



## **EASyCAP Encoder/Decoder Release History**

### **Version 21.02, 3/22/21**

- 1) Added support for StrataSync to provide a Management System for the EASyCAP Encoder/Decoders.
- 2) Upload configuration changes to the management system
- 3) Download configurations deployed from the management system
- 4) Upload status updates about active alerts and monitoring sources to the management system
- 5) Upload the EAS Alert Log and EAS Compliance Reports to the management system
- 6) Download licenses and firmware upgrades deployed from the management system
- 7) Version 21.02.03 Patch (6/10/21)
  - Fixed a problem writing the PPS and SPS elements to the MPEG-DASH manifest
- 8) Version 21.02.04 Patch (9/13/21)
  - Fixed a problem producing MPEG-DASH live audio segments for an EAN that includes more than 13 FIPS codes.
- 9) Version 21.02.05 Patch (9/17/21)
  - Fixed a problem with file permissions that prevented EAS message origination via SNMP
  - Roll the Plugin Manager debug log when the service is restarted
  - Fixed a problem that could cause a CAP HTTP Delivery failure when Spanish audio is enabled for CAP HTTP Delivery but not enabled for any audio output
  - Removed invalid error notifications about restarting the MyStateUsaFeed by ensuring keep-alive file was written within an acceptable timeframe.
- 10) Version 21.02.06 Patch (8/26/22)
  - Fixed a problem that can cause high CPU utilization and intermittent SNMP communications when the SNMP Operations OIDs are polled more frequently than once every 20 seconds.
- 11) Version 21.02.07 Patch (9/20/22)
  - Allow abort and cancellation messages to be sent to DNCS and SCTE-18 recipients when there is not an alert in progress.

### **Version 20.12.01, 2/4/21**

- 1) Upgrade the Linux operating system to Debian Version 10, including all updates and security patches that were available on or before 12/1/20.
- 2) Added the ability to duplicate a MPEG stream to a second address, port, or ethernet interface.
- 3) Added the ability to provide a continuous MPEG stream. Each MPEG output can be configured to stream continuously or only during an alert message.

## Version 19.10, 10/30/19

- 1) Hosted Email Server
  - Add support for a hosted Email server to eliminate the need for users to provide their own Email server.
- 2) CAP HTTP Delivery Protocol
  - Do not include a Spanish info block if the *Use Spanish* option is disabled.
  - Ensure that the EAN cancellation message identifier uses the same location codes as the EAN CAP message that it references.
- 3) MPEG DASH
  - Fixed a problem during a live audio message that could cause the last audio segment to be omitted.
  - Retain MPEG DASH media for 30 days.
- 4) MPEG Stream Output
  - Add support for RTP protocol.
  - Add support for two MPEG streams, providing the ability to stream SD and HD at the same time.
- 5) File Maintenance
  - Retain MPEG DASH media for 30 days.
  - Retain alert audio files for 90 days.
- 6) Logging
  - Add links to the audio files that were played during alert messages.
  - Ensure that the EAS header information is included in logs of messages that could not be decoded due to EAS protocol errors.
- 7) Licensing
  - Add license warning to warn users if a license is nearing its expiration.
- 8) Mediaroom
  - Add an option to make the ID element configurable.
- 9) Remote Receivers
  - Add an *EASyCAP Remote Receiver Feed* option to simplify the configuration of remote receivers.
- 10) SDI Video Output
  - When the SDI video output is configured to crawl the alert text and the *Show Event Text* option is enabled, automatically adjust the position of the Event text to avoid the crawl.
- 11) Web API
  - Add an option to use an HTTP interface for the Status and Operations Web API's.
- 12) Version 19.10.02 Patch (1/13/20)
  - Update the EASyCAP Atom Server to pass the Station ID and configured channel name through the Atom feed so that logs on the receiving EASyCAP show the Station ID and input channel name from the remote EASyCAP receiver.

## **Version 18.10, 10/24/18**

- 1) Changed the software versioning to use year.month.
- 2) Rebranded for Viavi Solutions.
- 3) Added an option for a text crawl on the SDI video output.
- 4) Added the Compliance Reporting feature, which analyzes incoming and outgoing alert messages for compliance with EAS Regulations and then Emails the reports to a list of configured recipients. Reports are automatically generated at the end of each week and at the end of each month
- 5) Modified the Email feature to make it compatible with Gmail SMTP servers.
- 6) Added Help buttons to all windows available from the Web Interface.
- 7) Added the option to configure which SSL protocols are accepted by the Web Interface.
- 8) Changed the validation of an EAN to reject the message if the origination time is more than 15 minutes in the future or if the message has expired.
- 9) Fixed a problem that caused Ethernet Interfaces 3 and 4 to be omitted from the configuration screens when an expansion card with one Ethernet interface is installed.
- 10) Limited the MPEG Stream Program Map ID value to 16-7936 to prevent configuring it for an invalid value.
- 11) Fixed a problem that caused duplicate logs to be shown when the Optional Log Information option "MPEG-DASH" was enabled.
- 12) Fixed a problem that caused the logs to show the configured Call Letters in the EAS Header text rather than the received Call Letters.
- 13) Fixed a problem with MPEG-DASH live audio when both the MPEG Stream and MPEG-DASH were configured.
- 14) Fixed a problem with the MPEG-DASH audio content when it was configured for AAC HEv2 audio.
- 15) Version 18.10.02 Patch (11/5/18)
  - Add support for high definition video (720p and 1080i) to the MPEG Stream output.
- 16) Version 18.10.03 Patch (11/12/18)
  - Add options to allow the Generic Character Generator and Alert Text message protocols to use a network or serial interface.
- 17) Version 18.10.04 Patch (11/20/18)
  - Fixed a problem that omitted the voice message recorded from the Telephone when originating EAS messages from the Telephone Interface.
- 18) Version 18.10.05 Patch (12/3/18)
  - Fixed a problem with scheduling the compliance monthly report when the next report is scheduled for a new year, causing the report to be Emailed repeatedly.
- 19) Version 18.10.06 Patch (1/17/19)
  - Fixed a problem that could cause the MPEG-DASH video duration to be too long when the audio duration was longer than the video.
  - Added an option to enable/disable Spanish info blocks for the CAP HTTP Delivery feature.
- 20) Version 18.10.08 Patch (8/13/19)

- Fixed a problem generating audio for CAP HTTP Delivery and DNCS/Evertz when only Spanish audio is configured, and the alert does not include Spanish audio.
- Fixed a problem generating audio for CAP HTTP Delivery and DNCS/Evertz when Spanish audio is not configured for any of the EASyCAP local audio interfaces (analog audio out, MPEG, DASH, or SDI), but Spanish audio is configured for a CAP HTTP Delivery or DNCS/Evertz recipient.

### **Version 3.04, 5/10/18**

- 1) Linux operating system updates and security patches (all updates as of 5/9/18).
- 2) Added the Blue Alert event code (BLU).
- 3) Added support for Spanish audio and text
  - Construct FCC Required EAS translation text in Spanish, and retrieve Spanish CAP text when present
  - Added an option to produce Spanish text-to-speech audio when Spanish audio is not present in the received message
  - Audio outputs can be configured to use English or Spanish audio
  - Video outputs can be configured to show English and/or Spanish text
  - Configure the language for audio and text sent to each message delivery recipient
- 4) HD/SD SDI Video output
  - Added support for an optional HD/SD SDI video output board
  - Video display modes can be set to 480i, 720p, and 1080i at 59.94 or 60 Hz
  - Video can be configured to show English and/or Spanish text
  - Eight (8) channels of embedded audio can be configured, and each channel can be configured to use English or Spanish audio
- 5) MPEG output stream enhancements
  - English and Spanish audio streams can be configured
  - Video can be configured to show English and/or Spanish text
  - Ensure that the MPEG stream has the same duration for both audio and video
  - Improved the timing and PCR accuracy
  - Stream at a constant bitrate (with some variation)
- 6) MPEG\_DASH enhancements
  - English and Spanish can be configured
  - Separate English and Spanish manifests and media are produced per configuration
  - Changed the MPEG-DASH manifest AudioChannelConfiguration element to include the correct value for mono audio
- 7) Added Lead-in and Lead-out messages
  - Added the ability to configure lead-in messages, which are presented immediately before an alert message
  - Added the ability to configure lead-out messages, which are presented immediately after an alert message
  - Audio, images, and text can be configured for each lead-in and lead-out message
  - A lead-in and lead-out message can be configured for each event type and severity

- 8) CAP HTTP Delivery includes English and Spanish information, including audio and DASH manifest resources (depending on the configuration)
- 9) Fixed a problem in the Web GUI that wouldn't save locations for the RWT unless Random RWT was enabled.
- 10) Fixed a problem with the audio sample rate from EASyIP Network Receivers.
- 11) Fixed a problem where an EAN was delivered to DNCS/Evertz recipients regardless of the recipients configured locations.
- 12) Change the allowable SSL ciphers if Compliance Assistant is licensed.
- 13) V3.04.03 Patch released on 6/15/18
  - Added a public announcement feature that allows operators to originate messages for a configurable duration. This feature is used to tune televisions and set-top boxes to a non-EAS details channel. The audio and video for the details channel is provided by an external source.
  - Modified the MPEG output stream to minimize UDP packet bursts to prevent packet losses at receivers with small buffer space.
  - Enable the MPEG Stream Null Packet Stuffing by default to prevent problems with low bitrate, audio only streams.
  - Fixed a problem with determining the correct duration for an EAN received from a CAP source that includes an audio file resource.

### **Version 3.03, 10/13/17**

- 1) Linux operating system updates and security patches (all updates as of 10/4/17).
- 2) Added monitoring and status information for temperatures and fans.
- 3) Changed the audio input signal detection to use the radio receiver's measured RSSI values for determining if a radio station's signal is good.
- 4) Updates to the MPEG-DASH feature
  - Write a temporary file when updating the DASH manifest and then copy it to the manifest file that's accessible to external clients in order to avoid racing issues with client requests.
  - Fixed a problem with MPEG-DASH live audio media, where the first audio segment included the correct PID but other segments included a different PID.
- 5) Added user configuration for processing EAS EOM's, including the amount of time wait for an EOM and the action to take if a timeout occurs.
- 6) Fixed a problem that occurred when configured to show the Station ID in the alert display text, where the received Station ID was shown rather than the Station ID configured for the EASyCAP.
- 7) Added the ability to backup and restore all configuration settings for the EASyCAP except for machine specific information such as licenses, serial number, and user accounts. Network settings, NTP settings, and Certificate files used by the EASyCAP software can be optionally backed up and restored.
- 8) The random weekly test feature was updated to allow operators to configure two time slots per day as the allowable times that weekly tests can be automatically generated.
- 9) Updates to the Alert Log
  - Added transmit times for alert message deliveries
  - Added MPEG-DASH information

- Added an HTTP/HTTPS endpoint to retrieve the alert log as a JSON payload, and an option to specify a maximum number of log records that are returned.
  - Added an option to log all failures to deliver alert messages to CAP HTTP Delivery recipients
- 10) Updates to SNMP and SYSLOG
- Added temperature status and warnings
  - Added fan status and warnings
  - Added MPEG-DASH manifest and media errors
  - Added audio and video media errors
- 11) Added debug, web access, and web error logs for troubleshooting purposes
- SYSLOG is used to maintain the logs, and allows them to be sent to remote logging servers
  - A separate MPEG-DASH access log is maintained for clients attempting to retrieve MPEG-DASH manifests and media
  - The logs can be viewed from the Web Interfaces Alert/System Log screen
- 12) Added a user configurable option to view system status and configuration without requiring the operator to login.
- 13) 3.03.01 patch was released on 10/30/17
- All Linux operating system updates and security patches as of 10/30/17
  - Added support for Analog Devices AD1989 HDA CODEC
  - Added support for each process to handle upgrading its own configuration when an older configuration file is detected
- 14) 3.03.03 patch was released on 12/14/17
- All Linux operating system updates and security patches as of 12/7/17
  - Add option to use AC-3 audio in the MPEG stream
  - Fixed problem that could sometimes increase the bandwidth of the MPEG stream

### **Version 3.01, 6/26/17**

- 1) Updates to allow software to run on 64-bit Debian Jessie
- 2) Updates to support EASyCAP Series 30 hardware
- 3) Improved audio quality and processing
- 4) Removed EASyPLUS/EASyCAST support
- 5) Added the following SNMP and syslog alarms
  - Certificate warning
  - NTP warnings and errors
- 6) IPAWS Atom feed
  - Add the ability to immediately check for CAP messages when an EAS message is received from an audio input.
  - Added certificate configuration to allow users to easily configure certificates used for CAP servers and digital signatures.
  - Added an option to ignore Required Weekly Tests from IPAWS Atom feeds.
  - Add option to use the EASText element for the alert text.
- 7) Added configuration to allow the user to configure each individual general purpose input and output, including the outputs on IP switches.

- 8) Added options to quickly view logs for today, this week, last week, this month, and last month.
- 9) Changed the EAS message's sender element to the Station ID rather than the Originator code in order to be able to track alerts back to the original source when using the EASyCAP Atom feed.
- 10) Changes to the MPEG-DASH manifest
  - Changed manifest xmlns to "urn:mpeg:dash:schema:mpd:2015"
  - Added segmentAlignment to AdaptationSet
  - Changed AudioChannelConfiguration schemeIdUri to "urn:mpeg:dash:outputChannelPositionList:2012"
  - Changed the Audio AdaptationSet mimeType back to "video/mp2t"
  - Added <SupplementalProperty schemeIdUri="urn:scte:dash:powered-by" value="Trilithic\_EASyCAP-3.01.1">

### **Version 2.17, 4/4/16**

- 1) The following changes were made to the video outputs (analog and MPEG video):
  - Added an option to show page numbers at the top or bottom of the video.
  - Added an option to configure the default background color of the video.
- 2) The following changes were made to the DASH feature:
  - Added an option to disable the video text outline.
  - Added an option to configure the manifest name.
  - Changed the media filenames to be unique when multiple languages are used.
  - Allow the segment duration to be configured for 2 to 10 seconds.
  - Allow the I-Frame interval to be configured for once every 1 to 10 seconds.
- 3) The following changes were made to the CAP HTTP Delivery feature:
  - Added the following ability to use client certificates.
  - Added options to retry failed deliveries for a configurable amount of time.
- 4) The following changes were made to the Log Web API:
  - Added options to select the last full week and last full month.
  - Added an option to include CAP and EAS source status information in the Alert log.
- 5) Added two protocols to the SW-IP Delivery feature, allowing operators to use iPIO-8 and IP2CC IP based switches.
- 6) A problem was fixed that required the Automatic RWT Generator feature to be enabled in order to generate a weekly test from a general purpose input.
- 7) A problem was fixed on the Web GUI screen used to configure sub-divisions and polygons. The Coverage Area screen could be opened more than once, which caused the Web GUI to be disabled after closing the Coverage Area screen.
- 8) Added a method to the Web Services configuration screen to generate a self-signed SHA-2 certificate for the Web Server.
- 9) Show the EASyCAP hostname in the About panel of the Web GUI to allow operators to easily see which system they are logged into.
- 11) 2.17.8 patch to change the DASH manifest per updated DASH CIF specifications
  - Added MPEG DASH CIF Manifest license

- Ensure the mediaPresentationDuration element contains the duration of the longest adaptation
  - Add AdaptationSet@maxFrameRate per section 6.3.1 of the CIF specification
  - Add AdaptationSet@codecs per section 6.3.2 of the CIF specification
  - Add AdaptationSet@sar per section 6.3-6e of SCTE 214-1
  - Include ContentComponent only if the adaptation set is multiplexed, per section 6.4-1 of SCTE 214-1
  - Add SegmentTemplate@presentationTimeOffset if the presentation time of the first segment is nonzero, per section 6.3.1 of the CIF specification
  - Add separate SegmentTimeline <S> elements for segments with different durations
  - Use mimeType audio/mp2t for adaptation sets that only contain audio
- 12) 2.17.7 patch on 1/31/17 fixed a problem with MPEG-DASH that could occur when the duration of the last audio segment is close to the segment duration, which could cause an additional audio segment to be written with no data. The patch adds 6 lines of code to the end of the segmentation routine to detect and remove invalid TS files.
- 13) 2.17.6 patch on 8/15/16
- Added the new EAS Event Codes requested by the National Weather Service.
  - Fixed a problem with originating a weekly test from the front panel LCD.
  - Fixed a problem that can occur in the HTTP CAP Delivery process when a connection error is encountered.
  - Changed the MPEG-DASH process so it would not require a reboot after enabling DASH from the Web GUI.
  - Changed the Web GUI and MPEG-DASH process to prevent the use of unsupported audio sample rates.

### **Version 2.16, 2/1/16**

- 1) Added the ability to process any event as a live message.
- 2) Added MPEG-DASH to stream alert audio and video over HTTP.
- 3) Added AAC audio format to the MPEG Stream.
- 4) Added a setup screen to upload background images for the analog and MPEG video. A background image can be configured for each event type and each severity.
- 5) Added options to the DNCS/Evertz message deliveries to treat any event as a force-tune. Each event can be setup to use a force-tune.
- 6) Added the ability to configure a polygon for each configured FIPS code. The configured polygons are not used to filter incoming alerts. They can be optionally included in CAP messages delivered by the CAP HTTP Delivery feature.
- 7) Added the following options to the CAP HTTP Delivery feature
  - Include DASH manifest resource
  - Omit audio resource when a DASH resource is present
  - Include configured polygons for messages that are locally generated
  - Include configured polygons for messages that are receive via CAP or EAS sources
- 2) Corrected a problem that could cause SCTE-18 and Minerva messages to end early for an EAN when the Force-Tune Timing Adjustments option was enabled.



- 3) Corrected a problem with the MPEG audio stream by ensuring that the PCR interval is less than 100ms and improving the transmission time of PES packets.
- 4) Added user configuration to control how long a Web Services GUI session can remain active.
- 5) Added options to the Log Web API to get logs for the last full week or the last full month.
- 6) Added FIPS code 046102 – Oglala Lakota, SD

### **Version 2.15, 4/27/15**

- 1) Linux operating system updates and security patches. Includes all patches and updates available from Debian as of 4/15/15.
- 2) Implemented recommendations from the CSRIC WG3 EAS Security Best Practices
  - Prompt users to change their password if a factory default password is used.
  - Added configuration and support for user account aging. If account aging is enabled, users are prompted to change passwords after a configured time period.
  - Added configuration and support for password complexity. Users are required to comply with the configured complexity criteria when changing their password.
  - Configuration will default to the most secure, least privileged state, when possible.
- 3) Changes to the CAP HTTP Delivery feature
  - Added an option to remove state codes from weekly tests.
  - Added an option to prevent delivery of weekly tests that are received from a CAP source.
  - Strip preceding and trailing spaces from the configured Address and Service Path.
- 4) Changes to the Web Services GUI
  - Added the ability to edit the hosts file through the GUI.
  - Allow an Abort to be issued from the Status Screen when an alert is not in progress.
  - Added a keep-alive to allow the process manager to monitor the health of Web Services and correct problems that are detected.
  - Corrected a problem which could cause an exception when freeing resources.
  - Corrected a problem that prevented files from being uploaded via HTTPS from Chrome and Internet Explorer browsers.
  - Corrected a problem that could prevent the Web API from being configured if the EASyCAP is only licensed for Compliance Assistant.
- 5) Changes to the Apache Web Server
  - Do not allow the use of medium or weak cipher algorithms.
  - Do not allow SSLv2 or SSLv3 protocols to be negotiated.
  - Do not allow browse-able directories.
- 6) Use stronger cipher encryption when generating SSH certificates.
- 7) Improved the randomness of the Random Weekly Test feature.
- 8) Optimize the character generator to minimize rendering time for analog and MPEG video outputs.
- 9) Added streaming EAN audio for the Atom CAP Server. When EAN messages are enabled for the CAP server, the audio stream can also be previewed by operators from a standard Web browser.

- 10) Corrected the character escaping in the XML for the CAP Atom Server.
- 11) Corrected a problem that prevented System Logs from being viewed if the Log Time Zone was set to anything other than Default (time zone of the EASyCAP).
- 12) Corrected a problem that prevented the text-only option from being used when originating a custom message.
- 13) Truncate the voice portion of non-EAN audio streams to two minutes.
- 14) Corrected a problem that could occur if an EAN is received from a CAP source with an audio file resource, resulting in an invalid audio duration.
- 15) Corrected a problem with the “Short RWT Text” option which could cause the description and instruction elements of a CAP message to be omitted from the text.

### **Version 2.14, 10/13/14**

- 1) Linux operating system updates and security patches, including a patch for the BASH Shellshock vulnerability.
- 2) Added support for Compliance Assistant software.
- 3) Added the National Location code (000000) as a user configurable option.
- 4) Changed the EAN input filter to reject EAN messages that do not include any configured FIPS codes, allowing for geo-targeted EAN's.
  - Users can override this filter by configuring an EAN to accept any location.
  - User configuration is provided to activate all equipment during an EAN.
- 5) Added an Atom feed to monitor message activations and EAS/CAP sources.
- 6) Added a Web service to monitor the status of message activations, EAS sources, and CAP sources.
- 7) Added a Web service to perform EAS operations, including Confirm a pending message, Cancel a pending message, and Abort a message in progress.
- 8) Added a screen to the Web GUI to configure the Web API/Services.
- 9) Added an audio link variable to SNMP, allowing audio files to be previewed.
- 10) Added an audio link to Emails to allow users to preview the alert audio. Links to confirm and cancel pending messages were also added.
- 11) Added configuration to disable secure connections (TLS) to the Email server.
- 12) Changed the Email configuration to allow a server to be configured without login information.
- 13) Added configuration to enable/disable weekly tests from being sent to Serial Character Generators.
- 14) Added settings to the Configuration/Web Configuration screen to configure the EASyCAP address used for audio, confirm, and cancel links.
- 15) Added filters for the System log to view EAS/CAP source logs, user activity logs, and error logs.
- 16) Added support for evaluation licenses.
- 17) Updated Location (FIPS) codes
  - Added the following Alaskan locations: Hoonah-Angoon (FIPS 02105), Petersburg (FIPS 02195), Prince of Wales-Hyder (FIPS 02198), Skagway (FIPS 02230), and Wrangell (FIPS 02275).

- Deleted the following Alaskan locations: Prince of Wales-OuterKetchikan (FIPS 02201), Skagway-Hoonah-Angoon (FIPS 02232), Wrangell-Petersburg (FIPS 02280).
- Added the following Louisiana locations: Claiborne (FIPS 22027).
- Deleted the following Louisiana locations: Wilkin (FIPS 22167).

### **Version 2.10, 6/2/14**

- 1) Linux operating system updates and security patches
- 2) Added an MPEG output feature which will stream MPEG-2 and MPEG-4 directly from one of the EASyCAP Encoder/Decoder's Ethernet ports.
- 3) Added the ability to receive EAS messages from EASyIP Network Receiver's.
- 4) Added an Atom Server that can be used to deliver EAS, CAP, and locally generated messages to downstream Encoder/Decoder's.
- 5) Added the following user configurable options to the CAP HTTP Delivery feature:
  - Use Basic Authentication
  - <source> element contains the EASyCAP (and EASyPLUS) IP address
  - <sender> element contains the EASyCAP (and EASyPLUS) IP address
- 6) Added a Campus Alert feed for receiving CAP messages from Omnilert and Rave Mobile Safety servers (or servers that provide a similar HTTP interface).
- 7) Added configurable filters to prevent multiple weekly and monthly tests from being transmitted.
- 8) Added audio buffering for the EAN to ensure that the entire EAN audio message is retransmitted.
- 9) Added a configurable option to use Basic Authentication for IPAWS Atom Feeds.
- 10) Added configurable padding to the beginning and ending of message playback to help timing and synchronization for some applications.
- 11) Added configurable time adjustments for general purpose outputs and IP Switches for synchronization with systems that require time to encoding MPEG streams and/or deliver downstream signals.
- 12) Added configurable time adjustments for force-tune technologies such as SCTE-18 and Middleware applications. The time adjustments can improve synchronization with systems that require time to encoding MPEG streams and/or deliver downstream force-tune signals.
- 13) Added configuration to periodically deactivate IP Switches (SW-IP) when the EASyCAP is not playing messages. This feature was added to ensure that the SW-IP switches are deactivated after an alert message, even in systems where occasional Network issues can prevent the delivery of commands.
- 14) Added an option for DNCS/Evertz servers to include only configured FIPS codes, and to expand state codes to configured county codes. This can be helpful when more than one Encoder/Decoder delivers messages to the same DNCS server.
- 15) Added an option to prevent delivery of EAN messages to DNCS/Evertz servers.
- 16) Added an option for Broadcast stations in manual mode, allowing an event to be configured to wait for user confirmation until the event expires. This option will never automatically send the event.

- 17) Corrected a problem in which the SNMP playback status was not reset to “Idle” if an alert was cancelled while waiting for confirmation.
- 18) Corrected a problem that caused the times displayed in the Web UI’s status screen and system log to be one hour off when in daylight savings.

### **Version 2.00, 1/14/14**

- 1) Linux operating system updates and security patches
- 2) Added a lockout to the web interface, locking access to the web server after a configurable number of login failures
- 3) Improved security of user accounts and configuration files containing passwords
- 4) Improved security for licenses
- 5) Changed the Machine Key used to generate licenses
- 6) Added the ability for the users to load their own certificates for the web server
- 7) Added the ability for users to generate new SSH certificates
- 8) Added the ability to configure up to four NTP servers
- 9) Added the ability to configure 2 proxy servers that are used as failover servers when communications through one of the proxies fails a configurable number of times
- 10) Added the ability to enable or disable the video output
- 11) Fixed a problem that caused incorrect times to be shown in logs that span across daylight savings
- 12) Fixed a problem that could cause multiple random weekly tests to be issued during a week that spans across daylight savings
- 13) Added SNMP status traps for system notifications and errors, logins, and web interface lockout
- 14) Prevent multiple logs of the same duplicate message from the same CAP source
- 15) Rearranged the Web Interface GUI layout
- 16) Improved the process used for upgrading firmware
- 17) Consolidated plugins, improved internal traffic flow, and tightened integration of features added over time

### **Version 1.8, 7/23/13**

- 1) Added SNMP
- 2) Added syslog
- 3) Added Email
- 4) Added a Web API to get alert logs
- 5) Updated ComLabs EMnet client to version 10.0.0.74
- 6) Added CAP Feed status information
- 7) Added logs to indicate when a connection to a CAP source is lost and reestablished
- 8) Added the ability to translate to a user specified time zone when downloading logs
- 9) Improved process for upgrading the EASyCAP firmware
- 10) Improved audio recording quality for units with a Realtek audio CODEC.
- 11) Fixed a problem that could prevent EAS duplicates from being detected when extraneous data is present at the end of the EAS header text.
- 12) Fixed a problem that could allow expired EAS messages to be transmitted.

- 13) Added the ability to disable EAS audio inputs
- 14) Added configuration to set the audio file volume for CAP HTTP delivery
- 15) Added configuration to set the audio file volume for DNCS/Evertz delivery

#### **Version 1.7, 6/3/13**

- 1) Added Rave Mobile Safety CAP Feed

#### **Version 1.6, 12/18/12**

- 1) Added support for ComLabs EMnet
- 2) Added support for MyStateUSA
- 3) Added custom messaging
- 4) Added support for the optional Telephone interface
- 5) Added the ability to remotely sample the audio inputs
- 6) Fixed a problem with the random RWT scheduling
- 7) Added an option for EAN alert text to display "Entire USA" for the location
- 8) Modified the IPAWS Atom feed to make it work with NY-ALERT
- 9) Improved the logging and added user options to control what information is included in the log

#### **Version 1.5, 9/28/12**

- 1) Added CAP & Audio HTTP Delivery feature to deliver EAS and CAP messages to external HTTP(S) Servers
- 2) Added EASyPLUS Feed to retrieve EAS messages from EASyPLUS and EASyCAST Encoder/Decoders
- 3) Added support for the AES-EBU Digital Audio board

#### **Version 1.3, 8/9/12**

- 1) Added a method to backup and restore the configuration
- 2) Added the ability to view and download logs for a specific time period
- 3) Improved the log screen when viewing or downloading large log files
- 4) Allow users with testing permissions access to screens that include test functions
- 5) Added a monitor and additional timeouts to the IPAWS Atom Feed plugin
- 6) Fixed a problem that occurs when no locations are configured for the Random RWT
- 7) Added a check and warning when saving invalid configuration for the Random RWT

#### **Version 1.2, 7/6/12**

- 1) Audio enhancements for the Realtek ALC889 CODEC
- 2) Added slider controls to the audio volume configuration screen

#### **Version 1.1, 6/28/12**

- 1) Added the ability to use a Proxy Server for the IPAWS CAP Atom feeds
- 2) Provide user configuration to enable or disable the delivery of EAS and locally generated messages to EASyPLUS recipients
- 3) Automatically enable SSH and Web Interface access when configuring network settings from the front panel menu
- 4) Added support for up to four Ethernet ports. Two additional Ethernet ports can be added by installing an optional Communications Expansion Board
- 5) Added additional checks to the Web Interface's Network Configuration to prevent common network configuration errors
- 6) Added an option to provide a constant video output by leaving the video switch activated at all times
- 7) Added support to stream EAN audio to EASyPLUS recipients
- 8) Updated the Web Interface to show descriptive names in the selection box for message delivery recipients and CAP feeds
- 9) Fixed a problem with the Locations configuration screen that occurred when only one location was added
- 10) Added an option to use a short text message for Required Weekly Tests
- 11) Improved the text-to-speech translation by adding filters and making adjustments to the alert text

#### **Version 1.0, 5/2/12**

- 1) Initial Release
- 2) EAS monitoring and decoding on 6 audio input channels
- 3) EAS Encoding
- 4) Support TCP CAP feeds
- 5) Support IPAWS CAP Atom feeds
- 6) Support up to 6 internal radio receivers
- 7) NTSC character generator to display the alert message as a full page replacement
- 8) Touch-screen LCD used for basic configuration and EAS message status
- 9) HTTP/HTTPS web service for management and monitoring
- 10) Support message delivery to EASyPLUS Encoder/Decoders
- 11) DNCS (DVS-168) protocol
- 12) SCTE-18 protocol
- 13) IP based general purpose outputs (SW-IP devices)
- 14) Minerva protocol
- 15) DCM protocol
- 16) Serial protocols (Alert text, Chyron CG, Generic CG, Minerva, and Star-8 CG)