELAYMAXRATE Profile name: VoP Media Profile
Relay Redundancy Depth	Integer 0-2	Online	0	Determines the depth of redundancy for fax packets. This parameter is applicable only to non-V.21 packets. 0 = No redundancy 1 = 1 packet redundancy 2 = 2 packet redundancy Mib name: acFaxRelayRedundancyDepth INI Name: FAXRELAYREDUNDANCYDEPTH Profile name: VoP Media Profile
Enhanced Relay Redundancy Depth	Integer 0-4	Online	0	Determines the number of repetitions to be applied to control packets when using the T.38 standard. 0 = No redundancy 1 = 1 packet redundancy 2 = 2 packet redundancy 3 = 3 packet redundancy 4 = Maximum redundancy Mib name: acFaxEnhancedRelayRedundancyDepth INI Name: FAXRELAYENHANCEDREDUNDANCYDEPTH Profile name: VoP Media Profile

Parameter Name	Type	Provisioning Type	Default Value	Description
CNG Detector Mode	Enum: CNG-DETECTOR-MODE-DISABLE(0), CNG-DETECTOR-MODE-RELAY(1), CNG-DETECTOR-MODE-EVENT-ONLY(2)	Online	0	Determines the CNG Detector mode. 0 = Disable 1 = Relay 2 = Event Only Mib name: acFaxCNGDetectorMode INI Name: CNGDETECTORMODE Profile name: VoP Media Profile
Relay Volume (dBm)	Integer -18--3	Online	-18	Determines the fax gain control. The range -18 to -3 relates to -18.5 dBm to -3.5 dBm in steps of 1 dBm. Mib name: acFMCommonRelayVolume INI Name: FAXMODEMRELAYVOLUME Profile name: VoP Media Profile

2.2.6 Tab: Modem Settings

Frame: Media Provisioning, Tab: Modem Settings

Parameter Name	Type	Provisioning Type	Default Value	Description
V21 Transport	Enum: Disable(0), RelayEnable(1), ByPassEnable(2), EventsOnly(3)	Online	0	Sets the V.21 modem transport method (must be set to 0 = Disable). 0 = Transparent 2 = Bypass 3 = Transparent with Events Mib name: acModemV21Transport INI Name: V21MODEMTRANSPORTTYPE Profile name: VoP Media Profile
V22 Transport	Enum: Disable(0), RelayEnable(1), ByPassEnable(2), EventsOnly(3)	Online	0	Sets the V.22 modem transport method. 0 = Transparent 2 = Bypass 3 = Transparent with Events Mib name: acModemV22Transport INI Name: V22MODEMTRANSPORTTYPE Profile name: VoP Media Profile
V23 Transport	Enum: Disable(0), RelayEnable(1), ByPassEnable(2), EventsOnly(3)	Online	0	Sets the V.23 modem transport method. 0 = Transparent 2 = Bypass 3 = Transparent with Events Mib name: acModemV23Transport INI Name: V23MODEMTRANSPORTTYPE Profile name: VoP Media Profile

Parameter Name	Type	Provisioning Type	Default Value	Description
V32 Transport	Enum: Disable(0), RelayEnable(1), ByPassEnable(2), EventsOnly(3), AnsMute(4)	Online	0	Sets the V.32 modem transport method. 0 = Transparent 2 = Bypass 3 = Transparent with Events 4 = AnsMute Mib name: acModemV32Transport INI Name: V32MODEMTRANSPORTTYPE Profile name: VoP Media Profile
Bell Transport Type	Enum: Disable(0), ByPassEnable(2), EventsOnly(3)	Online	0	Use this parameter to set the Bell modem transport method. 0 = Transparent 2 = Bypass (enum ByPassEnable) 3 = Transparent with Events (enum EventsOnly) Mib name: acModemBellTransportType INI Name: BELLMODEMTRANSPORTTYPE Profile name: VoP Media Profile
V34 Transport	Enum: Disable(0), RelayEnable(1), ByPassEnable(2), EventsOnly(3), AnsMute(4)	Online	0	Sets the V.34 modem transport method. 0 = Transparent 2 = Bypass 3 = Transparent with Events 4 = AnsMute Mib name: acFMCommonV34Transport INI Name: V34MODEMTRANSPORTTYPE Profile name: VoP Media Profile
V150.1				
Allocation Profile	Integer 0-20	Offline	0	Selects the V.150.1 profile, determining how many DSP channels have V.150.1 support. Range = 0 to 3 Mib name: acV150dot1AllocationProfile INI Name: V1501ALLOCATIONPROFILE Profile name: VoP Media Profile
SSE Payload Type Rx	Integer 96-127	Online	105	SSE payload type RX Mib name: acV150dot1SSEPayloadTypeRx INI Name: V1501SSEPAYLOADTYPERX Profile name: VoP Media Profile

Parameter Name	Type	Provisioning Type	Default Value	Description
SSE Redundancy Depth	Integer 1-6	Online	3	SSE is a part of V150.1 modem relay protocol and SSE messages are sent over RTP. SSE redundancy refers to the sending of SSE messages several times to increase reliability. This parameter determines the number of times each SSE message is to be resent. Mib name: acV150dot1SSERedundancyDepth INI Name: V1501SSEREDUNDANCYDEPTH Profile name: VoP Media Profile

2.2.7 Tab: In-Band-Signaling

Frame: Media Provisioning, Tab: In-Band-Signaling

Parameter Name	Type	Provisioning Type	Default Value	Description
Analog Signal Transport Type	Enum: ignore(0), transfer(1)	Online	0	Determines the analog signal transport type. 0 = Ignore 1 = Transfer hookflash via RFC 2833 Mib name: acIBSAnalogSignalTransportType INI Name: ANALOGSIGNALTRANSPORTTYPE Profile name: VoP Media Profile
DTMF Volume (dBm)	Integer -31-0	Online	-31	Defines and controls the DTMF generation volume [-dBm]. Range = -31 to 0 Mib name: acIBSDTMFVolume INI Name: DTMFVOLUME Profile name: VoP Media Profile
DTMF Transport Type	Enum: acMuteDTMF(0), acTransparentDTMF(2), acRFC2833RelayDTMF(3), acRFC2833RelayDecoderMute(7)	Online	0	Defines the type of DTMF transport. 0 = Erase DTMFs from voice transport not relayed to remote 2 = DTMFs not erased are not relayed to remote 3 = DTMFs are muted from the voice stream and relayed according to RFC 2833 7 = DTMFs are sent according to RFC 2833 and muted when received Mib name: acIBSDTMFTransportType INI Name: DTMFTRANSPORTTYPE Profile name: VoP Media Profile

Parameter Name	Type	Provisioning Type	Default Value	Description
CAS Relay Transport Mode	Enum: CASEventsOnly(0), CASRFC2833Relay(1)	Online	0	Controls the ABCD signaling transport type over IP. 0 = No Relay over the network 1 = Enable CAS relay according to RFC 2833 Mib name: acIBSCASRelayTransportMode INI Name: CASTRANSPORTTYPE Profile name: VoP Media Profile
Rx DTMF Relay Hang Over Time (msec)	Integer 0-2000	Online	0	Used to configure the Voice Silence time (in ms units) after playing DTMF or MF digits to the TDM side that arrived as Relay from the Network side. Range from 0 to 2000, Default 1000. Mib name: acIBSRxDtmfHangOverTime INI Name: RXDTMFHANGOVERTIME Profile name: VoP Media Profile
Tx DTMF Relay Hang Over Time (msec)	Integer 0-2000	Online	0	Voice Silence time (in ms units) after detecting the end of DTMF or MF digits at the TDM side when the DTMF Transport Type is either Relay or Mute. This feature allows the user to configure the silence time. Mib name: acIBSTxDtmfHangOverTime INI Name: TXDTMFHANGOVERTIME Profile name: VoP Media Profile
DTMF Twist Control	Integer -10-10	Offline	0	Defines a delta (in dB) between the high and low frequency component in the DTMF signal. dB Positive values cause the higher frequency component to be stronger than the lower one. Negative values cause the opposite effect. For any parameter value, both components change so that their average is constant. Range = -10 to 10 Mib name: acIBSDTMFTwistControl INI Name: DTMFGENERATIONTWIST Profile name: VoP Media Profile
Detector				
Trunk Testing Tones Detector	Enum: Disables (0), Enables (1)	Offline	0	Enables or disables trunk testing tones. 0 = Disables trunk testing tones 1 = Enables trunk testing tones Mib name: acIBSTrunkTestingTonesEnable INI Name: ENABLETRUNKTESTINGTONES Profile name: VoP Media Profile

Parameter Name	Type	Provisioning Type	Default Value	Description
MF R1 Enable	Enum: Disable(0), Enable(1)	Online	0	Enables or disables detection of MFR1 signaling. 0 = Disable 1 = Enable Mib name: acIBSDetectorsMFR1Enable INI Name: MFR1DETECTORENABLE Profile name: VoP Media Profile
MF R2 Forward Enable	Enum: Disable(0), Enable(1)	Online	0	Enables or disables detection of MFR2 forward signaling. 0 = Disable 1 = Enable Mib name: acIBSDetectorsMFR2ForwardEnable INI Name: MFR2FORWARDDETECTORENABLE Profile name: VoP Media Profile
MF R2 Backward Enable	Enum: Disable(0), Enable(1)	Online	0	Enables or disables detection of MFR2 backward signaling Mib name: acIBSDetectorsMFR2BackwardEnable INI Name: MFR2BACKWARDDETECTORENABLE Profile name: VoP Media Profile
R1 Line Enable	Enum: Disable(0), Enable(1)	Online	0	Enables or disables detection of Line signaling. 0 = Disable 1 = Enable Mib name: acIBSDetectorsR1LineEnable INI Name: R1LINEDETECTORENABLE Profile name: VoP Media Profile
DTMF Enable	Enum: Disable(0), Enable(1)	Online	0	Enables or disables detection of DTMF signaling. 0 = Disable 1 = Enable Mib name: acIBSDetectorsDTMFEnable INI Name: DTMFDETECTORENABLE Profile name: VoP Media Profile
Call Progress Enable	Enum: Disable(0), Enable(1)	Online	0	Enables or disables detection of Call Progress Tones. 0 = Disable 1 = Enable Mib name: acIBSDetectorsCallProgressEnable INI Name: CALLPROGRESSDETECTORENABLE Profile name: VoP Media Profile

Parameter Name	Type	Provisioning Type	Default Value	Description
User Defined Tone Enable	Enum: Disable(0), Enable(1)	Online	0	Enables or disables detection of User Defined Tones signaling. 0 = Disable 1 = Enable Mib name: acIBSDetectorsUserDefinedToneEnable INI Name: USERDEFINEDTONEDETECTORENABLE Profile name: VoP Media Profile
Detection Redirection	Enum: pcm(0), network(1)	Online	0	Determines the IBS (In-Band Signaling) Detection Direction. 0 = PCM 1 = Network Mib name: acIBSDetectorsDetectionRedirection INI Name: IBSDETECTIONREDIRECTION Profile name: VoP Media Profile
SIT Enable	Enum: Disable(0), Enable(1)	Offline	0	Enables or disables SIT (Special Information Tone) detection according to the ITU-T recommendation E.180/Q.35. 0 = Disable 1 = Enable Mib name: acIBSDetectorsSITEnable INI Name: SITDETECTORENABLE Profile name: VoP Media Profile
COT Enable	Enum: Disable(0), Enable(1)	Offline	0	Enables or disables Continuity Test tone detection and generation according to the ITU-T Q.724 recommendation. 0 = Disable 1 = Enable Mib name: acIBSDetectorsCOTEnable INI Name: ENABLECONTINUITYTONES Profile name: VoP Media Profile
R1.5 Detection Standard	Enum: MfR1DetectionStandardItu (0), MfR1DetectionStandardR15 (1)	Offline	0	This parameter determines which one of the R1 MF protocol flavors will be used for detection. 0 = ITU 1 = R1.5 Mib name: acIBSDetectorsR1DetectionStandard INI Name: R1DETECTIONSTANDARD Profile name: VoP Media Profile

Parameter Name	Type	Provisioning Type	Default Value	Description
UDT Detector Frequency Deviation	Integer 1-50	Offline	50	Defines the deviation allowed for the detection of each signal frequency. Units are in Hertz. Valid values range 1-50. Default value 50 Hz. Mib name: acIBSDetectorsUDTDetectorFrequency Deviation INI Name: UDTDETECTORFREQUENCYDEVIATION Profile name: VoP Media Profile
CPT Detector Frequency Deviation	Integer 1-30	Offline	10	Defines the deviation allowed for the detection of each CPT signal frequency. Units are in Hertz. Valid values range 1-30. Default value 10 Hz. Mib name: acIBSDetectorsCPTDetectorFrequency Deviation INI Name: CPTDETECTORFREQUENCYDEVIATION Profile name: VoP Media Profile

2.2.8 Tab: RTP Settings

Frame: Media Provisioning, Tab: RTP Settings

Parameter Name	Type	Provisioning Type	Default Value	Description
Base UDP Port	Integer 1024-65535	Offline	4000	Defines the lower boundary of UDP ports to be used by the board. The upper boundary is calculated on the basis of BoardBaseUDPPort + 10 * (Number of Channels). This parameter value must be a multiple of 10. Mib name: acRtpBaseUDPPort INI Name: BASEUDPPORT Profile name: VoP Media Profile
Disable NAT	Enum: No(0), Yes(1)	Online	0	Enables or disables the NAT feature. 0 = Do not disable NAT 1 = Disable NAT Mib name: acMediaNetworkDisableNAT INI Name: DISABLENAT Profile name: VoP Media Profile

Parameter Name	Type	Provisioning Type	Default Value	Description
Comfort Noise Enable	Enum: Disable(0), Enable(1)	Online	0	<p>When set to 1 (Enable), SID packets are sent with the RTP SID type (RFC 3389). 0 = Disable 1 = Enable</p> <p>Determines whether Silence Indicator (SID) packets that are sent and received are according to RFC 3389. 0 = Disabled (default). 1 = Enabled.</p> <p>Note: Applicable only to MP-11x and Mediant 1000.</p> <p>Mib name: acRtpComfortNoiseEnable INI Name: ENABLESTANDARDSIDPAYLOADTYPE Profile name: VoP Media Profile</p>
RFC2833 Tx Payload Type	Integer 96-127	Online	96	<p>Controls the RFC 2833 Tx Relay RTP Payload type.</p> <p>Range = 96 to 127 Mib name: acRtpRFC2833TxPayloadType INI Name: RFC2833TXPAYLOADTYPE Profile name: VoP Media Profile</p>
RFC2833 Rx Payload Type	Integer 96-127	Online	96	<p>Controls the RFC 2833 Rx Relay RTP Payload type.</p> <p>Range = 96 to 127 Mib name: acRtpRFC2833RxPayloadType INI Name: RFC2833RXPAYLOADTYPE Profile name: VoP Media Profile</p>
NTE Max Duration	Integer -1-20000000	Online	-1	<p>Maximal time for sending NTEs (Named Telephony Events) to the network, regardless of the time range when the TDM signal is detected.</p> <p>-1= NTE will stop only upon detection of End event (default). Mib name: acIBSNTEMaxDuration INI Name: NTEMAXDURATION Profile name: VoP Media Profile</p>
Redundancy Payload Type	Integer 96-127	Online	96	<p>This parameter sets the RFC 2198 (RTP Redundancy) packet's parameter 'RTP Payload Type'.</p> <p>Range: 96 to 127 Mib name: acRtpRedundancyPayloadType INI Name: RFC2198PAYLOADTYPE Profile name: VoP Media Profile</p>

Parameter Name	Type	Provisioning Type	Default Value	Description
Redundancy Depth	Integer 0-5	Online	0	Redundancy depth of RFC 2198 redundancy packets. 0 = Disabled In Gen 3 boards: range is 0-5 For other Gens 0-1 Mib name: acRtpRedundancyDepth INI Name: RTPREDUNDANCYDEPTH Profile name: VoP Media Profile
Packetization Factor	Integer 1-12	Online	1	Defines the number of DSP payloads for generating one RTP packet. Range = Hardware dependent Mib name: acRtpPacketizationFactor INI Name: RTPPACKINGFACTOR Profile name: VoP Media Profile
No Op Enable	Enum: Disable(0), Enable(1)	Online	0	Enables / disable Noop packets sending mode. 0 = Disable 1 = Enable Mib name: acRtpNoOpEnable INI Name: NOOPENABLE Profile name: VoP Media Profile
No Op Payload Type	Integer 96-127	Online	96	User can modify the Noop packets RTP Payload type by setting this parameter. Range = 96 to 127 Mib name: acRtpNoOpPayloadType INI Name: RTPNOOPPAYLOADTYPE Profile name: VoP Media Profile
No Op Interval	Integer 20-600000	Online	20	Used to modify the Noop packets sending interval Parameter value is in milliseconds Default value = 10 sec (10000 msec) Range = 20 to 600000 (20 msec to 10 min - 10 min = 600000) Mib name: acRtpNoOpInterval INI Name: NOOPINTERVAL Profile name: VoP Media Profile

Parameter Name	Type	Provisioning Type	Default Value	Description
VBR Coder Header Format	Enum: WithOut-RFC2658Interleaving-And-TOC(0), Including-RFC2658Interleaving-And-TOC(1), Including-TOC-Only(2), Interleave-Bundling(3)	Online	0	0 - payload only (no header, no toc, no m-factor) 1- support RFC 2658 format, 1 byte for interleaving header (always 0) and toc, no m-factor 2 ? payload including toc only, allow m-factor 3- RFC 3358 format Mib name: acRtpVBRCoderHeaderFormat INI Name: VBRCODERHEADERFORMAT Profile name: VoP Media Profile
AMR Coder Header Format	Enum: CE-AMR-DEFAULT-FORMAT(0), CE-AMR-RFC-3267-BUNDLING(1), CE-AMR-RFC-3267-INTERLEAVING(2), CE-AMR-IF2(3)	Online	0	AMR_CODER_HEADER_DEFAULT_FORMAT=0 - old m factor, each frame contains CRM byte and toc RFC_3267_BUNDLING=1 - single CRM byte followed by toc tables RFC_3267_INTERLEAVING=2 - supported as receivers only Mib name: acRtpAMRCoderHeaderFormat INI Name: AMRCODERHEADERFORMAT Profile name: VoP Media Profile
Broken Connection Event Timeout	Integer 3-2684354	Online	3	Determines for how long the RTP connection should be broken before the Broken Connection event is issued. In units of 100 msec. Mib name: acRtpRtcpBrokenConnectionEventTimeout INI Name: BROKENCONNECTIONEVENTTIMEOUT Profile name: VoP Media Profile
Broken Connection Event Activation Mode	Enum: AfterFirstIncomingRTPPacket(0), OnRTPStreamActivation(1)	Online	0	Determines if the broken connection mechanism is activated when the RTP stream is activated or when the first RTP packet is received. 0 = After First incoming packet (default) 1 = Upon channel?s RTP activation. Mib name: acRtpRtcpBrokenConnectionEventActivationMode INI Name: BROKENCONNECTIONEVENTACTIVATIONMODE Profile name: VoP Media Profile

Parameter Name	Type	Provisioning Type	Default Value	Description
Basic RTP Packet Interval	Enum: PACKET-INTERVAL-DEFAULT(0), PACKET-INTERVAL-5-MSEC(1), PACKET-INTERVAL-10-MSEC(2), PACKET-INTERVAL-20-MSEC(3)	Online	0	Selects the RTP packet rate for sample based coders (such as G.711, G.726, G.727). Also applicable for G.729, G.729E And G.728. 0 = Default (set internally) 1 = 5 msec 2 = 10 msec 3 = 20 msec Mib name: acRtpRtcpBasicRTTPacketInterval INI Name: BASICRTPPACKETINTERVAL Profile name: VoP Media Profile
Connection Establish Notification Mode	Enum: AfterBrokenConnection(0), UponFirstRTPFrameDetection(1)	Online	0	Determines the notification mode for the RTP connection establishment event acEV_CONNECTION_ESTABLISHED. 0 = Notify only after a broken connection event 1 = Also notify when the first RTP packet is received Mib name: acRtpRtcpConnectionEstablishNotificationMode INI Name: CONNECTIONESTABLISHMENTNOTIFICATIONMODE Profile name: VoP Media Profile
AMR FEC Redundancy Depth	Enum: CE-AMR-FEC-REDUNDANCY-LEVEL-NONE(0), CE-AMR-FEC-REDUNDANCY-LEVEL-1(1), CE-AMR-FEC-REDUNDANCY-LEVEL-2(2), CE-AMR-FEC-REDUNDANCY-LEVEL-3(3)	Online	0	Sets the AMR / WB-AMR Redundancy depth according to RFC 3267. 0 = No Redundancy 1 = Redundancy depth of a single packet 2 = Redundancy depth of 2 packets 3 = Redundancy depth of 3 packets Mib name: acRtpAMRFECRedundancyDepth INI Name: AMRFECREDUNDANCYDEPTH Profile name: VoP Media Profile
AMR FEC Num Of Mngt Policy Entries	Integer 0-9	Online	0	Sets the number of entries to be defined at the AMR management policy table. Each entry defines the policy of a different rate. Mib name: acRtpAMRFECNumOfMngtPolicyEntries INI Name: AMRFECNUMBEROFMODECMODES Profile name: VoP Media Profile

Parameter Name	Type	Provisioning Type	Default Value	Description
AMR FEC Delay Hysteresis	Integer 0-255	Online	0	Defines the hysteresis of the Delay Threshold for AMR Hand-out events (in msec). Mib name: acRtpAMRFECDelayHysteresis INI Name: AMRFECDELAYHYSTERESIS Profile name: VoP Media Profile
AMR FEC Delay Threshold	Integer 0-255	Online	0	Defines the one-way delay value (in msec) that may cause the AMR Hand Out report. 0 = 'Hand Out' report is disabled (default). Mib name: acRtpAMRFECDelayThreshold INI Name: AMRFECDELAYTHRESHHOLD Profile name: VoP Media Profile
AMR Octet Aligned Enable	Enum: disable(0), enable(1)	Online	1	0 = disable the AMR Octet Aligned mode. 1 = enable the AMR Octet Aligned mode. Mib name: acRtpAMROctetAlignedEnable INI Name: AMROCTETALIGNEDENABLE Profile name: VoP Media Profile

2.2.9 Tab: SRTP Settings

Frame: Media Provisioning, Tab: SRTP Settings

Parameter Name	Type	Provisioning Type	Default Value	Description
Enable Media Security	Enum: Disable(0), Enable(1)	Offline	0	Enables or disables Media Security protocol (SRTP) . Enabling this parameter might reduce the board channel capacity. 0 = Disable 1 = Enable Mib name: acVoiceEnableMediaSecurity INI Name: ENABLEMEDIASECURITY Profile name: VoP Media Profile
Aria Protocol Support	Enum: Disable(0), Enable(1)	Offline	0	Enables or disables Aria encryption protocol. Enabling this parameter might reduce the board channel capacity. 0 = Disable 1 = Enable Supported on TP6310, TP8410 and M800 Mib name: acVoiceAriaProtocolSupport INI Name: ARIAPROTOCOLSUPPORT Profile name: VoP Media Profile

Parameter Name	Type	Provisioning Type	Default Value	Description
RTP Authentication Disable Tx	Enum: inactive(0), active(1)	Online	0	On a secured RTP session, determines whether to enable Authentication on transmitted RTP packets. One of the following values: 0 = Enable 1 = Disable Mib name: acSysMediaEncryptionRTPAuthenticationDisableTx INI Name: RTPAUTHENTICATIONDISABLETX Profile name: VoP Media Profile
RTP Encryption Disable Tx	Enum: inactive(0), active(1)	Online	0	On a secured RTP session, determines whether to enable Encryption on transmitted RTP packets. One of the following values: 0 = Enable 1 = Disable Mib name: acSysMediaEncryptionRTPEncryptionDisableTx INI Name: RTPENCRYPTIONDISABLETX Profile name: VoP Media Profile
RTCP Encryption Disable Tx	Enum: inactive(0), active(1)	Online	0	On a secured RTP session, determines whether to enable Encryption on transmitted RTCP packets. One of the following values: 0 = Enable 1 = Disable Mib name: acSysMediaEncryptionRTCPEncryptionDisableTx INI Name: RTCPENCRYPTIONDISABLETX Profile name: VoP Media Profile
Packet MKI Size	Integer 0-4	Online	0	Determines the size of the parameter Master Key Identifier (MKI) in SRTP Tx packets. One of the following values: 0 = MKI Disabled 1 - 4 = size (bytes of MKI) Mib name: acSysSRTPPacketMKISize INI Name: SRTPTXPACKETMKISIZE Profile name: VoP Media Profile

2.2.10 Tab: RTCP Settings

Frame: Media Provisioning, Tab: RTCP Settings

Parameter Name	Type	Provisioning Type	Default Value	Description
Disable Interval Randomization	Integer 0-1	Online	0	Controls whether RTCP report intervals are randomized or whether each report interval accords exactly to the parameter defining RTCP Mean Tx Interval (in milliseconds). 0 = Randomize 1 = Don't Randomize Mib name: acRtcpDisableIntervalRandomization INI Name: DISABLERTCPRANDOMIZE Profile name: VoP Media Profile
RTCP XR				
RTCP XR Enable	Enum: Disable(0), Enable(1), EnableOnlyCalculation(2)	Offline	0	Sets voice quality monitoring (RTCP-XR) mode. 0 = Disable 1 = Enable all 2 = Enable Only Calculation Mib name: acRtcpXrEnable INI Name: VQMONENABLE Profile name: VoP Media Profile
Burst Threshold	Integer -1-12	Online	-1	voice quality monitoring - excessive burst alert threshold. if set to -1, no alerts will be issued. Mib name: acRtcpXrBurstThreshold INI Name: VQMONBURSTHR Profile name: VoP Media Profile
Delay Threshold	Integer -1-12	Online	-1	voice quality monitoring - excessive delay alert threshold. if set to -1, no alerts will be issued. Mib name: acRtcpXrDelayThreshold INI Name: VQMONDELAYTHR Profile name: VoP Media Profile
End of Call Rval Delay Threshold	Integer -1-12	Online	-1	voice quality monitoring - end of call low quality alert threshold. if set to -1, no alerts will be issued. Mib name: acRtcpXrEndOofCallRvalDelayThreshold INI Name: VQMONEOCRVALTHR Profile name: VoP Media Profile
GMin	Integer 0-255	Online	0	voice quality monitoring - minimum gap size (number of frames) Mib name: acRtcpXrGMin INI Name: VQMONGMIN Profile name: VoP Media Profile

2.2.11 Tab: Misc. Settings

Frame: Media Provisioning, Tab: Misc. Settings

Parameter Name	Type	Provisioning Type	Default Value	Description
TTY Transport Type	Enum: Disable(0), Inband-Relay(2), Bypass(1)	Online	0	Defines the transferring method of TTY signals during a call 0 = Disable 1 = Bypass 2 = Relay Mib name: acVoiceTTYTransportType INI Name: TTYTRANSPORTTYPE Profile name: VoP Media Profile
Port Range End	Integer -1-60000	Read-Only	-1	The ending port for the range of media ports. Mib name: acCPMediaRealmPortRangeEnd INI Name: CPMEDIAREALM_PORTRANGEEND Profile name: Not Profiled
Is Default Realm	Enum: false(0), true(1)	Offline	0	Determines whether this is the default media realm or not. Mib name: acCPMediaRealmIsDefault INI Name: CPMEDIAREALM_ISDEFAULT Profile name: Not Profiled

2.3 Frame: Network Parameters Provisioning

2.3.1 Tab: IP Interface Parameters

Frame: Network Parameters Provisioning, Tab: IP Interface Parameters

Parameter Name	Type	Provisioning Type	Default Value	Description
VLAN Mode	Enum: Disable(0), Enable(1)	Offline	0	Sets the VLAN functionality. 0 = Disable 1 = Enable Mib name: acSysVLANMode INI Name: VLANMODE Profile name: Network Profile
Native VLAN ID	Integer 1-4094	Online	1	Sets the native VLAN identifier. Mib name: acSysVLANVlanNativeVlanId INI Name: VLANNATIVEVLANID Profile name: Network Profile

2.3.2 Tab: QoS Settings

Frame: Network Parameters Provisioning, Tab: QoS Settings

Parameter Name	Type	Provisioning Type	Default Value	Description
Differential Services				
Network Service Class Diff Serv	Integer 0-63	Online	48	<p>This parameter is used to set the DiffServ for Network service class content.</p> <p>Range = 0 to 63 Default = 48 Mib name: acSysVLANNetworkServiceClassDiffServ INI Name: NETWORKSERVICECLASSDIFFSERV Profile name: Network Profile</p>
Premium Service Class Media Diff Serv	Integer 0-63	Online	46	<p>This parameter is used to set the DiffServ for Premium service class content and media traffic.</p> <p>Range = 0 to 63 Mib name: acSysVLANPremiumServiceClassMediaDiffServ INI Name: PREMIUMSERVICECLASSMEDIADIFFSERV Profile name: Network Profile</p>
Premium Service Class Control Diff Serv	Integer 0-63	Online	40	<p>Sets the DiffServ for the Premium service class content and control traffic.</p> <p>Range: 0 to 63 Mib name: acSysVLANPremiumServiceClassControlDiffServ INI Name: PREMIUMSERVICECLASSCONTROLDIFFSERV Profile name: Network Profile</p>
Gold Service Class Diff Serv	Integer 0-63	Online	26	<p>Sets the DiffServ for the Gold service class content.</p> <p>Range = 0 to 63 Default = 26 Mib name: acSysVLANGoldServiceClassDiffServ INI Name: GOLDSERVICECLASSDIFFSERV Profile name: Network Profile</p>
Bronze Service Class Diff Serv	Integer 0-63	Online	10	<p>Sets the DiffServ for the Bronze service class content.</p> <p>Range = 0 to 63 Default = 10 Mib name: acSysVLANBronzeServiceClassDiffServ INI Name: BRONZESERVICECLASSDIFFSERV Profile name: Network Profile</p>
QoS Settings				

Parameter Name	Type	Provisioning Type	Default Value	Description
Network Service Class Priority	Integer 0-7	Online	7	This parameter is used to set the priority for Network service class content. Range = 0 to 7 Default = 7 Mib name: acSysVLANNetworkServiceClassPriority INI Name: VLANNETWORKSERVICECLASSPRIORITY Profile name: Network Profile
Premium Service Class Media Priority	Integer 0-7	Online	6	Sets the priority for the Premium service class content and media traffic. Range = 0 to 7 Default = 6 Mib name: acSysVLANPremiumServiceClassMediaPriority INI Name: VLANPREMIUMSERVICECLASSMEDIAPRIORITY Profile name: Network Profile
Gold Service Class Priority	Integer 0-7	Online	4	Sets the priority for the Gold service class content. Range = 0 to 7 Default = 4 Mib name: acSysVLANGoldServiceClassPriority INI Name: VLANGOLDSERVICECLASSPRIORITY Profile name: Network Profile
Bronze Service Class Priority	Integer 0-7	Online	2	Sets the priority for the Bronze service class content. Range = 0 to 7 Default = 2 Mib name: acSysVLANBronzeServiceClassPriority INI Name: VLANBRONZESERVICECLASSPRIORITY Profile name: Network Profile
Premium Service Class Control Priority	Integer 0-7	Online	6	Sets the priority for the Premium service class content and control traffic. Range = 0 to 7 Default = 6 Mib name: acSysVLANPremiumServiceClassControlPriority INI Name: VLANPREMIUMSERVICECLASSCONTROLPRIORITY Profile name: Network Profile

2.3.3 Tab: Static Routes

Frame: Network Parameters Provisioning, Tab: Static Routes

Parameter Name	Type	Provisioning Type	Default Value	Description
Status	Enum: Active(1), NotInService(2), NotReady(3), CreateAndGo(4), CreateAndWait(5), Destroy(6)	Instant	1	The row status variable, used according to row installation and removal conventions. A row entry cannot be modified when the status is marked as active(1). Mib name: inetCidrRouteStatus Profile name: Not Profiled
Interface Index	Integer 0-256	Instant	1	The ifIndex value that identifies the local interface through which the next hop of this route should be reached. A value of 0 is valid and represents the scenario where no interface is specified. Mib name: inetCidrRouteIfIndex Profile name: Not Profiled
Primary Routing Metric	Integer -1-100	Instant	1	The primary routing metric for this route. The semantics of this metric are determined by the routing-protocol specified in the route's inetCidrRouteProto value. If this metric is not used, its value should be set to -1. Mib name: inetCidrRouteMetric1 Profile name: Not Profiled

Parameter Name	Type	Provisioning Type	Default Value	Description
Type	Enum: Other(1), Reject(2), Local(3), Remote(4), Black Hole(5), Static Inactive(6), Static Active(7), Automatic(8)	Read-Only	1	<p>The type of route. Note that local(3) refers to a route for which the next hop is the final destination; remote(4) refers to a route for which the next hop is not the final destination.</p> <p>Routes that do not result in traffic forwarding or rejection should not be displayed, even if the implementation keeps them stored internally.</p> <p>reject(2) refers to a route that, if matched, discards the message as unreachable and returns a notification (e.g., ICMP error) to the message sender. This is used in some protocols as a means of correctly aggregating routes.</p> <p>blackhole(5) refers to a route that, if matched, discards the message silently. Mib name: inetCidrRouteType Profile name: Not Profiled</p>

2.3.4 Tab: SCTP

Frame: Network Parameters Provisioning, Tab: SCTP

Parameter Name	Type	Provisioning Type	Default Value	Description
Heart Beat Interval	Integer 0-3600	Offline	30	<p>Defines the SCTP heartbeat interval.</p> <p>Range: 1 to 3600 Mib name: acSysSCTPHeartBeatInterval INI Name: SCTPHBINTERVAL Profile name: Network Profile</p>
T4 SACK Timer	Integer 1-5	Offline	3	<p>Defines the SCTP T4 SACK timer interval.</p> <p>Range: 1 to 5 Mib name: acSysSCTPT4SACKTimer INI Name: SCTPT4SACKTIMER Profile name: Network Profile</p>
Check Sum Method	Enum: Adler(0), Crc(1)	Offline	0	<p>Stream Control Transmission Protocol (SCTP) uses a checksum mechanism in order to authenticate packets on both sides (the receiving side and the transmitting side).</p> <p>Presently, two checksum mechanisms are available:</p> <p>0 = Adler32 checksum mechanism 1 = Crc32c checksum mechanism (improved mechanism)</p> <p>Mib name: acSysSCTPChecksumMethod INI Name: SCTPCHECKSUMMETHOD Profile name: Network Profile</p>
Host Name	String Up to 255 chars.	Offline	NULL	<p>When this parameter is set to any value other than an empty string, SCTP (Stream Control Transmission Protocol) uses the value as the value of the FQDN (Fully Qualified Domain Name) parameter attached to the INIT chunk. In this case, the FQDN parameter replaces any IP address parameters in the INIT chunk.</p> <p>This feature enables overcoming NAT problems where the original IP addresses belonging to the endpoint supports are converted into pseudo addresses. When this parameter is not set (default), the INIT chunk is sent without any FQDN parameter.</p> <p>Range = String[42] Mib name: acSysSCTPHostName INI Name: SCTPHOSTNAME Profile name: Network Profile</p>

Parameter Name	Type	Provisioning Type	Default Value	Description
SCTP Associations Num	Integer 1-8	Offline	3	Defines the maximum number of Stream Control Transmission Protocol (SCTP) associations that can be opened. Range: 1 to 8 Mib name: acSysSCTPAssociationsNum INI Name: SCTPASSOCIATIONSNUM Profile name: Network Profile

2.3.5 Tab: Ethernet Ports

Frame: Network Parameters Provisioning, Tab: Ethernet Ports

Parameter Name	Type	Provisioning Type	Default Value	Description
Ethernet Port Configuration				
Active Port Number	Integer 0-2	Read-Only	0	Display the current active ethernet port number. 0 - not relevant. Mib name: acSysEthernetActivePortNumber Profile name: Not Profiled
First Port Duplex Mode	Enum: HalfDuplex(0), FullDuplex(1), ForceModeValue(2), NotAvailable(3)	Read-Only	0	full-duplex or half-duplex connection Mib name: acSysEthernetFirstPortDuplexMode Profile name: Not Profiled
First Port Speed	Enum: ForceModeValue(2), NotAvailable(3), ac10Mbps(10), ac100Mbps(100), ac1000Mbps(1000)	Read-Only	0	Mib name: acSysEthernetFirstPortSpeed Profile name: Not Profiled
Second Port Duplex Mode	Enum: HalfDuplex(0), FullDuplex(1), ForceModeValue(2), NotAvailable(3)	Read-Only	0	full-duplex or half-duplex connection Mib name: acSysEthernetSecondPortDuplexMode Profile name: Not Profiled
Second Port Speed	Enum: ForceModeValue(2), NotAvailable(3), ac10Mbps(10), ac100Mbps(100), ac1000Mbps(1000)	Read-Only	0	Mib name: acSysEthernetSecondPortSpeed Profile name: Not Profiled

2.3.6 Tab: General Settings

Frame: Network Parameters Provisioning, Tab: General Settings

Parameter Name	Type	Provisioning Type	Default Value	Description
Disable ICMP Redirects	Enum: Disable(0), Enable(1)	Instant	0	Disable ICMP Redirect messages. When set to 0 ICMP Redirect messages are not ignored. Mib name: acSysNetworkSettingsDisableICMPRedirects INI Name: DISABLEICMPREDIRECTS Profile name: Not Profiled

2.4 Frame: Security Provisioning

2.4.1 Tab: IPsec Proposal

Frame: Security Provisioning, Tab: IPsec Proposal

Parameter Name	Type	Provisioning Type	Default Value	Description
Index	Integer 0-4	NA	0	Index Field for line. Mib name: acSysIPsecProposalIndex INI Name: IPSECPROPOSALTABLE_INDEX Profile name: Not Profiled
IPsec Enable	Enum: No(0), Yes(1)	Offline	0	IPsec Enable flag Mib name: acSysIPsecEnable INI Name: ENABLEIPSEC Profile name: Not Profiled
Row Status	Enum:	NA	0	ROWSTATUS Field for line. Mib name: acSysIPsecProposalRowStatus INI Name: IPSECPROPOSALTABLE_ROWSTATUS Profile name: Not Profiled
Strict IKE certificate validation	Enum: disabled(0), enabled(1)	Instant	0	Enables or disables certificate extension checking for IKE. Mib name: acSysIPsecIKECertificateExtValidate INI Name: IKECERTIFICATEEXTVALIDATE Profile name: Not Profiled
Encryption Algorithm	Enum: none(0), desCbc(1), tripleDesCbc(2), aes(3)	Online	0	Selects the encryption (privacy) algorithm to use. Mib name: acSysIPsecProposalEncryptionAlgorithm INI Name: IPSECPROPOSALTABLE_ENCRYPTIONALGORITHM Profile name: Not Profiled
Authentication Algorithm	Enum: none(0), hmacSha1-96(2), hmacMd5-96(4)	Online	0	Selects the message authentication (integrity) algorithm to use. Mib name: acSysIPsecProposalAuthenticationAlgorithm INI Name: IPSECPROPOSALTABLE_AUTHENTICATIONALGORITHM Profile name: Not Profiled
DiffieHellman Group	Enum: group1-768Bits(0), group2-1024Bits(1)	Online	0	Selects the Diffie-Hellman group to use. Mib name: acSysIPsecProposalDiffieHellmanGroup INI Name: IPSECPROPOSALTABLE_DHGROUP Profile name: Not Profiled

2.4.2 Tab: IPsec SA

Frame: Security Provisioning, Tab: IPsec SA

Parameter Name	Type	Provisioning Type	Default Value	Description
Index	Integer 0-20	NA	0	Index Field for line. Mib name: acSysIPsecSAIndex INI Name: IPSECSATABLE_INDEX Profile name: Not Profiled
Row Status	Enum:	NA	0	ROWSTATUS Field for line. Mib name: acSysIPsecSARowStatus INI Name: IPSECSATABLE_ROWSTATUS Profile name: Not Profiled
Operational Mode	Enum: Transport(0), Tunnel(1)	Online	0	Selects the IPsec mode of operation.;0 = Transport mode (default);1 = Tunnel mode; Mib name: acSysIPsecSAIPsecMode INI Name: IPSECSATABLE_IPSECMODE Profile name: Not Profiled
Remote Tunnel Address	String Up to 45 chars.	Online		IP address of the peer router. Mib name: acSysIPsecSARemoteTunnelAddress INI Name: IPSECSATABLE_REMOTETUNNELADDRESS Profile name: Not Profiled
Remote Subnet IP Address	String Up to 45 chars.	Online		IP address of the remote subnetwork. Mib name: acSysIPsecSARemoteSubnetIPAddress INI Name: IPSECSATABLE_REMOTESUBNETIPADDRESS Profile name: Not Profiled
Remote Subnet Prefix Length	Integer 0-128	Online	0	Prefix length of the Remote Subnet IP Address parameter (in bits). Mib name: acSysIPsecSARemoteSubnetPrefixLength INI Name: IPSECSATABLE_REMOTESUBNETPREFIXLENGTH Profile name: Not Profiled
Remote Endpoint Address	String Up to 98 chars.	Online		IP address or DNS host name of the peer. Mib name: acSysIPsecSARemoteEndpointAddress INI Name: IPSECSATABLE_REMOTEENDPOINTADDRESSORNAME Profile name: Not Profiled
Authentication Method	Enum: preshared Key(0), RSASignature(1)	Online	0	Selects the method used for peer authentication during IKE main mode. Mib name: acSysIPsecSAAuthenticationMethod INI Name: IPSECSATABLE_AUTHENTICATIONMETHOD Profile name: Not Profiled

Parameter Name	Type	Provisioning Type	Default Value	Description
Shared Key	String	Online	79	Defines the pre-shared key (in textual format). Mib name: acSysIPsecSASharedKey INI Name: IPSECSATABLE_SHAREDKEY Profile name: Not Profiled
Source Port	Integer 0-65535	Online	0	Defines the source port to which this configuration applies. Mib name: acSysIPsecSASourcePort INI Name: IPSECSATABLE_SOURCEPORT Profile name: Not Profiled
Dest Port	Integer 0-65535	Online	0	Defines the destination port to which this configuration applies. Mib name: acSysIPsecSADestPort INI Name: IPSECSATABLE_DESTPORT Profile name: Not Profiled
Protocol	Integer 0-255	Online	0	Defines the protocol type to which this configuration applies. Standard IP protocol numbers should be used, e.g.: 0 = Any protocol (default); 17 = UDP; 6 = TCP; Mib name: acSysIPsecSAProtocol INI Name: IPSECSATABLE_PROTOCOL Profile name: Not Profiled
Phase1 Sa Lifetime (Sec)	Integer 0-2147483647	Online	0	Determines the duration (in seconds) for which the negotiated IKE SA (main mode) is valid. After the time expires, the SA is re-negotiated. Mib name: acSysIPsecSAPhase1SaLifetimeInSec INI Name: IPSECSATABLE_PHASE1SALIFETIMEINSEC Profile name: Not Profiled
Phase2 Sa Lifetime (Sec)	Integer 0-2147483647	Online	0	Determines the duration (in seconds) for which the negotiated IPsec SA (quick mode) is valid. After the time expires, the SA is re-negotiated. Mib name: acSysIPsecSAPhase2SaLifetimeInSec INI Name: IPSECSATABLE_PHASE2SALIFETIMEINSEC Profile name: Not Profiled
Phase2 Sa Lifetime (KB)	Integer 0-2147483647	Online	0	Determines the maximum volume of traffic (in kilobytes) for which the negotiated IPsec SA (quick mode) is valid. Mib name: acSysIPsecSAPhase2SaLifetimeInKB INI Name: IPSECSATABLE_PHASE2SALIFETIMEINKB Profile name: Not Profiled
DPD mode	Enum: DPDDisabled(0), DPDPeriodic(1), DPDOnDemand(2)	Online	0	Controls dead peer detection (DPD) as per RFC 3706. Mib name: acSysIPsecSADPDmode INI Name: IPSECSATABLE_DPDMODE Profile name: Not Profiled

Parameter Name	Type	Provisioning Type	Default Value	Description
Interface Name		Online		Select the OID of the interface name corresponding to the one appearing in the interface table. The OID should be 1.3.6.1.4.1.5003.9.10.10.1.3.1.30.22.1.11. acSysInterfaceIndex Note: when ignore a default value will be SET: 0.0 Mib name: acSysIPsecSAInterfaceName INI Name: IPSECSATABLE_INTERFACENAME Profile name: Not Profiled

2.4.3 Tab: Firewall Settings

Frame: Security Provisioning, Tab: Firewall Settings

Parameter Name	Type	Provisioning Type	Default Value	Description
Index	Integer 0-49	NA	0	Index Field for line. Internal parameter. Mib name: acSysAccessListIndex INI Name: ACCESSLIST_INDEX Profile name: Not Profiled
Status	Enum:	NA	0	ROWSTATUS field for line. Internal parameter. Mib name: acSysAccessListRowStatus Profile name: Firewall Profile
Source IP	String Up to 60 chars.	Online		Source IP for access rule Mib name: acSysAccessListSourceIP INI Name: ACCESSLIST_SOURCE_IP Profile name: Firewall Profile
Start Port	Integer 0-65535	Online	0	Port range - start Mib name: acSysAccessListStartPort INI Name: ACCESSLIST_START_PORT Profile name: Firewall Profile
End Port	Integer 0-65535	Online	0	Port range - end Mib name: acSysAccessListEndPort INI Name: ACCESSLIST_END_PORT Profile name: Firewall Profile
Protocol	String Up to 10 chars.	Online		IP user-level protocol (TCP, UDP, ICMP, ESP, SIP, MGCP, TPNCP, ANY or numeric value) Mib name: acSysAccessListProtocol INI Name: ACCESSLIST_PROTOCOL Profile name: Firewall Profile
Packet Size	Integer 0-65535	Online	0	Maximum packet size (0 = unused) Mib name: acSysAccessListPacketSize INI Name: ACCESSLIST_PACKET_SIZE Profile name: Firewall Profile

Parameter Name	Type	Provisioning Type	Default Value	Description
Byte Rate	Integer 0-2147483647	Online	0	Allowed traffic in bytes per second (0 = unused) Mib name: acSysAccessListByteRate INI Name: ACCESSLIST_BYTE_RATE Profile name: Firewall Profile
Byte Burst	Integer 0-2147483647	Online	0	Allowed traffic burst in bytes (0 = unused) Mib name: acSysAccessListByteBurst INI Name: ACCESSLIST_BYTE_BURST Profile name: Firewall Profile
Allow Type	Enum: notSet(0), allow(1), block(2)	Online	0	Allow or block traffic matching this rule Mib name: acSysAccessListAllowType INI Name: ACCESSLIST_ALLOW_TYPE Profile name: Firewall Profile
Match Count	Integer 0-65535	Read-Only	0	Statistics: number of matched packets Mib name: acSysAccessListMatchCount INI Name: ACCESSLIST_MATCHCOUNT Profile name: Firewall Profile
Interface Name	String Up to 15 chars.	Online		Name of the specific interface the rule applies to. None - default value when no interface was chosen. Mib name: acSysAccessListInterfaceName INI Name: ACCESSLIST_INTERFACE_ID Profile name: Firewall Profile
Use Specific Interface	Enum: disable(0), enable(1)	Online	0	Rule for specific interface or for the entire interfaces Mib name: acSysAccessListUseSpecificInterface INI Name: ACCESSLIST_USE_SPECIFIC_INTERFACE Profile name: Firewall Profile
Source Port	Integer 0-65535	Online	0	Source Port Mib name: acSysAccessListSourcePort INI Name: ACCESSLIST_SOURCE_PORT Profile name: Firewall Profile
Prefix Length	Integer 0-128	Online	0	Prefix length of source IP address (defining a subnet). Mib name: acSysAccessListPrefixLength INI Name: ACCESSLIST_PREFIXLEN Profile name: Firewall Profile

2.5 Frame: SNMP Provisioning

2.5.1 Tab: SNMP Managers Table

Frame: SNMP Provisioning, Tab: SNMP Managers Table

Parameter Name	Type	Provisioning Type	Default Value	Description
Row Status	Enum: Active(1), NotInService(2), NotReady(3), CreateAndGo(4), CreateAndWait(5), Destroy(6)	Instant	1	<p>The status of this conceptual row. To create a row in this table, a manager must set this object to either createAndGo(4) or createAndWait(5). Until instances of all corresponding columns are appropriately configured, the value of the corresponding instance of the snmpTargetAddrRowStatus column is 'notReady'. In particular, a newly created row cannot be made active until the corresponding instances of snmpTargetAddrTDomain, snmpTargetAddrTAddress, and snmpTargetAddrParams have all been set. The following objects may not be modified while the value of this object is active(1):</p> <ul style="list-style-type: none"> - snmpTargetAddrTDomain - snmpTargetAddrTAddress <p>An attempt to set these objects while the value of snmpTargetAddrRowStatus is active(1) will result in an inconsistentValue error.</p> <p>Mib name: snmpTargetAddrRowStatus Profile name: Not Profiled</p>
Address	String Up to 255 chars.	Instant	0.0.0.0:0	<p>This object contains a transport address. The format of this address depends on the value of the snmpTargetAddrTDomain object.</p> <p>Mib name: snmpTargetAddrTAddress Profile name: Not Profiled</p>
Params	String Up to 255 chars.	Instant	1	<p>The value of this object identifies an entry in the snmpTargetParamsTable. The identified entry contains SNMP parameters to be used when generating messages to be sent to this transport address.</p> <p>Mib name: snmpTargetAddrParams Profile name: Not Profiled</p>

2.5.2 Tab: SNMPv3 Users

Frame: Snmp Provisioning, Tab: SNMPv3 Users

Parameter Name	Type	Provisioning Type	Default Value	Description
User Status	Enum: Active(1), NotInService(2), NotReady(3), CreateAndGo(4), CreateAndWait(5), Destroy(6)	Instant	1	<p>The status of this conceptual row. Until instances of all corresponding columns are appropriately configured, the value of the corresponding instance of the usmUserStatus column is 'notReady'. In particular, a newly created row for a user who employs authentication, cannot be made active until the corresponding usmUserCloneFrom and usmUserAuthKeyChange have been set. Further, a newly created row for a user who also employs privacy, cannot be made active until the usmUserPrivKeyChange has been set.</p> <p>The RowStatus TC [RFC2579] requires that this DESCRIPTION clause states under which circumstances other objects in this row can be modified:</p> <p>The value of this object has no effect on whether other objects in this conceptual row can be modified, except for usmUserOwnAuthKeyChange and usmUserOwnPrivKeyChange. For these 2 objects, the value of usmUserStatus MUST be active.</p> <p>Mib name: usmUserStatus Profile name: Not Profiled</p>
Security Name	String Up to 32 chars.	Instant	1	<p>A human readable string representing the user in Security Model independent format. The default transformation of the User-based Security Model dependent security ID to the securityName and vice versa is the identity function so that the securityName is the same as the userName.</p> <p>Mib name: usmUserSecurityName Profile name: Not Profiled</p>

Parameter Name	Type	Provisioning Type	Default Value	Description
Auth Protocol	Enum: None(0), MD5(1), SHA(2)	Instant	1	<p>An indication of whether messages sent on behalf of this user to/from the SNMP engine identified by usmUserEngineID, can be authenticated, and if so, the type of authentication protocol which is used. An instance of this object is created concurrently with the creation of any other object instance for the same user (i.e., as part of the processing of the set operation which creates the first object instance in the same conceptual row).</p> <p>If an initial set operation (i.e. at row creation time) tries to set a value for an unknown or unsupported protocol, then a 'wrongValue' error must be returned.</p> <p>The value will be overwritten/set when a set operation is performed on the corresponding instance of usmUserCloneFrom.</p> <p>Once instantiated, the value of such an instance of this object can only be changed via a set operation to the value of the usmNoAuthProtocol.</p> <p>If a set operation tries to change the value of an existing instance of this object to any value other than usmNoAuthProtocol, then an 'inconsistentValue' error must be returned.</p> <p>If a set operation tries to set the value to the usmNoAuthProtocol while the usmUserPrivProtocol value in the same row is not equal to usmNoPrivProtocol, then an 'inconsistentValue' error must be returned. That means that an SNMP command generator application must first ensure that the usmUserPrivProtocol is set to the usmNoPrivProtocol value before it can set the usmUserAuthProtocol value to usmNoAuthProtocol.</p> <p>Mib name: usmUserAuthProtocol Profile name: Not Profiled</p>
Auth Key Change	String Up to 255 chars.	Instant	1	<p>Password</p> <p>Mib name: usmUserAuthKeyChange Profile name: Not Profiled</p>

Parameter Name	Type	Provisioning Type	Default Value	Description
Privacy Protocol	Enum: None(0), DES(1), AES(2)	Instant	0	<p>An indication of whether messages sent on behalf of this user to/from the SNMP engine identified by usmUserEngineID, can be protected from disclosure, and if so, the type of privacy protocol which is used.</p> <p>An instance of this object is created concurrently with the creation of any other object instance for the same user (i.e., as part of the processing of the set operation which creates the first object instance in the same conceptual row).</p> <p>If an initial set operation (i.e. at row creation time) tries to set a value for an unknown or unsupported protocol, then a 'wrongValue' error must be returned.</p> <p>The value will be overwritten/set when a set operation is performed on the corresponding instance of usmUserCloneFrom.</p> <p>Once instantiated, the value of such an instance of this object can only be changed via a set operation to the value of the usmNoPrivProtocol.</p> <p>If a set operation tries to change the value of an existing instance of this object to any value other than usmNoPrivProtocol, then an 'inconsistentValue' error must be returned.</p> <p>Note that if any privacy protocol is used, then you must also use an authentication protocol. In other words, if usmUserPrivProtocol is set to anything else than usmNoPrivProtocol, then the corresponding instance of usmUserAuthProtocol cannot have a value of usmNoAuthProtocol. If it does, then an 'inconsistentValue' error must be returned.</p> <p>Mib name: usmUserPrivProtocol Profile name: Not Profiled</p>
Privacy Key Change	String Up to 255 chars.	Instant	1	<p>Password</p> <p>Mib name: usmUserPrivKeyChange Profile name: Not Profiled</p>

2.6 Frame: System Settings Provisioning

2.6.1 Tab: Diagnostics

Frame: System Settings Provisioning, Tab: Diagnostics

Parameter Name	Type	Provisioning Type	Default Value	Description
Enable Diagnostics	Enum: Disabled(0), BuiltInTest(1), BuiltInTestwithPartialFlash(2), BuiltInTestWithSDRAM(3), BuiltInTestOnUtopiaVxb(4), InternalUse(99)	Offline	0	Checks the correct functionality of the different hardware components on the board. On completion of the check, the board sends an EV_END_BIT value, which contains information on the test results of each hardware component. 0 = No diagnostics (default) 1 = Perform diagnostics (full test of DSPs, PCM, Switch, LAN, PHY and Flash) 2 = Perform diagnostics (full test of DSPs, PCM, Switch, LAN, PHY, but partial, test of Flash, a quicker mode) Mib name: acSysDiagnosticsEnable INI Name: ENABLEDIAGNOSTICS Profile name: Not Profiled
Enable Performance Threshold Alarms	Enum: Disable(0), Enable(1)	Instant	0	This parameter enables sending SNMP traps and Syslog messages when performance of the device is degraded (according to the configured thresholds). Mib name: acSysDiagnosticsEnablePerformanceThresholdAlarms INI Name: PM_ENABLETHRESHOLDALARMS Profile name: Not Profiled
Syslog enable	Enum: Disable(0), Enable(1)	Online	0	Enable SysLog protocol log. Mib name: acSyslogEnable INI Name: ENABLESYSLOG Profile name: Not Profiled
Syslog server Ip Address	IP Address	Online	0.0.0.0	This parameter defines the IP address in dotted format notation. e.g., 192.10.1.255 Range = Legal IP address Mib name: acSyslogServerIPAddress INI Name: SYSLOGSERVERIP Profile name: Not Profiled
Syslog Server Port Number	Integer 0-65535	Online	514	Defines the Port number of the Syslog Server. Range = Legal Port Number Mib name: acSyslogAcSyslogServerPortNumber INI Name: SYSLOGSERVERPORT Profile name: Not Profiled

Parameter Name	Type	Provisioning Type	Default Value	Description
Syslog Facility	Integer 16-23	Online	16	parameter to determine the facility number at syslog messages. can be: 16 = local use 0 (local0) 17 = local use 1 (local1) .. 23 = local use 0 (local7) Mib name: acSyslogFacility INI Name: SYSLOGFACILITY Profile name: Not Profiled

2.6.2 Tab: Application Settings

Frame: System Settings Provisioning, Tab: Application Settings

Parameter Name	Type	Provisioning Type	Default Value	Description
NTP				
Primary Server IP Address	IP Address	Instant	0	This parameter is used to define the NTP server's IP address. Range = Legal IP address Mib name: acSysNTPServerIPAddress INI Name: NTPSERVERIP Profile name: System Profile
Secondary Server IP	IPAddress	Instant	0	Defines the NTP Secondary Server IP address. Mib name: acSysNTPSecondaryServerIP INI Name: NTPSECONDARYSERVERIP Profile name: System Profile
Utc Offset (seconds)	Integer -43200-43200	Instant	0	This parameter is used to define the NTP time to offset, in seconds. Default = 0 Range = -43200 to +43200 seconds Mib name: acSysNTPUtcOffset INI Name: NTPSERVERUTCOffset Profile name: System Profile

Parameter Name	Type	Provisioning Type	Default Value	Description
Update Interval (seconds)	Integer 1-2147483647	Instant	86400	This parameter defines the NTP update interval, in seconds. It's inadvisable to set it exceeding 1 month (2592000 seconds). Range = 0 to 2592000 seconds Default = 86400 seconds Mib name: acSysNTPUpdateInterval INI Name: NTPUPDATEINTERVAL Profile name: System Profile
Day Light Saving Time				
Mode	Enum: Disable(0), Enable(1)	Instant	0	Determines whether to enable the time adjustment to day light saving time while update time from NTP server Mib name: acSysDayLightSavingTimeMode INI Name: DAYLIGHTSAVINGTIMEENABLE Profile name: System Profile
Offset (min)	Integer 0-120	Instant	60	when DayLightSavingTimeEnable is Enable, this parameter determine the fix size in minutes: 0-120 Mib name: acSysDayLightSavingTimeOffset INI Name: DAYLIGHTSAVINGTIMEOFFSET Profile name: System Profile
Start (mo:dd:hh:mm)	String Up to 11 chars.	Instant		This parameter defines the date and time of starting day light time in current year. Format mo:dd:hh:mm Mib name: acSysDayLightSavingTimeStart INI Name: DAYLIGHTSAVINGTIMESTART Profile name: System Profile
End (mo:dd:hh:mm)	String Up to 11 chars.	Instant		This parameter defines the date and time of ending day light time in current year. Format mo:dd:hh:mm. Mib name: acSysDayLightSavingTimeEnd INI Name: DAYLIGHTSAVINGTIMEEND Profile name: System Profile

Parameter Name	Type	Provisioning Type	Default Value	Description
STUN				
STUN Enable	Enum: Disable(0), Enable(1)	Offline	0	This parameter is used to enable the STUN module, used for NAT traversal of UDP packets. Mib name: acSysSTUNEnable INI Name: ENABLESTUN Profile name: System Profile
Primary Server IP	IP Address	Offline	0	Defines the primary STUN Server IP address. Range = Legal IP address Mib name: acSysSTUNPrimaryServerIP INI Name: STUNSERVERPRIMARYIP Profile name: System Profile
Secondary Server IP	IP Address	Offline	0	Defines the secondary STUN server IP address. Range = Legal IP address Mib name: acSysSTUNSecondaryServerIP INI Name: STUNSERVERSECONDARYIP Profile name: System Profile
Binding Life Time	Integer 0-2147483647	Offline	30	This parameter is used to define the NAT binding lifetime, in seconds. STUN refreshes the binding information after this time expires. Range = 0 - 2592000 Mib name: acSysSTUNBindingLifeTime INI Name: NATBINDINGDEFAULTTIMEOUT Profile name: System Profile
System NAT Type	Enum: stunDisabled(-1), none(0), fullCone(1), restricted(2), portRestricted(3), symmetric(4), symmetricFireWall(5), blocked(6), unknown(7), natIdentificationInProgress(10)	Read-Only	0	Identified NAT type.;-1 - STUN client is disabled;0 - None;1 - FullCone;2 - Restricted;3 - PortRestricted;4 - Symmetric;5 - SymmetricFireWall;6 - Blocked;7 - Unknown;10 - NAT identification in progress Mib name: acSysNATType Profile name: Not Profiled
Keep Alive Trap Port	Integer 0-65334	Instant	162	The port to which the keep alive traps are sent to. Mib name: acSysSNMPKeepAliveTrapPort INI Name: KEEPALIVETRAPPORTR Profile name: System Profile

Parameter Name	Type	Provisioning Type	Default Value	Description
DHCP				
DHCP Enable	Enum: Disable(0), Enable(1)	Online	0	<p>Enables/disables DHCP support.</p> <p>0 = Disable 1 = Enable</p> <p>After the gateway is powered up, it attempts to communicate with a BootP server. If a BootP server does not respond and if DHCP is enabled, the gateway attempts to obtain its IP address and other network parameters from the DHCP server.</p> <p>Note that throughout the DHCP procedure, the BootP/TFTP application must be deactivated. If it isn't deactivated, the gateway receives a response from the BootP server instead of the DHCP server.</p> <p>For additional information on DHCP, refer to the product documentation.</p> <p>Note: DHCPEnable is a special ?Hidden? parameter. Once defined and saved in flash memory, its assigned value doesn't revert to its default even if the parameter doesn't appear in the INI file.</p> <p>Mib name: acSysIPDHCPEnable INI Name: DHCPENABLE Profile name: System Profile</p>
DHCP Speed Factor	Integer 0-10	Offline	1	<p>Controls the DHCP renewal speed. When set to 0, the DHCP lease renewal is disabled. Otherwise, the renewal time is divided by this factor. Some DHCP-enabled routers perform better when set to 4.</p> <p>0 = Disable DHCP 1 = Normal 2 to 10 = Fast</p> <p>Mib name: acSysIPDHCPSpeedFactor INI Name: DHCPSPPEEDFACTOR Profile name: System Profile</p>

2.6.3 Tab: NFS Settings

Frame: System Settings Provisioning, Tab: NFS Settings

Parameter Name	Type	Provisioning Type	Default Value	Description
Index	Integer 0-15	NA	0	Index Field for line. Internal parameter. Index can be up to 15 in dependency of board type. Mib name: acSysNFSIndex INI Name: NFSSERVERS_INDEX Profile name: Not Profiled
Status	Enum:	NA	0	ROWSTATUS field for line. Internal parameter. Mib name: acSysNFSRowStatus Profile name: NFS Profile
Host Or IP	String Up to 39 chars.	Online		The domain name or IP address of the NFS server. If a domain name is provided, then a DNS server must be configured. Mib name: acSysNFSHostOrIP INI Name: NFSSERVERS_HOSTORIP Profile name: NFS Profile
Root Path	String Up to 99 chars.	Online		Path to the root of the exported file system. Mib name: acSysNFSRootPath INI Name: NFSSERVERS_ROOTPATH Profile name: NFS Profile
Nfs Version	Enum: v2(2), v3(3)	Online	3	NFS version to use with this remote file system, 2 or 3 (default). Mib name: acSysNFSNfsVersion INI Name: NFSSERVERS_NFSVERSION Profile name: NFS Profile
Auth Type	Enum: null(0), unix(1)	Online	1	Identifies the authentication method used with this remote file system, 0 for AUTH_NULL, 1 for AUTH_UNIX (default). Mib name: acSysNFSAuthType INI Name: NFSSERVERS_AUTHTYPE Profile name: NFS Profile
UID	Integer 0-2147483647	Online	0	User ID used in authentication if using AUTH_UNIX. The default is 0. Mib name: acSysNFSUID INI Name: NFSSERVERS_UID Profile name: NFS Profile
GID	Integer 0-2147483647	Online	1	Group ID used in authentication if using AUTH_UNIX. The default is 1. Mib name: acSysNFSGID INI Name: NFSSERVERS_GID Profile name: NFS Profile

Parameter Name	Type	Provisioning Type	Default Value	Description
Vlan Type	Enum: oam(0), media(1)	Online	0	The VLAN, OAM(0) or Media(1), to use when accessing this remote file system. The default is to use;the media VLAN. This parameters applies only if multiple IP addresses are configured on this board. Mib name: acSysNFSVlanType INI Name: NFSSERVERS_VLANTYPE Profile name: NFS Profile

2.6.4 Tab: Security Settings

Frame: System Settings Provisioning, Tab: Security Settings

Parameter Name	Type	Provisioning Type	Default Value	Description
TLS & Certificates				
TLS Version	Integer 0-1	Online	0	This parameter defines the supported versions of SSL/TLS. When set to 0, SSL/TLS handshakes always start with SSL 2.0 and switch to TLS 1.0 if both peers support it. When set to 1, TLS 1.0 is the only version supported; clients attempting to contact the device using SSL 2.0 will be rejected. Possible values: 0 = SSL 2.0, SSL 3.0, and TLS 1.0 are supported (default) 1 = TLS 1.0 will always be used Mib name: acSysSecurityTLSVersion INI Name: TLSVERSION Profile name: Not Profiled
HTTPS Cipher String	String Up to 200 chars.	Offline	0	Requires client certificates for HTTPS connection. The client certificate must be preloaded on the gateway, and its matching private key must be installed on the managing computer. Time and date must be correctly set on the gateway, for the client certificate to be verified. Mib name: acSysWEBHTTPSCipherString INI Name: HTTPSCIPHERSTRING Profile name: Not Profiled

Parameter Name	Type	Provisioning Type	Default Value	Description
HTTPS Require Client Certificate	Enum: disable(0), enable(1)	Online	0	Requires client certificates for HTTPS connection. The client certificate must be preloaded on the gateway, and its matching private key must be installed on the managing computer. Time and date must be correctly set on the gateway, for the client certificate to be verified. Mib name: acSysSecurityHTTPSRequireClientCertificate INI Name: HTTPSREQUIRECLIENTCERTIFICATE Profile name: System Profile
AUPD Verify Certificates	Enum: disable(0), enable(1)	Online	0	This parameter configures the AutoUpdate facility to verify server certificates when using HTTPS. Mib name: acSysSecurityAUPDVerifyCertificates INI Name: AUPDVERIFYCERTIFICATES Profile name: Not Profiled
TLS Expiry Check Start	Integer 0-3650	Instant	60	The system will report when the TLS server certificate is about to expire within this number of days. Mib name: acSysSecurityTLSExpiryCheckStart INI Name: TLSEXPIRYCHECKSTART Profile name: System Profile
TLS Expiry Check Period	Integer 1-3650	Instant	7	Defines how often the system will check for TLS server certificate expiry (in days). Mib name: acSysSecurityTLSExpiryCheckPeriod INI Name: TLSEXPIRYCHECKPERIOD Profile name: System Profile
OCSP				
OCSP Enable	Enum: disabled(0), enabled(1)	Instant	0	Enables or disables certificate checking via OCSP. Mib name: acSysSecurityOcspeEnable INI Name: OCSPENABLE Profile name: System Profile
OCSP Server IP Type	inetAddressType	Instant		This parameter defines the OCSP server's IP address Type. 0 - unknown 1 - IPv4 2 - IPv6 Mib name: acSysSecurityOcspsServerIPType Profile name: System Profile

Parameter Name	Type	Provisioning Type	Default Value	Description
OCSP Server IP	String Up to chars.	Instant		This parameter defines the OCSP server's IP address. Range = Legal IP address Mib name: acSysSecurityOcspServerIP INI Name: OCSPSERVERIP Profile name: System Profile
OCSP Secondary Server IP Type	inetAddressType	Instant		This parameter defines the OCSP secondary server's IP address Type. 0 - unknown 1 - IPv4 2 - IPv6 Mib name: acSysSecurityOcspSecondaryServerIPType Profile name: Not Profiled
OCSP Secondary Server IP	String Up to chars.	Instant		This parameter defines the OCSP secondary server IP address. Range = Legal IP address Mib name: acSysSecurityOcspSecondaryServerIP INI Name: OCSPSECONDARYSERVERIP Profile name: Not Profiled
OCSP Server Port	Integer 1-32767	Instant	2560	This parameter defines the OCSP server's TCP port number. Range = 1 to 32767. Mib name: acSysSecurityOcspServerPort INI Name: OCSPSERVERPORT Profile name: System Profile
OCSP Default Response	Enum: rejectPeerCertificate (0), allowPeerCertificate (1)	Instant	0	Determines default OCSP behavior when the server cannot be contacted. 0 = reject peer certificate. 1 = allow peer certificate. Mib name: acSysSecurityOcspDefaultResponse INI Name: OCSPDEFAULTRESPONSE Profile name: System Profile
Require Strict Certification	Enum: disable(0), enable(1)	Online	0	Verify the certification strictly - for SSL Mib name: acSysSecurityRequireStrictCertification INI Name: REQUIRESTRICTCERT Profile name: System Profile

2.6.5 Tab: License

Frame: System Settings Provisioning, Tab: License

Parameter Name	Type	Provisioning Type	Default Value	Description
Supported Features	String Up to 484 chars.	Read-Only		List of all activated features. Mib name: acSysLicenseKeyActiveList Profile name: Not Profiled

2.6.6 Tab: Logging

Frame: System Settings Provisioning, Tab: Logging

Parameter Name	Type	Provisioning Type	Default Value	Description
Index	Integer 0-29	Read-Only	0	The index of the cost group. Mib name: loggingFiltersIndex INI Name: LOGGINGFILTERS_INDEX Profile name: Not Profiled
Debug Recording Destination IP	IPAddress	Instant		Defines the destination IP address for Debug Recording default target Mib name: loggerDebugRecordingDestIP INI Name: DEBUGRECORDINGDESTIP Profile name: Not Profiled
Type	Enum: unknownFilter(0), anyFilter(1), trunkIdFilter(2), trunkGroupIdFilter(3), bChannelFilter(4), fxsFxoFilter(5), telToIpFilter(6), ipToTelFilter(7), ipGroupdFilter(8), srdFilter(9), classificationFilter(10), ipToIpRoutingFilter(11), userFilter(12)	Online	0	Type of logging filter Mib name: loggingFiltersType INI Name: LOGGINGFILTERS_FILTERTYPE Profile name: Not Profiled
Debug Recording Destination Port	Integer 1-65535	Instant	925	Defines the destination UDP Port for Debug Recording default target Mib name: loggerDebugRecordingDestPort INI Name: DEBUGRECORDINGDESTPORT Profile name: Not Profiled
Value	String Up to 19 chars.	Online		Value of log filter Mib name: loggingFiltersValue INI Name: LOGGINGFILTERS_VALUE Profile name: Not Profiled

Parameter Name	Type	Provisioning Type	Default Value	Description
Debug Recording Status	Enum: Stop(0), Start(1)	Instant	0	Determines if Debug Recording should be Stopped (0) or Started (1) Mib name: loggerDebugRecordingStatus INI Name: DEBUGRECORDINGSTATUS Profile name: Not Profiled
Syslog	Enum: disable(0), enable(1)	Online	0	Print Syslog false(0) true(1) Mib name: loggingFiltersSyslog INI Name: LOGGINGFILTERS_SYSLOG Profile name: Not Profiled
Capture Type	Enum: captureNone(0), captureSig(1), captureSigMedia(2), captureSigMediaPCM(3), capturePSTN(4)	Online	0	Capture Type Mib name: loggingFiltersCaptureType INI Name: LOGGINGFILTERS_CAPTURETYPE Profile name: Not Profiled
Row Status	Enum: Active(1), NotInService(2), NotReady(3), CreateAndGo(4), CreateAndWait(5), Destroy(6)	NA	3	Row-Status Textual Conventions as defined in RFC 2579: Textual Conventions for SMIv2 Mib name: loggingFiltersRowStatus INI Name: LOGGINGFILTERS_ROWSTATUS Profile name: Not Profiled

2.7 Frame: Voice Quality Rules

2.7.1 Tab: Voice Quality Rules

Frame: Voice Quality Rules, Tab: Voice Quality Rules

Parameter Name	Type	Provisioning Type	Default Value	Description
Monitored Param	Enum: Mos(0), Delay(1), PacketLoss(2), Jitter(3), Rerl(4)	Online	0	MonitoredParam Mib name: acCPQOERulesMonitoredParam INI Name: QOERULES_MONITOREDPARAM Profile name: Not Profiled
Direction	Enum: DeviceSide(0), RemoteSide(1)	Online	0	Whether the paramter is monitored on the remote or local side. Mib name: acCPQOERulesDirection INI Name: QOERULES_DIRECTION Profile name: Not Profiled
Profile	Enum: noProfile(0), lowSensitivity(1), defaultSensitivity(2), highSensitivity(3)	Online	2	Profile Mib name: acCPQOERulesProfile INI Name: QOERULES_PROFILE Profile name: Not Profiled
Green Yellow Threshold	Integer 0-4294967295	Online	0	GreenYellowThreshold Mib name: acCPQOERulesGreenYellowThreshold INI Name: QOERULES_GREENYELLOWTHRESHOLD Profile name: Not Profiled
Green Yellow Hystersis	Integer 0-4294967295	Online	0	GreenYellowHystersis Mib name: acCPQOERulesGreenYellowHystersis INI Name: QOERULES_GREENYELLOWHYSTERESIS Profile name: Not Profiled
Yellow Red Threshold	Integer 0-4294967295	Online	0	YellowRedThreshold Mib name: acCPQOERulesYellowRedThreshold INI Name: QOERULES_YELLOWREDTHRESHOLD Profile name: Not Profiled
Yellow Red Hystersis	Integer 0-4294967295	Online	0	YellowRedHystersis Mib name: acCPQOERulesYellowRedHystersis INI Name: QOERULES_YELLOWREDHYSTERESIS Profile name: Not Profiled

2.8 Frame: Web Provisioning

2.8.1 Tab: Access Settings

Frame: Web Provisioning, Tab: Access Settings

Parameter Name	Type	Provisioning Type	Default Value	Description
Index	Enum: administrator(0), monitoringLevel(1)	Read-Only	1	WEB Access index Mib name: acSysWEBAccessIndex Profile name: Not Profiled
Disable WEB Config	Enum: Enable(0), Disable(1)	Offline	0	Enables or disables Web Configuration. 0 = Read And Write mode (default) 1 = Read Only mode Mib name: acSysWEBConfigDisable INI Name: DISABLEWEBCONFIG Profile name: Not Profiled
User Name	String	Instant	60	WEB Basic user name. Range = String[26] Mib name: acSysWEBAccessUserName INI Name: WEBACCESSUSERNAME Profile name: Not Profiled
HTTPS Only	Enum: disable(0), enable(1)	Offline	0	Use this parameter to allow only HTTPS connections (force security). When set to 1, unencrypted HTTP (normally, port 80) is blocked. Mib name: acSysWEBHTTPSONly INI Name: HTTPSONLY Profile name: Not Profiled
User Code	String	Instant	60	WEB Basic userAccess Mib name: acSysWEBAccessUserCode INI Name: WEBACCESSUSERCODE Profile name: Not Profiled
HTTPS Port	Integer 0-65535	Offline	443	Determine the local Secure HTTPS port of the device. The default port is 443. Range = 1-65535 (other restrictions may apply in this range) Mib name: acSysWEBHTTPSPort INI Name: HTTPSPORT Profile name: Not Profiled

Parameter Name	Type	Provisioning Type	Default Value	Description
Web Authentication Mode	Enum: BasicMode(0), DigestModeWhenPossible(1), DigestModeHTTPOnly(2)	Instant	1	<p>Selects HTTP basic (clear text) or digest (MD5) authentication for the web interface.</p> <p>When set to 0, basic authentication (clear text) will be used.</p> <p>When set to 1, digest authentication (MD5) will be used.</p> <p>When set to 2, digest authentication (MD5) will be used for HTTP, while basic authentication will be used for HTTPS.</p> <p>Note that turning on RADIUS login forces basic authentication.</p> <p>Mib name: acSysWEBAccessWebAuthMode INI Name: WEBAUTHMODE Profile name: Not Profiled</p>
Web Use Radius Login	Enum: disable(0), enable(1)	Instant	0	<p>Uses the RADIUS (Remote Authentication Dial-In User Server/Service) for Web interface authentication.</p> <p>Make sure that ENABLERADIUS is on.</p> <p>Use of this parameter without HTTPSONLY = 1 is not recommended.</p> <p>Mib name: acSysWEBWebUseRadiusLogin INI Name: WEBRADIUSLOGIN Profile name: Not Profiled</p>
WEB Deny Authentication Timer	Integer 0-86400	Online	0	<p>Defines the time the next authentication attempt from the last authentication failed IP should be denied.</p> <p>The range can be any value from 0 - 86400 in seconds</p> <p>Mib name: acSysWEBDenyAuthenticationTimer INI Name: DENYAUTHENTICATIONTIMER Profile name: Not Profiled</p>

2.8.2 Tab: Access Addresses

Frame: Web Provisioning, Tab: Access Addresses

Parameter Name	Type	Provisioning Type	Default Value	Description
Index	Integer 0-9	Read-Only	1	WEB ACL (Access Control List) index. Mib name: acSysWEBACLIndex Profile name: Not Profiled
IP Address	IP Address	Instant	0	Allows IP addresses to connect to the Web interface. Set to zeroes to allow all IP addresses. Range: Valid IP address Mib name: acSysWEBACLIP INI Name: WEBACCESSLIST Profile name: Not Profiled

3 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.

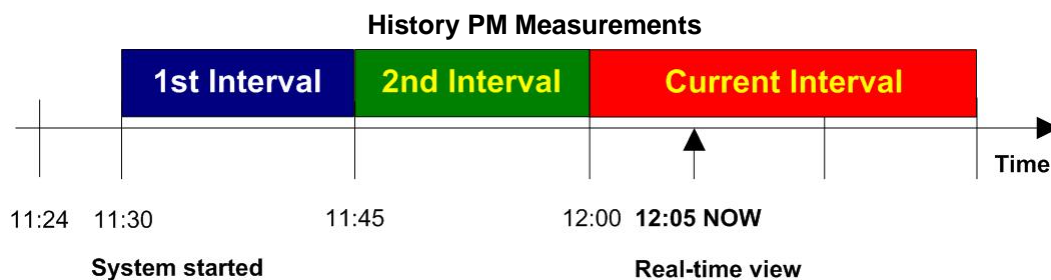
The system provides two types of performance measurements:

- **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 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.

3.1 Frame: MP System Monitoring (Configuration)

3.1.1 Tab: System IP

Frame: MP 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

3.2 Frame: MP System Monitoring (History)

3.2.1 Tab: System IP

Frame: MP 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

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
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

3.3 Frame: MP System Monitoring (Real-Time)

3.3.1 Tab: System IP

Frame: MP System Monitoring (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
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

EMS Parameter Name	RT / Hist	Gauge / Counter	Parameter Description
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

4 Alarms

System alarms, associated with the Mediapack can be displayed, viewed, tracked and troubleshooted in the EMS's Alarm Browser.

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

- Standard traps: traps originated by the media gateway - all the standard traps are treated as events.
- Proprietary alarms / events: traps originated by the media gateway and defined in the gateway's 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	Textual description of specific problem.
SNMP Alarm	NOTIFICATION-TYPE Name as it appears in the MIB.
SNMP OID	NOTIFICATION-TYPE OID as it appears in the MIB.
Alarm Title	The alarm name, as it appears in the EMS Alarm Browser.
Alarm Type	Alarm type according to ITU X.733 definition. This value is displayed from the variable-binding <code>acBoardTrapGlobalsType</code> .
Alarm Source	Possible values of sources if applicable to a specific alarm. This value is displayed from the variable-binding <code>acBoardTrapGlobalsSource</code> .
Probable Cause	Alarm probable cause according to ITU X.733 definition. This value is displayed from the variable-binding <code>acBoardTrapGlobalsProbableCause</code> .
Severity	Possible values of severities. This value is displayed from the variable-binding <code>acBoardTrapGlobalsSeverity</code> .
Additional Info1,2,3	Additional information fields provided by MG application, depending on the specific scenario. These values are displayed from <code>acBoardTrapGlobalsAdditionalInfo1</code> , <code>acBoardTrapGlobalsAdditionalInfo2</code> and <code>acBoardTrapGlobalsAdditionalInfo3</code> . The document includes a few examples of the possible values of this field.
Corrective Action	Possible corrective action when applicable.

4.1 Standard Traps

4.1.1 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 Info^{1,2,3}	
Corrective Action	

4.1.2 Authentication Failure

Authentication Failure

Description	SNMPv2-MIB: An authenticationFailure trap signifies that the SNMP entity has received a protocol message that is not 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	Authentication Failure
Alarm Type	Communication Alarm
Alarm Source	
Probable Cause	Other
Severity	Major
Additional Info^{1,2,3}	
Corrective Action	

4.2 EMS Alarms

4.2.1 EMS Trap Receiver Binding Error

EMS Trap Receiver Binding Error

Textual 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	<p>Run netstats command to verify which application uses the alarms reception port (by default UDP post 162).</p> <ul style="list-style-type: none"> ▪ 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

4.2.2 GW Connection Alarm

GW Connection Alarm

Textual 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	-
Corrective Action	<p>Communication problem: Try to ping the gateway to check if there is network communication.</p> <ul style="list-style-type: none"> ▪ 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 matches 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

4.2.3 GW Mismatch Alarm

GW Mismatch Alarm

Textual Description	<p>Activated when the EMS detects a hardware, software, predefine or configuration mismatch.</p> <ul style="list-style-type: none"> • Software Mismatch: <p>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.</p> • Hardware Mismatch: <p>Activated when the EMS detects a hardware mismatch between the actual and the previous definition of a Media Gateway.</p> • Configuration Mismatch: <p>Activated when the EMS detects a configuration mismatch between the actual parameter values provisioned and previous parameter values provisioned.</p>
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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	<ul style="list-style-type: none"> • Software Mismatch: <ul style="list-style-type: none"> ✓ Define the detected version in the EMS Software Manager ✓ Perform a Software Upgrade on the gateway with one of the supported versions. • Hardware Mismatch: <ul style="list-style-type: none"> ✓ 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: <ul style="list-style-type: none"> ✓ Run Configuration Verification command in order to compare EMS configuration and actual MG configuration: <ul style="list-style-type: none"> -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.

4.2.4 EMS Server Started

EMS Server Started

Textual 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.

4.2.5 Disk Space Alarm

Disk Space Alarm

Textual Description	Originated when the EMS Server hard disk capacity is almost full.
SNMP OID	acEMSNotEnoughDiskSpaceAlarm - 1.3.6.1.4.1.5003.9.20.3.2.0.12
AlarmTitle	Disk Space Alarm
ItuAlarmType	Environment Alarm
AlarmSource	EMS Server
Probable Cause	-
Severity	Critical - disk usage > 80 % Major - disk usage > 70 %
Additional Info	-
Corrective Action	<ul style="list-style-type: none"> ▪ Clean all unnecessary files ▪ Expand the hard disk
Media Gateways	All the gateways managed by the EMS.

4.2.6 Software Replaced

Software Replaced

Textual 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.

4.2.7 Hardware Replaced

Hardware Replaced

Textual Description	<p>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.</p> <p>Hardware Replace is discovered by the MAC address and performed during Board Started trap.</p>
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

4.2.8 HTTP/HTTPS Access Disabled

HTTP/HTTPS Access Disabled

Textual Description	<p>Originated when HTTP access is disabled by EMS hardening but the EMS manages media gateways that require HTTP access for software upgrade.</p> <p>Originated on server startup.</p>
SNMP OID	acEMSHHTTPDisabled - 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

4.2.9 PM File Generated

PM File Generated

Textual 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>.
Corrective Action	-
Media Gateways	All Gateways

4.2.10 PM Polling Error

PM Polling Error

Textual 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	<p>Verify in the 'Textual Description' (see above) the reason why the PM history stopped.</p> <ul style="list-style-type: none"> ▪ 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. <p>Note: The alarm continues to activate every 15 minutes unless you fix the problem or manually stop PM polling of the Gateway.</p>
Media Gateways	All Gateways

4.2.11 Cold Start Missed

Cold Start Missed

Textual 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

4.2.12 Security Alarm

Security Alarm

Textual 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	

4.2.13 Security Event

Security Event

Textual 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	

4.2.14 Topology Update Event

Topology Update Event

Textual 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	<p>Additional Info 1 field will include following details:</p> <p>Region: X1 'X2' [GW: Y1 'Y2' 'Y3' 'Y4']</p> <p>X1 = Region ID (unique identifier in the EMS data base used for region identification)</p> <p>X2 = Region name as it defined by EMS operator</p> <p>Y1 = GW ID (unique identifier in the EMS data base used for GW identification)</p> <p>Y2 = GW Name as it defined by EMS operator</p> <p>Y3 = GW IP as it defined by EMS operator</p> <p>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 successful. The following GWs will be supported: MP, M1K, M2K, M3K, M5K, M8K</p> <p>Region details will always be part of the alarm, while GW info will be displayed when event is GW related.</p> <p>All the fields related to the GW will always be displayed to allow easy parsing.</p> <p>Examples:</p> <p>(Description=Add Region) Region: 7 'Test Lab'</p> <p>(Description=Update Region) Region: 7 'My Updated Region'</p> <p>(Description=Add GW) Region: 7 'My Updated Region', GW: 22 'MG14' '1.2.3.4' 'Unknown', PM Polling: disabled</p> <p>(Description=Update GW) Region: 7 'My Updated Region', GW: 22 'My MG 15' '4.5.6.7' 'M3K'</p> <p>(Description=Update GW) Region: 7 'My Updated Region', GW: 22 'My MG 15' '4.5.6.7', PM Polling: enabled</p> <p>(Description=Remove GW) Region: 7 'My Updated Region', GW: 22 'My MG 15' '4.5.6.7' 'M3K', Polling: enabled</p> <p>(Description=Remove Region) Region: 7 'My Updated Region'</p>
Corrective Action	
Media Gateways	

4.2.15 Topology File Event

Topology File Event

Textual 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 <i>OAMP Integration Guide</i> .
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	

4.2.16 Synchronizing Alarms Event

Synchronizing Alarms Event

Textual 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	

4.2.17 Synchronizing Active Alarms Event

Synchronizing Active Alarms Event

Textual 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	

4.2.18 License Key Alarm

License Key Alarm

Textual Description	This alarm is raised when one of the following occurs: <ul style="list-style-type: none"> ▪ EMS Application License is expired. ▪ EMS Application License will be expired within one month. ▪ Gateway management is not covered by the current EMS Application License (the maximum number of EMS licenses for managing this gateway has been exceeded).
SNMP OID	acEMSLicenseKeyAlarm - 1.3.6.1.4.1.5003.9.20.3.2.0.29
Alarm Title	EMS License Key Alarm
Alarm Source	
Severity	Major/Critical
Alarm Type	Other
Probable Cause	keyExpired
Additional Info	
Corrective Action	
Media Gateways	

4.3 MediaPack Alarms

4.3.1 Board Fatal Error Alarm

Board Fatal Error

Description	Board fatal error.
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	Equipment Alarm
Alarm Source	
Probable Cause	Underlying resource unavailable
Severity	Critical
Additional Info^{1,2,3}	NULL
Corrective Action	Capture the Syslog alarm data and send it to Technical Support who will probably instruct you to collect additional data from the device.

4.3.2 Configuration Error

Configuration Error

Description	Configuration error.
SNMP Alarm	acBoardConfigurationError
SNMP OID	1.3.6.1.4.1.5003.9.10.1.21.2.0.2
Alarm Title	[Event] Configuration Error
Alarm Type	Equipment Alarm
Alarm Source	
Probable Cause	Underlying resource unavailable
Severity	Critical
Additional Info^{1,2,3}	NULL
Corrective Action	Inspect the run-time specific string to determine the nature of the configuration error. Fix the configuration error using the appropriate tool: Web interface, EMS, or <i>ini</i> file. Save the configuration and if necessary reset the device.

4.3.3 Temperature Alarm

Temperature Alarm

Description	The temperature alarm is set off when the temperature exceeds 60 degrees Celsius, and ceases when the temperature again falls below 55 degrees Celsius. <ul style="list-style-type: none"> Alarm raise - 'The temperature is too high' Alarm clear - 'The temperature is normal'
SNMP Alarm	acBoardTemperatureAlarm
SNMP OID	1.3.6.1.4.1.5003.9.10.1.21.2.0.3
Alarm Title	Temperature Alarm
Alarm Type	Equipment Alarm
Alarm Source	
Probable Cause	Temperature unacceptable
Severity	Critical
Additional Info1,2,3	NULL
Corrective Action	Inspect the system. Determine if all fans in the system are operating correctly.

4.3.4 Initialization Ended

Initialization Ended

Description	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

4.3.5 Board Resetting Following Software Reset

Board Resetting Following Software Reset

Description	The device started the reset process - following 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.

4.3.6 Feature Key Related Error

Feature Key Related Error

Description	Feature key error
SNMP OID	1.3.6.1.4.1.5003.9.10.1.21.2.0.6

4.3.7 Gateway Administrative State Changed

Gateway Administrative State Changed

Description	<p>This alarm indicates that the administrative state of the gateway has been changed to a new state.</p> <p>Note that all state changes are instigated by the parameter <code>acgwAdminState</code>.</p> <ul style="list-style-type: none"> ▪ Time limit set in the parameter <code>acgwAdminStateLockControl - 'GateWay shutting down. Max time to LOCK %d sec'</code> ▪ No time limit in the parameter <code>acgwAdminStateLockControl - 'GateWay is shutting down. No time limit.'</code> ▪ When reaching lock state - 'GateWay is locked' <p>When the gateway is SET to unlocked - 'GateWay is unlocked (fully active again)'.</p>
SNMP Alarm	<code>acgwAdminStateChange</code>
SNMP OID	1.3.6.1.4.1.5003.9.10.1.21.2.0.7
Alarm Title	Administrative State Change
Alarm Type	Equipment Alarm
Alarm Source	
Probable Cause	Other
Severity	<ul style="list-style-type: none"> ▪ Major ▪ Major ▪ Major ▪ Cleared
Additional Info^{1,2,3}	NULL
Corrective Action	A network administrator has taken an action to lock the device. No corrective action is required.

4.3.8 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
Alarm Type	Other
Alarm Source	'GWAPP'
Probable Cause	Other
Severity	Major / Clear
Additional Info^{1,2,3}	-

4.3.9 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. <ul style="list-style-type: none"> ▪ 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 Type	Equipment Alarm
Alarm Source	
Probable Cause	<ul style="list-style-type: none"> ▪ Input/Output Device Error ▪ Other ▪ Underlying resource unavailable
Severity	<ul style="list-style-type: none"> ▪ Critical ▪ Cleared ▪ Major
Additional Info^{1,2,3}	-
Corrective Action	Ensure that both Ethernet cables are plugged into the back of the system. Inspect the system's Ethernet link lights to determine which interface is failing. Reconnect the cable or fix the network problem.

4.3.10 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
Alarm Title	System Component Overloaded
Alarm Type	Other
Alarm Source	'GWAPP'
Probable Cause	Other
Severity	Major / Clear
Additional Info^{1,2,3}	-

4.3.11 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.

4.3.12 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
Severity	Major on raise, Clear on clear
Additional Info	
Corrective Action	-

4.3.13 Keep Alive Trap

Keep Alive Trap

Description	This traps is sent The STUN client in the board is enabled and has either identified a NAT or is not finding the STUN server The ini file contains the following line: 'SendKeepAliveTrap=1' Keep-alive is sent out every x second.x =0. 9 of the time defined in the NatBindingDefaultTimeout parameter
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
Probable Cause	other
Severity	Indeterminate
Additional Info	
Corrective Action	-

4.3.14 NAT Traversal Alarm

NAT Traversal Alarm

Description	This alarm is raised when the STUN client in the board is enabled and has either identified a NAT or is cannot find the STUN server. The ini file contains the following line: 'SendKeepAliveTrap=1' Keep-alive is sent out every 9/10 of the time defined in the NatBindingDefaultTimeout parameter.
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 Info^{1,2,3}	-
Corrective Action	-

4.3.15 Threshold of Performance Monitored Object Exceeded

Threshold of Performance Monitored Object Exceeded

Description	This alarm is raised when a performance counter has crossed the high / low threshold. 'Performance: Threshold alarm was set', with source = name of the performance counter which caused the trap.
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 Info^{1,2,3}	-
Corrective Action	-

4.3.16 HTTP Download Result

HTTP Download Result

Description	This is a log message (not alarm) indicating both successful or 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	-
Corrective Action	-

4.3.17 Analog Port SPI Out of Service

Analog Port SPI Out of Service

Description	This alarm indicates that an analog port 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	Port#<m> where m is the analog port number
Alarm Type	Physical Violation
Probable Cause	Equipment Malfunction
Severity	Major on raise, Clear on clear
Additional Info	
Corrective Action	

4.3.18 Analog Port High Temperature

Analog Port High Temperature

Description	This alarm indicates that an 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	Physical Violation
Probable Cause	Equipment Malfunction
Severity	Major on raise, Clear on clear
Additional Info	
Corrective Action	

4.3.19 NTP Server Status Alarm

NTP Server Status Alarm

Description	This alarm is issued when there is no initial communication with the NTP server (major severity) or when a previously existing connection is lost (minor severity).
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
Severity	Major / Minor / Clear
Additional Info	
Corrective Action	Check the NTP server configuration parameters and / or rectify communication with the NTP Server.

4.3.20 Three Way Conference Out Of Resource

Three Way Conference Out Of Resource

Description	This alarm is issued when users try to establish more than the allowed number of conference calls.
SNMP Alarm	acThreeWayConferenceOutOfResources
SNMP OID	1.3.6.1.4.1.5003.9.10.1.21.2.0.72
Alarm Title	[Event] Three Way Conference Out Of Resource
Alarm Source	
Alarm Type	equipmentAlarm
Probable Cause	underlyingResourceUnavailable
Severity	Indeterminate
Additional Info	
Corrective Action	Try to establish the conference call later.

4.3.21 OCSP Server Status Alarm

OCSP Server Status

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	Board#1 / System#1
Alarm Type	communicationsAlarm
Probable Cause	communicationsSubsystemFailure
Severity	Major / Clear
Additional Info	
Corrective Action	

4.3.22 Media Process Overload Alarm

Media Process Overload Alarm

Description	This alarm is raised when the media process overloads, and 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	

4.3.23 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	
Alarm Source	
Alarm Type	environmentalAlarm
Probable Cause	keyExpired
Severity	indeterminate
Additional Info	
Corrective Action	

4.3.24 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	denialOfService
Severity	indeterminate
Additional Info	
Corrective Action	

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