AudioCodes™ CPE & Access Analog Gateways

MGCP, MEGACO & TPNCP

Media Pack MP-1xx & MP-11x

Mediant 1000

Release Notes 4.6

Document #: LTRT-61603

May 2005

Trademarks

AC logo, Ardito, AudioCoded, AudioCodes, AudioCodes logo, IPmedia, Mediant, MediaPack, MP-MLQ, NetCoder, Stretto, TrunkPack, VoicePacketizer and VoIPerfect, are trademarks or registered trademarks of AudioCodes Limited.

All other products or trademarks are property of their respective owners.

Customer Support

Customer technical support and service are provided by AudioCodes' Distributors, Partners, and Resellers from whom the product was purchased. For Customer support for products purchased directly from AudioCodes, contact support@audiocodes.com.

Abbreviations

Each abbreviation, unless widely used, is spelled out in full when first used. Only industry-standard terms are used throughout this manual. Hexadecimal notation is indicated by 0x preceding the number.

Applicable Products

This manual provides additional information for the following AudioCodes products:

MediaPack Series:	MP-124/FXS, 24 analog FXS interfaces.
	MP-108/FXS, 8 analog FXS interfaces.
	MP-108/FXO, 8 analog FXO interfaces.
	MP-104/FXS, 4 analog FXS interfaces.
	MP-104/FXO, 4 analog FXO interfaces.
	MP-102/FXS, 2 analog FXS interfaces.
	MP-118/FXS, 8 analog FXS interfaces.
	MP-114/FXS, 4 analog FXS interfaces.
	MP-112/FXS, 2 analog FXS interfaces.
	Mediant 1000 Analog, 4 to 24 analog FXS/FXO interfaces.

Notice

These Release Notes describe the functionality of the AudioCodes' MediaPack Series Analog Gateways supported by version 4.6. Information contained in this document is believed to be accurate and reliable at the time of printing. However, due to ongoing product improvements and revisions, AudioCodes cannot guarantee the accuracy of printed material after the Date Published nor can it accept responsibility for errors or omissions.

Date Published: May-10-2005 Date Printed: Jul-10-2005

Reader's Notes

Table of Contents

1 What's New in Release 4.6

1.1 Supported Hardware Platforms

1.1.1 New Hardware Platforms Introduced in This Release

- The following hardware platforms are introduced in this version:
  - MediaPack MP-11x/FXS, 2 to 8 analog FXS interfaces, with enhanced CPU resources
    - MediaPack MP-118/FXS, 8 analog FXS interfaces
    - MediaPack MP-114/FXS, 4 analog FXS interfaces
    - MediaPack MP-112/FXS, 2 analog FXS interfaces
  - Mediant 1000, a 19-inch rack-mounted, 1U chassis hosting FXS or FXO modules, up to 4 ports in each module, with a total of 6 modules providing 24 ports.

1.1.2 Support of the Existing Hardware Platforms

- MediaPack MP-124/FXS, 24 analog FXS interfaces
- MediaPack MP-108/FXS, 8 analog FXS interfaces
- MediaPack MP-108/FXO, 8 analog FXO interfaces
- MediaPack MP-104/FXS, 4 analog FXS interfaces
- MediaPack MP-104/FXO. 4 analog FXO interfaces
- MediaPack MP-102/FXS, 2 analog FXS interfaces

1.1.3 Hardware Platforms No Longer Supported

Not applicable.

1.2 Analog Interface New Features

1. Support was added for generation of the following Caller ID type-1 standards: ETSI before ring DT AS, ETSI before ring RP AS, ETSI before ring LR DT AS, ETSI not ring-related DT AS, ETSI not ring-related RP AS, ETSI not ring-related LR DT AS, Bellcore not ring related and Brazilian. AC13878
2. Support was added for generation of the following Message Waiting Indication type-1 standards: ETSI before ring DT AS, ETSI before ring RP AS, ETSI before ring LR DT AS, ETSI not ring-related DT AS, ETSI not ring-related RP AS, ETSI not ring-related LR DT AS, Bellcore not ring-related. AC13878
3. **MP-104/MP-108 FXO only** - A new parameter TimeToSampleAnalogLineVoltage enables the user to control the timing of the analog line voltage sample, which will set the default threshold for the current disconnect. AC24727

4. **MP-104/MP-108 FXO only** - A new parameter CurrentDisconnectDefaultThreshold enables the user to control the minimum voltage threshold for the current disconnect. AC24727

1.3 Networking and Security New Features

5. Network Separation - Media, Control and Management traffic can now be separated to 3 different networks. Instead of a single IP address, the user will be able to assign 3 IP addresses and subnet masks to each board, one for each traffic type. AC20028

6. VLAN tagging - earlier versions supported QoS tagging in the IP layer (IPTOS / Precedence or Diffserve). Version 4.6 introduces the capability to define tagging in the Ethernet layer, according to 802.1p/Q. Tagging is supported both for Tx and for Rx. AC18791

7. NAT Traversal – this version introduces several features that enable NAT traversal for the management, control and media interfaces. These features include SNMP/EMS NAT traversal, automatic software and configuration update via HTTP and a STUN client that can detect the presence of a NAT device and its type. AC18778

8. For far-end NAT traversal, T.38 now supports the first incoming packet detection, similar to the RTP mechanism. AC21008

1.4 Media Engines New Features

1.4.1 Voice, RTP and RTCP New Features:

9. **For MP-11x and Mediant 1000 only** - SID packets that are sent and received according to RFC 3389 can now contain spectral coefficients information. The user can choose the number of coefficients to be added to the SID packets using the RTPSIDCoeffNum parameter with the values of 0 (default), 4, 6, 8 or 10. AC18775

10. It is now possible to set the remote RTCP port to a value other than RTP port+1. AC21005

11. Support for *ThroughPacket* – an aggregation mechanism that reduces the bandwidth consumed by the media stream.

1.4.2 Modem/Fax New Features:

12. Detection and bypass of Bell 103 modem is now supported and controlled using the parameter BellModemTransportType. AC19976

13. Fax CNG tone detection was improved by increasing the detection duration. AC18757

14. When using Transparent-With-Events fax and modem transport mode, the Echo Canceler and NLP will be automatically disabled and enabled according to the fax/modem signal being detected. AC19777

1.4.3 In-Band Signaling New Features:

15. **MP-11x and Mediant 1000 only** - The In-Band-Signaling (IBS) capabilities have been enhanced, supporting more tones and frequencies and more complex tones. AC19494

    - Tones with AM Modulation
    - Up to 4 cadences per tone

- 32 Call Progress or User Defined Tones
- Up to 64 different frequencies
- Generation of voice during off time of the tone cadence of Call Waiting Tone
- Burst tones

16. The new IBS module supports generation of a continuous tone in any given one or two frequencies using the acPlayToneSequence function. AC15849

17. Support for the NTT CallerID type 2 (off hook), injection and detection. Added a name field for the NTT CallerID, which is available in NTT CallerID type 1 (on hook) and type 2. AC18774

1.4.4 Supported DSP Firmware Templates:

Note 1: Installation and use of vocoders is subject to obtaining the appropriate license in advance of use, and to royalty payments.

Note 2: When using DSP firmware template 0, G.729 and G.723.1 **should not** be used simultaneously on the same device.

- **MP-10x and MP-124:**
  - 0 = DSP firmware supports PCM/ADPCM, G.723, G.729A
  - 1 = DSP firmware supports PCM/ADPCM and NetCoder
  - 2 = Reserved
  - 3 = Reserved
- **MP-11x:**
  - 0 = DSP firmware supports PCM/ADPCM, G.723, G.729A
  - 1 = Reserved
  - 2 = Reserved
  - 3 = Reserved

1.5 Control Protocols New Features

18. The digit collection mechanism (DigitMap) is now enhanced and support the new features described in H.248.16. AC18764

1.5.1 MGCP New Features

Not applicable.

1.5.2 MEGACO New Features

19. The H.248 correction regarding an empty signals descriptor is now supported. For backward compatibility, both formats (with or without empty brackets) will be

accepted. AC19925

20. Support for MEGACO over TCP was added. AC12665

21. Support for the advanced digits collection packages (H.248.16) was added. AC18764

1.6 Provisioning and Management New Features

22. The system can now be configured to periodically check for an updated software image (CMP) or configuration (ini) on a remote HTTP server. When an update is detected, the new file is loaded to the board automatically. This mechanism can be used even for CPE devices that are installed behind NAT and firewalls. Refer to the parameters IniFileURL and CmpFileURL. AC19175

23. New configuration parameter RESETNOW=1 will cause the AudioCodes device to reset after the new configuration file has been loaded via IniFileURL. AC22438

24. CommandShell - a Command Line Interface (CLI) is available for basic configuration and diagnostics purposes. The CommandShell can be accessed via the embedded Web server, Telnet, or RS-232 (when available). AC22103

25. The new Performance Monitoring infrastructure allows collecting and retrieving current and historical performance data. The information can be retrieved via SNMP, Web and the CLI. AC19453

26. Logging to Syslog of on-the-fly configuration changes (Web, SNMP) is now supported. To enable, set ENABLEPARAMETERSMONITORING to 1. AC18776

27. Up to now, upgrading the CMP image on the non-volatile memory (flash) sometimes caused the configuration files (e.g., call-progress tones, coefficients, private labeling logo) to be deleted. A new allocation mechanism protects existing files and allows the CMP to be burned independently. AC18255

28. The EMS can now configure and manage devices that are placed in private networks behind NAT and firewalls. AC17616

1.6.1 Embedded Web Server New Features

29. **MP-11x and MP-124 only** - Allow secure (encrypted) access to the device's embedded Web server, using the HTTPS protocol. AC17519

30. User can define up to 10 authorized client IP addresses that will be permitted to contact the board via Web or Telnet interface. The interface allows addition and deletion of authorized IP addresses and can be found at: Advanced Configuration -> Network Setting -> Web & Telnet Access List. AC22277

31. An improved and enhanced Web interface is now available to configure MGCP/MEGACO settings. Interface is available at the 'Protocol Management' link. AC19259

32. Graceful shutdown is now supported for MEGACO and MGCP via the embedded Web server. User can choose to reset device in a graceful shutdown manner that delays reset according to a predefined timer and/or termination of all open calls. AC18801, AC18799

33. The Web interface is protected by a system password. The maximum length of the administrator's name and password is now 19 characters. Note that if a long password is set and then the user goes back to version 4.4. or earlier, the user and password will be deleted (changed to blank). AC18779

34. **MP-11x and MP-124 only** - Up to this version we supported authentication of a single Web user/password, which was stored internally. We now enable an alternative method to authenticate the Web user, using an external RADIUS server. In this mode, the system does not store the user and password, but simply forwards them to the pre-configured RADIUS server for authentication. The parameter WebRadiusLogin enables or disables this feature. The internal Web password is not disabled by this feature; it can be used as a fallback mechanism in case the RADIUS server is down. Note that using a RADIUS server implies that HTTP passwords are sent over the network in the clear. Consider setting HTTPSONLY=1 if using this feature. This feature also applies to the Telnet interface. AC18777

35. Two levels of Web access are defined:
Administrator – Read/Write, Monitor – Read-Only.
Default user/password are: Administrator – Admin/Admin, Monitor – User/User.
Both levels can use strings up to 19 characters long. ResetWebPassword parameter defaults both levels. Each level can change its password on-line. Full compatibility with previous versions - former Administrator level password will be preserved and the new monitoring level password will start in its default values. AC18767

36. The Web access list controls which computers (specified by IP address) may connect to the device's Web interface. Specify WEBACCESSLIST=0.0.0.0 to enable access from any computer (default). AC18762

37. Web pages can be viewed in popup blocking Web browsers as long as javascript is enabled. If javascript is disabled in the browser then a correct message will be displayed. AC18281

1.6.2 SNMP New Features

38. DateAndTime varbind was added to all AC traps. AC19042

39. A new *ini* file parameter allows the use of host name (FQDN) for the configuration of one SNMP manager. The resolved IP will appear in the bottom row of the trap managers table. AC12803

1.7 Miscellaneous New Features

40. When the device is configured to use DHCP, option 60 in the DHCP Request will be set to the full product name. AC24499

1.8 Documentation Changes

Update of Documentation Number.

Reader's Notes

2 Known Constraints

Note: After loading and burning a *cmp* file to the boards flash memory, Users must reload all other downloadable data files (Call Progress Tones file, Voice Prompts file, etc.). This is due to the fact that in the *cmp* loading and burning process all the data files that were previously stored on flash are erased.

2.1 New-Hardware Constraints

1. **Mediant 1000** - Only specific combinations of FXS and FXO modules are currently supported. For details, contact AudioCodes.

2. **MP-11x** - After running the procedure for restoring the factory defaults, the board must be reset again by a hardware reset. If a software reset is issued, the board will return to the factory defaults again. `[VI26599]`

2.2 Analog Interface Constraints

3. MP-124 rev A and MP-124 rev B do NOT support the following:

   - Long haul
   - Caller ID generation
   - MWI generation

4. On FXO, polarity reversal detection while using 12 kHz coefficients file ("MP1xx12-1-12khz-fxo") is not functional. `[VI9644]`

2.3 Host API Constraints

5. The VoIPLib API is not supported on the MediaPack product line.

2.4 IP Networking Constraints

6. VLAN Pass-through mode is not supported. `[VI24434]`

7. In some cases having spanning tree enabled on the external Ethernet switch port connected to the board, causes the external switch to block any traffic coming in and out of the board for some time after the board is reset.
   This may cause the loss of important packets such as BootP and TFTP requests which in turn may cause the board to fail to start up.
   A possible workaround is to set the BootPRetries *ini* file parameter to 5, causing the board to issue 20 BootP requests for 60 seconds.
   A second workaround would be to disable the spanning tree on the port of the external switch which is connected to the board.

8. Configuring the board to auto-negotiate mode while the opposite port is set manually to full-duplex (either 10 Base-T or 100 Base-TX) is invalid. It is also invalid to set the board to one of the manual modes while the opposite port is configured differently.

The User is encouraged to always prefer full-duplex connections instead of half-duplex, and 100 Base-TX instead of 10 Base-T (due to the larger bandwidth).

2.5 Media Engines Constraints

9. The Duration field of the acEV_END_TONE_DETECTED event may be inaccurate when the detected Call Progress Tone is cadence based tone. The variation might be up to 1 period time longer than the actual tone duration. [AC25097]

10. The level field in the detection event of burst tone should be ignored (always -63 dBm). [AC21866]

11. Voice-prompt barge-in parameter cannot be used when concatenating voice prompt commands. [AC21553]

12. When RTP packets are received after a sudden large delay (200 to 300 msec) in the network, the drift correction could take about 5 seconds. In this period of time, voice, towards the TDM side is silent. [AC21538]

13. The MS-GSM coder will not work with previous software versions of AudioCodes products. [AC19717]

14. NTT caller ID type 2 constraints - The NTT standard describes the CallerID type 2 generation as a sequence of an incoming-call signal, "C" & "D" DTMFs and FSK modulated Data. Generation of the incoming call signal remains the responsibility of the application, but "C", "D" and the FSK are generated by the supplied service. The signal can be generated using the UDT signal generation mechanism. Prior to the detection of NTT CallerID type 2 there are 2 DTMF ("C" and "D") detections which remain unscreened.

15. Constraints for pre-recorded tones [AC10234]:

    - A Pre-recorded Tone cannot be played using the acPlayToneSequence command.

    - If a Pre-recorded Tone is played using the acUserDialTimingImmediately option in UserPlayTiming parameter of the acPlayTone command in the middle of a Voice Prompt playback, the Voice Prompt playback does not continue when the Pre-recorded Tone playback has ended.

16. RTP packing factor (M) is limited to 1 for the AMR and GSM-EFR coders. [VI17287]

17. When using the Transparent-With-Events Fax & Modem settings, the Channel MUST be reopened after each Fax/Modem session.

18. Closing a channel during a User Defined Tone detection can cause unexpected IBS events in the next IBS detection on this DSP channel. [VI15984]

19. When the IBS detector is pointed towards the network, Fax & Modem tones are not detected from the TDM side.

20. When working with M-factor=6, spurious packet loss may occur. It is recommended therefore to use M-factor < 6. [VI15341]

21. Setting the V.21 Transport Type to Bypass and Fax Transport Type to relay results in entering Fax Relay mode at the 2100 Hz signal. Only at the end of this signal, does the channel enter Bypass mode. [VI15755]

22. If PCM LoopBack is activated, there is no way to know if a new channel being opened is in LoopBack state or not. The parameter should be used for test-purposes only.

23. DTMF Relay mode is not operational with channels set to PCI transport.

24. RFC 2198 redundancy mode with RFC 2833 is not supported (that is, if a complete DTMF digit was lost, it is not reconstructed). The current RFC 2833 implementation does support redundancy for inter-digit information lost.

25. When using FaxTransportType = TransparentWithEvents, the Fax events parameters regarding the side of the fax call (answering or calling) and the number of pages are invalid.

26. The function acAddDestinationPoint() cannot connect between 2 TDM end points.

27. A channel should NOT be reopened during IBS detection. Such an action could cause the detector to send multiple events on same IBS input.

28. The resolution of the duration of digits On time and Off time when dialing to the network using RFC 2833 relay, is dependent on the basic frame size of the coder being used.

29. Incoming CNG T.38 packets do not switch the channel to T.38 mode.

30. When CNG detector is not Transparent, a CNG tone received from the TDM can not be detected using the Call Progress Tone detector.

31. When using a sample interval of 10 msec or 5 msec, the channels capacity might be reduced.

Note: MEGACO (H.248) and VoPLib/TPNCP are currently not supported on the MP product line.

2.6 MGCP Constraints

32. The 'mptime' value is not supported on remote SDP. `[VI25732]`

33. TimeOut symbol is not supported in Digit Range. I.E D/[0-9A-D#*T] cannot be used. User should remove the 'T' symbol. `[VI25585]`

34. RBK signal is not supported. It is recommended that Call Agents use "rt@connectionID" instead of "rbk(connectionID)" for ring-back over a connection. `[VI25606]`

35. MGCPVersion configuration parameter is not functional. `[VI25730]`

36. RG signal can't be generated immediately after an RS signal. `[25847]`

37. Long DTMF feature does not function correctly. `[VI16373]`

38. TTY signals do not function correctly. `[VI12747]`

2.7 Embedded Web Server Constraints

39. When using the Web upgrade wizard to upgrade from 4.4 to 4.6, reload the

coefficients file in the wizard and do not use the 'Use Existing File' option. [VI26505]

2.8 SNMP Constraints

40. Only one SNMP manager can access the boards/modules at one time.

41. Changing some MGCP default parameters (e.g., Voice volume) via SNMP is NOT supported, as it is possible to change them dynamically through MGCP commands on a call-by-call basis.

42. Configuration alarm does not clear. [VI15603]

43. The following RTP MIB objects are not supported:
rtpRcvrSRCSSRC
rtpRcvrSSRC
rtpSenderSSRC
rtpRcvrLostPackets
rtpRcvrPackets
rtpSenderPackets
rtpRcvrOctets
rtpSenderOctets [VI13465]

2.9 Miscellaneous Constraints

44. Flash-burning control for specific files (BurnCASFile, BurnCallProgressToneFile, BurnVXMLFile, BurnVoicePromptsFile) is no longer supported. Everything is now controlled by the new parameter SaveConfiguration.

3 Previous Revision History

3.1 Hardware Supported in Release 4.4

- This version supports the following MediaPack hardware platforms (no change from previous release):
  - MediaPack MP-124/FXS, 24 analog FXS interfaces
  - MediaPack MP-108/FXS, 8 analog FXS interfaces
  - MediaPack MP-108/FXO, 8 analog FXO interfaces.
  - MediaPack MP-104/FXS, 4 analog FXS interfaces
  - MediaPack MP-104/FXO. 4 analog FXO interfaces.
  - MediaPack MP-102/FXS, 2 analog FXS interfaces

3.2 Analog Interface New Features

1. Support was added for detection and generation of type-1 DTMF-based Caller ID (Indian, Danish and Swedish). [AC11679]
2. The FXO gateway can now detect unconnected analog ports. These ports are marked using a color indication on the Web channel status page. [AC12538]
3. MP-1xx FXO can now detect a voltage-based Message Waiting Indication (MWI). [AC12603]
4. Support for BT Caller ID - enables calling line identity presentation (CLIP) at the receiving side. The MP-1xx FXS generates BT CallerID type one (in On-Hook state). [AC13182]
5. The user can now configure the duration of the current disconnect signal using the new parameter CurrentDisconnectDuration (default = 900 msec, range = 200 to 1500 msec). [AC14141]
6. A new parameter AnalogCallerIDTimingMode enables the user to control the timing of the Caller ID signal within the Ring signal. When set to 0 (default), the Caller ID is generated between the first two rings. When set to 1, the gateway tries to find an optimized timing according to the selected Caller ID type. [AC14266]
7. Support was added for modem-based NTT Direct Inward Dialing was added. The DID signal can be sent alone or combined with a NTT Caller ID signal. [AC14414]
8. An external utility – *CPTWizard* simplifies the MP configuration task by automatically detecting the local set of Call-Progress Tone generated by the switch / PBX. The utility creates a CPT configuration file. [AC]

3.3 IP Networking Related New Features

9. DHCP client improvements: The DHCP client now supports limited IP leasing time and

performs lease renewal. In addition, the time server and SIP DHCP options are now supported. [AC10257]

10. For diagnostic purposes, error messages indicating invalid received network packets (e.g. RTP packet with invalid payload type) now contain the source IP and port of the invalid packet. [AC12145]

11. Operation in a multiple routers network was improved - the gateway now learns the network topology by responding to ICMP redirections and caching them as routing rules (with expiration time). [AC12856]

3.4 VoIP Engine New Features

3.4.1 RTP/RTCP New Features:

12. The RTP connection re-establishment event (acEV_RTP_CONNECTION_REASTABLISHED) was modified to RTP connection established event (acEV_CONNECTION_ESTABLISHED) which can be controlled by the parameter ConnectionEstablishementNotificationMode if to be sent upon any new RTP connection establishment or only upon connection re-establishment due to broken connection time out. [AC3609]

13. The dependency between the RTP decoder and encoder frame sizes has been removed. The RTP decoder can now receive packet frame sizes that are different than the frame size configured for the encoder (e.g. the board can be configured to transmit 20-msec frames and receive 10-msec frames). [AC4819]

14. The user can configure the channel to send RTCP BYE packet upon channel closing or RTP/RTCP deactivation. On internal Control Protocols, the BYE packet is sent only at the end of a call. [AC12491]

15. Support for reception of RTP packet with non-zero values at the Extension bit and the CSRC count. [V12233]

3.4.2 Modem/Fax New Features:

16. A Fax Relay session success or failure indication field (FaxSessionResult) was added to the the acEV_END_FAX event structure - TFaxEndReport. [AC7273]

17. Fax & Modem Bypass streams handling was improved. User should be able to work with this feature with no degradation in the channel capacity. [AC11746]

18. T.38 Redundancy Enhancement: The redundancy of the low speed data is now determined according to the enhanced redundancy parameter. [AC12094]

19. The Fax/Modem Bypass mechanism was modified to better handle automatic remote switchover to G711 and also better handling of V.34 fax [AC13489]

20. The T.38 fax relay mechanism now supports the No Signal Transmission indication when relevant. [AC14137]

21. Cisco™ NSE mode is now supported for fax pass-through, in addition to the existing support for modem. [AC14145]

3.4.3 In-Band Signaling New Features:

22. Support for pre-recorded call-progress tones: Using the DConvert utility, the user can create a file that contains pre-recorded tones. Each tone is assigned with a tone type. After downloading to the board, the pre-recorded tones are played as regular Call Progress tones according to the tone types. No detection is supported for these tones. [AC10234]

23. The user can now configure the default duration of Call Progress, User Defined and Pre-Recorded Tones in the tones file. [AC11743]

24. In addition to Call Progress Tones, the user can configure up to 16 User Defined Tones for general-purpose continuous single or dual frequency tones. UDT can be used both for generation and for detection. The UDT detector has the advantages of shorter detection time (up to 100 msec) and larger bandwidth (350 to 3940 Hz). There is a common API (for CPT, UDT and Pre-recorded tones) for playing a tone by its Type. [AC12196]

25. A new Tone Type value (according to enum acTCallProgressToneType) is available to detect a TTY 1400 Hz tone via the User Defined or Call Progress Tones configuration. [AC12852]

26. Support for the NTT Direct Inward Dialing (DID) feature. [AC14193]

27. Support for DTMF based Caller ID was added. The supported standards are: Indian, Danish and DTMF based ETSI (Annex C of ETS 300 659-1). The desired type is selected using the CallerIDType parameter. [AC11503]

3.4.4 Miscellaneous Voice Engines New Features:

Note: Installation and use of vocoders is subject to obtaining the appropriate license in advance of use, and to royalty payments.

28. Support was added for Silence Compression for GSM & GSM EFR coders [AC15771].

29. The G.729 internal processing mechanism was enhanced to achieve better performance results on high load situations.

30. The DSPVersionTemplateNumber *ini* file parameter selects the DSP firmware and hence the supported coder group. The following list of templates specifies the different values for DSPVersionTemplateNumber and their respective supported coder list:

    - 0 = DSP firmware supports PCM/ADPCM, G.723, G.729A.
    - 1 = DSP firmware supports PCM/ADPCM (this Template provides backward-compatibility).
    - 2* = DSP firmware supports PCM/ADPCM, G.723, G.729A, (default template is 2)
    - 3* = DSP firmware supports PCM/ADPCM, (this Template provides backward-compatibility).

(* These templates include additional media processing features: Answer Detector and longer Echo Canceler: 40 msec.)

3.5 MGCP New Features

31. Support for Lockstep mode in Quarantine Handling procedures according to PacketCable TGCP specifications [AC11331]

32. Support for MGCP loopback mode: packets coming from the network are looped back to the network. In this mode the gateway acts as an RTP reflector [AC11335]

33. Support for generation of signals to the network side. [AC11513]

34. The media start event occurs on a connection when the first valid RTP media packet is received on the connection. [AC11838]

35. Adding long duration (ld) event. This event is triggered when a call exceeds a specific period of time. Long duration event time defaults to 10 minutes, but can be set by the *ini* file parameter (in seconds): LongDurationEventTime. [AC12455]

36. Support for playing of announcements to the network side using the MGCP Ann package. For this mode, user should set the parameter PlayAnnouncementToNetworkSide to 1. [AC12724]

37. Signal can be generated towards the network side by applying them on an active connection. [AC10043]

38. MGCP can now use distinctive ringing signals that are defined using the 'Call Progress Tone' configuration file. [AC15120]

39. The MGCP notified entity field (described using N:) can now handle domain names as well as IP addresses. [GA-AC17826]

40. Added *ini* file parameter UseBracketsWithDigitString. When set to 1, dialed string is reported with brackets. e.g O: [1234#]. [GA-AC17791]

3.6 Embedded Web Server New Features

3.6.1 Web Server Features

41. A new web wizard guides the user through the process of software upgrade – selection of files and uploading into the gateway. The wizard also enables the user to upgrade the software while maintaining the existing configuration. [AC13101]

42. Adding the capability to provision the table of authorized SNMP managers. [AC11173]

43. Allow private labeling of the explorer title when a graphical logo is used. [AC13522]

44. Add an alert pop-up to verify if user wants to burn changes in reset. [AC13549]

45. 'Web Password' and 'User Name' parameters can be changed on the fly, without the need for a reset. [AC14352]

46. The gateway web interface appearance was updated, reflecting AudioCodes coloring scheme, while leaving functionality intact. [AC15220]

47. Users have the option to configure the maximum and minimum detection periods of a flash hook. The configuration is made via the 'Channel Settings' Web page. [GA-AC18428]

3.6.2 Web Server Interoperability

The HTTP connection to AudioCodes' boards was tested using the following browsers:

48. Microsoft™ Internet Explorer™ – Ver 5.0 or newer

49. Netscape™ Navigator™ – Ver 7.0 or newer (with some limitations).

3.7 SNMP New Features

50. In addition to acBoard MIB, a new set of MIBs for configuration and status is introduced. The new MIBs are divided by functionality (Media, Analog, Control, System). [AC15251]

Note: Minor changes in the newly introduced MIBs may take place between 4.4 Beta and 4.4 Releases.

51. New SNMP MIB for collection and monitoring system performance. [AC12874]

52. Introduction of carrier grade alarm system with the following characteristics:
1) allows an EM to determine which alarms are currently active (active alarm table)
2) allows an EM to detect lost alarm raise and clear traps
3) allows an EM to recover lost raise and clear traps (alarm history table) [AC13009]

53. Support for advanced SNMP configuration according to the EMANATE MIB. [AC13936]

54. Enhance SNMP trap handling of Ethernet links disconnection. Added support for different alarms severities based on Ethernet link redundancy scheme. [AC11505]

3.8 Miscellaneous New Features

55. NTP support: The time-of-day can now be obtained from a standard SNTP server. New configuration parameters: NTPServerIP, NTPServerUTCOffset and NTPUpdateInterval. [AC13053]

56. When NTP is enabled, a timestamp string [hour:minutes:seconds] is added to all Syslog messages. [AC15941]

57. Support for configuration of NTP via DHCP options #42 (NTP server IP address) and #2 (UTC time offset in seconds). If the DHCP server provides these options, the device obtains time-of-day information from the specified server. [GA-AC17997]

58. It is now possible to manually restore the gateway configuration to its factory settings by following a special reset procedure. [AC14749]

59. The user can now configure the network (and other) parameters using a simple command-line interface available via the RS-232 interface. [AC13804]

60. Support was added for uploading and downloading encrypted *ini* files instead of clear text files. Files are encrypted decrypted using the Convert utility. [AC14955]

61. The mechanism for burning configuration files in the non-volatile memory has been improved. The new mechanism enables the user to maintain his configuration when upgrading the software version. User should note the following changes:

- Saving in non-volatile memory of the entire configuration (parameters and files) is now controlled by a single parameter – SaveConfiguration (default = 1).

- File-specific parameters (BurnCASFile, BurnCallProgressToneFile, BurnVXMLFile, BurnVoicePromptsFile) are no longer supported.

62. The Pre-Recorded Tones file can now be burned to the non-volatile memory. `[GA-AC18770]`

63. TFTP can now be used to download a new software version (CMP) and configuration files, even if the BootP or DHCP servers cannot provide the IP address of the TFTP server and the file names. New configuration parameters: IniFileURL, CmpFileURL. `[GA-AC17376]`

64. Error message indicating invalid *ini* file configuration now contain the line number of the invalid parameter in the *ini* file. `[GA-AC14168]`

65. Released package updates:

- The structure of the released package has been modified. The structure now contains the following main folders:
  - **Auxiliary_Files** – contains sample files (e.g. *ini*, CPT, CAS) and MIB files.
  - **Firmware** – contains the downloadable firmware files (CMP and HEX files).
  - **Utilities** – contains all the utilities that are supplied with the package (e.g. DConvert).
  - **VoP_API_Library** – contains the VoPLib API library and related applications and examples.

- The DiagnosticUtility now supports TP-260 and TP-260/UN boards, in all hardware configurations.

- New Call Progress Files Inserted to the package. The Call Progress Tone files format has been changed to include new parameters (see In-Band Signaling new features).

3.8.1 Documentation Changes

66. Change of Documentation Number and Format

67. VoPLib API Reference Manual, Document #: LTRT-84002 which now includes:

- Events with descriptions (transferred from VoPLib User's Manual, Document #: LTRT-84402

3.8.2 Previous Releases

Details of previous releases can be found in the MediaPack Release Notes of Version 4.2, Document # LTRT-00616, published by AudioCodes on October-27-2003.

Reader's Notes


Original
printed on
recycled paper
and available on
CD or Web site


CERTIFIED QMS
SI
ISO 9001:
2000
THE STANDARDS INSTITUTION OF ISRAEL

AudioCodes™ CPE & Access Analog Gateways

MGCP, MEGACO & TPNCP

Media Pack MP-1xx & MP-11x

Mediant 1000

Release Notes 4.6

AudioCodes

www.audiocodes.com