



Customer Release Notes

Version 8.2

Build 1.0

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Rev: 1.0

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1. Introduction

1.1 Purpose

The purpose of this document is communicating the major new features and changes in this release. It also documents known problems.

1.2 References

The following path links to relevant user guides:

<http://mip.volicon.com/>

1.3 Definitions and Acronyms

The following defines acronyms or terms commonly used in this document.

Services	A/V programs along with associated metadata
ARL	As Run Log
STB	Set Top Box
TS	Transport Stream
MH	Media Hub- internal Observer component
CC	Closed Captions
OTT	Over the Top
ACE	Automated Content Export
ABR	Adaptive Bitrate

2. General

Volicon version 8.2.1 is a major release with many new features and fixes, including:

- Email equipment alerts when probes are not responsive
- Automated ARL Export
- Share to Box.com
- Schedule delayed Facebook posts
- Option to disable thumbnail sharing for specific destinations
- OKTA SSO integration
- Uplynk Volislicer Control in Deliver Application

- Rapid ABR Publishing
- Database and UI changes for Multi-tenancy
- Share animated or still GIF's
- Advanced Content Export using XDS or DPI in addition to ARL
- Penalty Box (Show Faults only) in Volicon Multiviewer
- SCC sidecar closed caption export support
- New option for QoE analysis of perceived video quality (MOS)
- Adjust privacy of shared clips to YouTube

See “New Features in v8.2 QB1” section for more information.

2.1 Hardware consideration

- 8.2 supports only 64-bit systems (Central Server and Probe)
- The CEM and Thumbnails services can be installed directly on the CS if server has at least 8 GB RAM and less than 50% CPU utilization.
- In case of a standalone server (CS + Probe on the same machine), it is necessary to install the CEM and Thumbnails services on a separate server. The Thumbnails feature requires a large amount of storage- For one encoder, one day takes approximately ~400MB.
- For large systems with many channels of cc or thumbnails, as of 8.2 it is now recommended to have separate Central Modules Indexing Server(s). Contact Support for more information.

2.2 No Version Interoperability

There is NO Version Interoperability with any earlier version of the software.

- The Central Server and Probe must both be on 8.2 QB1 in order to communicate.
- In addition, the player must match the 8.2 QB1 software version in order to view content from a Client Machine.

3. Compatible Products and Platforms

This product was tested on the following platforms (or with the following products):

3.1 Operating systems

3.1.1 Central Server Installations

- Windows 2012 Server R2 x64
- Windows 10 x64
- AWS Win 2012 Server R2
- Windows 2016 Server x64
- Windows 7 Pro x64

3.1.2 Probe Installations

- Windows 2012 Server R2
- Windows 10 x64

- AWS Win 2012 Server R2
- Windows 2016 Server x64
- Windows 7 Pro x64

3.1.3 PC Clients

- Windows 7 64-bit
- Windows 10 64-bit

3.2 Capture cards

3.2.1 Transport Stream Capture cards

- Hauppauge (Added support for 1069 card)
 - Hauppauge WinTV-HVR-2255 (old 2250) Driver Version 7.9.1.32199 (Driver Date 07/18/2014)
- Dektec
 - DekTec DTA-xxxx Driver Version 4.23.0.240 (Driver Date: June 2017)
 - Supported: DTA 2111, DTA 2135, DTA 2136, DTA 2137, DTA 2145, DTA 2160

3.2.2 Other Capture cards

- Blackmagic Design
- Osprey

3.3 Browsers

3.3.1 HTML5 Only

The following HTML5 browsers are supported:

- Edge
- Safari
- Chrome
- Firefox

3.3.2 Internet Explorer

The following 64-bit versions of Internet Explorer are supported:

- IE11 (supported using HTML5 or ActiveX. New as of this version, default on IE is now HTML5 instead of ActiveX. Support can enable legacy ActiveX on IE if necessary.)

If you are using a non 64-bit version of Internet Explorer, please run the below executable for IE 64:

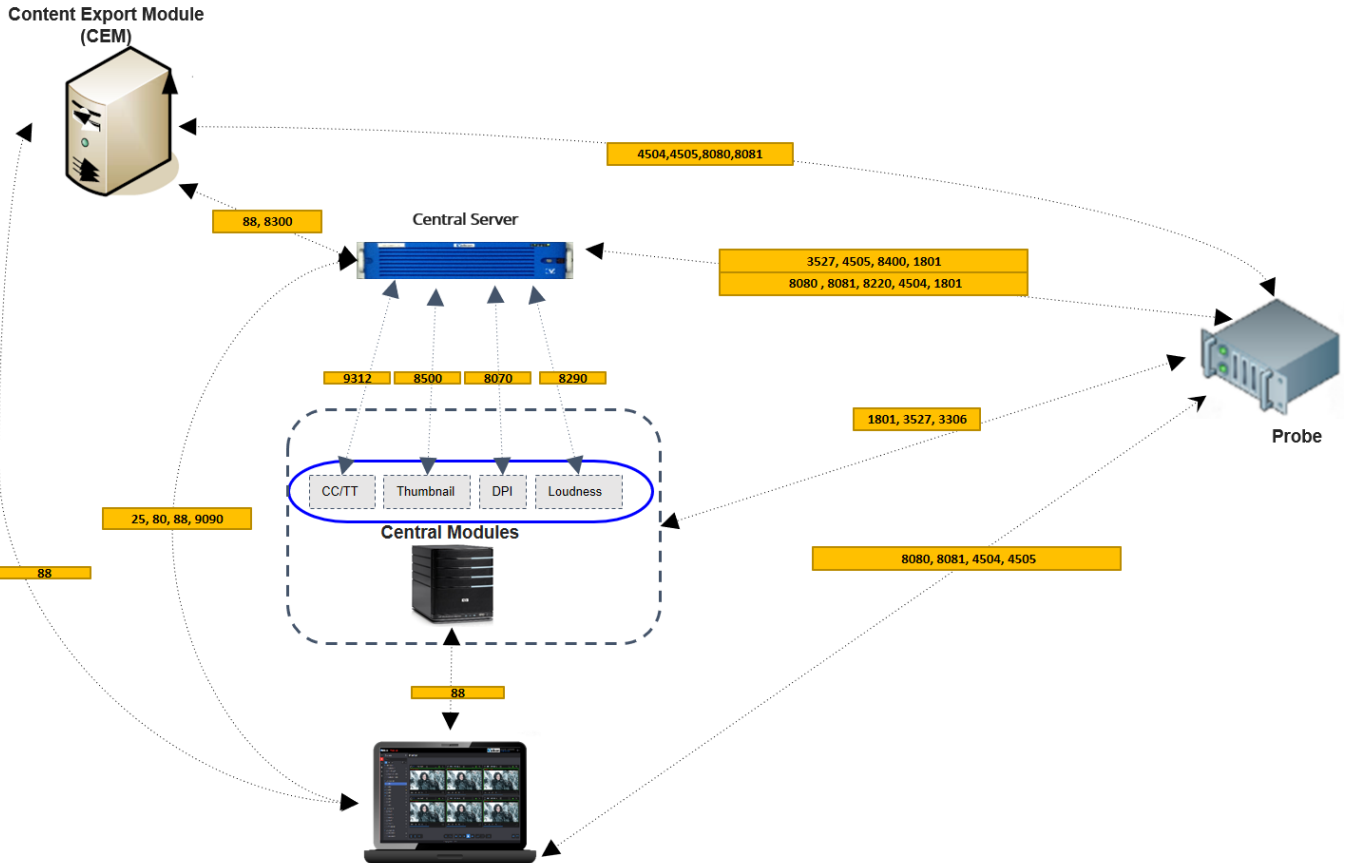


SetIE64.exe

3.4 Ports requirements:

New to the 8.2 software are the following Ports:

- 8290 (Loudness Indexing), bidirectional between the Central Server and Central Module Server
- 3360 (MySQL), bidirectional between the Probe and Central Module Server



Central Server		
Service	Incoming	Outgoing
Access to Probe's Listener Service		8220
Web Server Port (if using SSL)		8080
MSMQ	1801, 3527	
SMTP		25
Volicon Live Streamer Port		4505
Volicon Streamer Port		4504
MediaHub	8080	8080
MediaHub	8081	8081
Web Socket	9090	9090
Thumbnails	8500	8500
Sphinx	9312	9312
DPI Indexing	8070	8070
Loudness Indexing	8290	8290

Probe		
Service	Incoming	Outgoing
Listener Service	8220	
Media Hub	8080	
Volicon Live Streamer Port	4505	
Volicon Streamer Port	4504	
MediaHub	8080	8080
MediaHub	8081	8081
Updater	8400	8400
MSMQ		1801, 3527
MySQL		3306

Content Export Module		
Service	Incoming	Outgoing
Volicon Live Streamer Port		4505
Volicon Streamer Port		4504
MediaHub	8080	8080
MediaHub	8081	8081
CEM Port	8300	8300
CEM Port	88	88

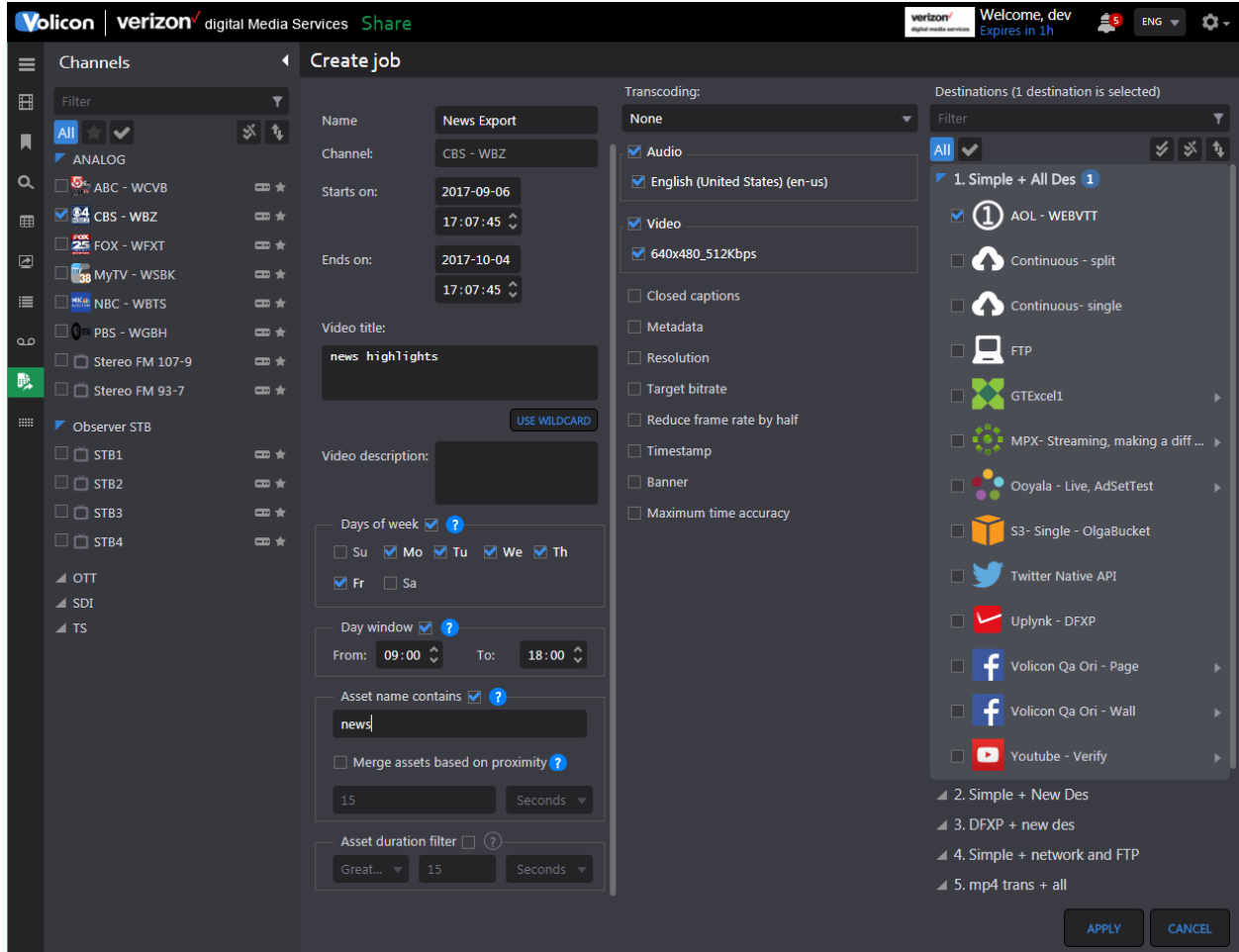
Client		
Service	Incoming	Outgoing
Access to Streamer		4504
Access to Live Streamer		4505
MediaHub	8080	8080
MediaHub	8081	8081
SMTP		25
Web Socket	9090	9090
HTTP	80	80
CEM	88	88
Nginx	88	88

Central Module											
Closed Captioning			DPI Indexing			Thumbnails			Loudness Indexing		
Service	Incoming	Outgoing	Service	Incoming	Outgoing	Service	Incoming	Outgoing	Service	Incoming	Outgoing
Sphinx	9312	9312	DPI Indexing	8070	8070	Thumbnails	8500	8500	Loudness Indexing	8290	8290
MSMQ	1801, 3527	1801, 3527	MSMQ	1801, 3527	1801, 3527	Nginx	88	88	MySQL	3306	3306
						MSMQ	1801, 3527	1801, 3527			

4. New Features in v8.2 QB1

4.1 Automated ARL Export

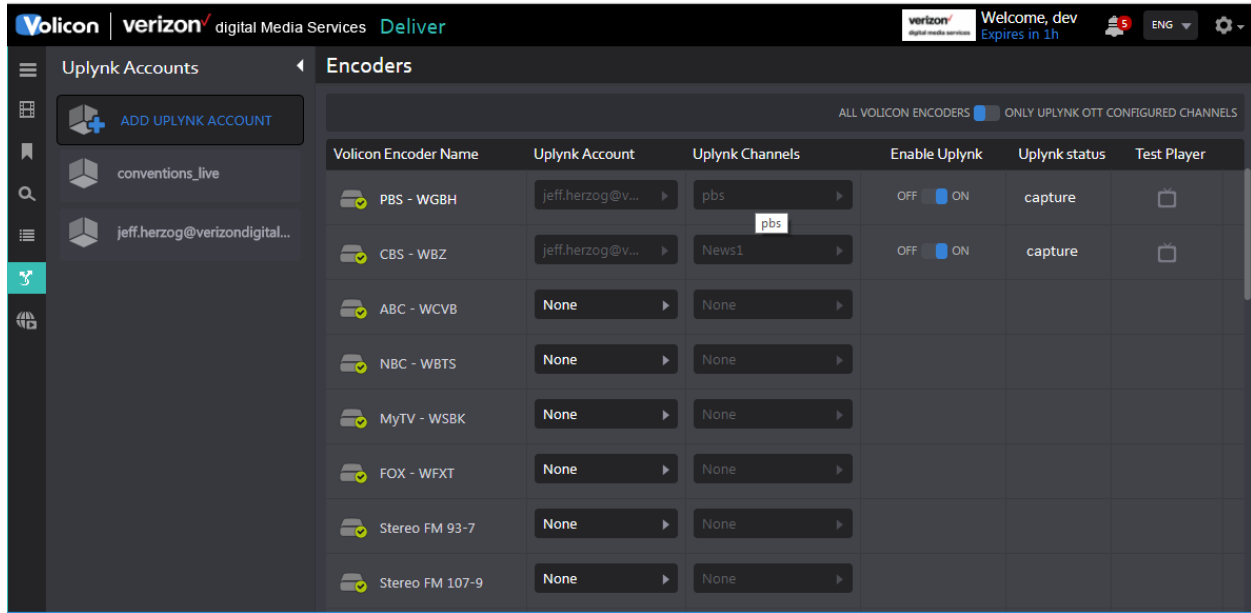
As-Run log Export enables users of the system to set automatic share processes according to imported as run logs (programs) to the system. For example, you could set up a job to export any clips marked in your as-run logs as “news” that appear between 6-11pm on certain days of the week. ARL export will trigger immediately after imported as-run logs are processed by the system for the last day.



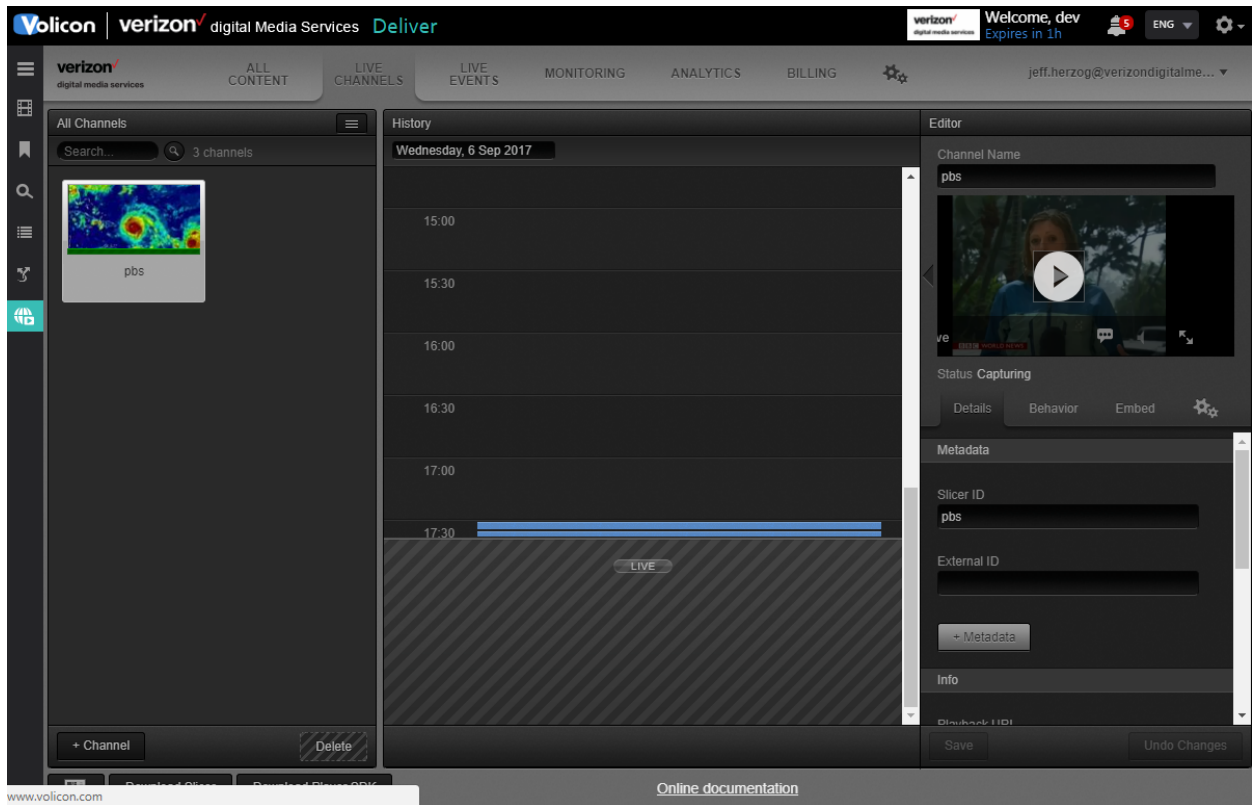
4.2 Uplynk Volislicer Control in Deliver Application

Volicon version 8.2 introduces “flip a switch” simplicity for converting high-resolution Volicon encoders into OTT origination points for Verizon Digital Media Service’s Uplynk OTT streaming.

Leverage your existing investment in Volicon to serve as an encoding/origination point for any linear channels you want to bring to OTT.



In Volicon 8.2, a new Slicer Control UI displays all your Volicon encoders and lets you input your Uplynk credentials. You can then easily map any Volicon encoder to a particular Uplynk Slicer and enable slicing.



The Uplynk CMS is integrated into the Volicon deliver application, allowing you to easily monitor your live OTT feeds.

4.3 Rapid ABR Publishing

It is now possible to share multiple renditions of the same clip to “MPX ThePlatform” content management system. This allows easy transmit of ABR to this service without any further transcoding required.

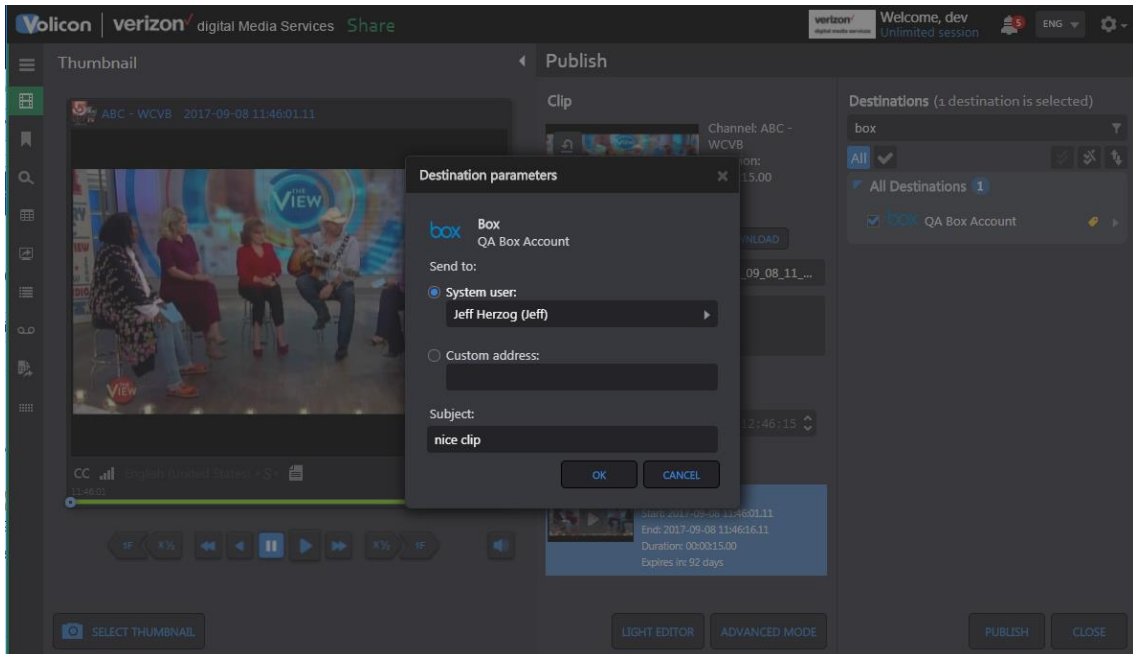
When sharing a clip from a channel that has sub-encoders, you can select multiple video streams, which are all simultaneously published to the platform during the Share process.

The image shows a software interface for video publishing. The top section, titled "Video parameters (Simple)", has a "Transcoding:" dropdown set to "None". Below this, there are several checked options: "Audio", "Spanish (spa)", "320x240_512Kbps", and "160x120_256Kbps". The "Video" section is highlighted with a red box. Other options like "Closed captions", "Metadata", "Resolution", "Target bitrate", "Reduce frame rate by half", "Timestamp", "Banner", and "Maximum time accuracy" are also visible. The bottom section, titled "Files for 'ABR_thePlatform'", shows a table of files with columns for Filename, Format, Bitrate, Dimensions, Asset Types, and Public URLs. A preview window on the right shows a play button.

Filename	Format	Bitrate	Dimensions	Asset Types	Public URLs
FS9d596-7a93-421d-8211-d994eb073ae_320x240_512Kbps.mp4	MPEG4	756k	320 x 240		
FS9d596-7a93-421d-8211-d994eb073ae_160x120_256Kbps.mp4	MPEG4	460k	160 x 120		
FS9d596-7a93-421d-8211-d994eb073ae.jpg	JPEG		320 x 240		

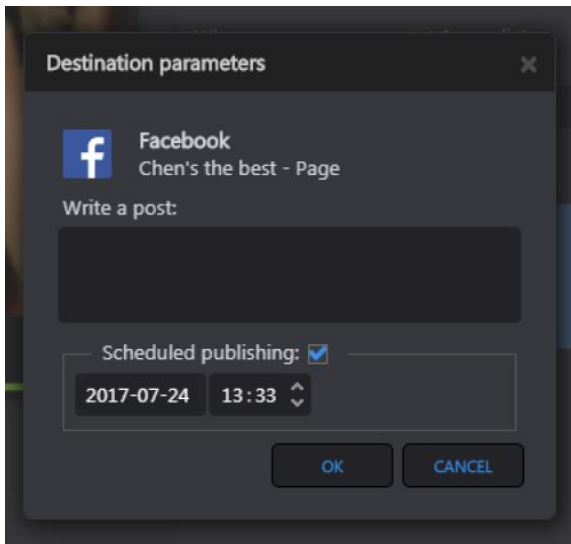
4.4 Share to Box.com

You can now upload clips to the Box.com service from Volicon Share.



4.5 Schedule delayed Facebook posts

Volicon Share now supports Facebook's capability to allow users to schedule posts for a future publication date and time. The scheduled time should be between 10 minutes to 6 months from the clip sharing time.



After scheduling a post, it can be seen in "Scheduled Posts" within the Facebook user interface.

4.6 Option to disable thumbnail sharing for specific destinations

You can now disable the sharing of thumbnail images to the same location as the video. The default is set to ON. This is available on Network, FTP, S3, GTxcel destinations.

The screenshot shows the 'New destination' configuration screen. It includes fields for 'Destination name', 'Network user name', 'Network user password', and 'Domain/workgroup name', all marked as 'Required'. There are radio buttons for 'Single destination folder' (selected) and 'Split destination folders'. A 'Destination folder path' field is also present, with a 'USE WILDCARD' button. At the bottom, the 'Share Thumbnail' checkbox is checked, and a red box highlights it with the text 'Default = ON'.

4.7 OKTA SSO integration

You can now integrate Volicon with Okta for enterprise SSO (Single-Sign-on) support. Contact Volicon support for configuration information.

The screenshot shows the 'Account Setup' page in the Volicon interface. The 'Settings' tab is selected. On the right side, the 'Authentication type' is set to 'Okta'. Below this, several fields are required for configuration: 'Identity Provider Issuer', 'Identity Provider Single Sign-On URL', 'x509 Certificate', 'SAML Administrator Name', 'SAML Administrator Email', 'SAML Administrator URL', and 'Homepage URL'. The 'Admin Group' field has a question mark icon. At the bottom, there is a red error message: 'idp is not valid, sam2 is not valid'. There are 'SAVE CHANGES' and 'CANCEL' buttons.

4.8 Share animated GIF's to certain destinations.

You can now share animated GIF's from Volicon to certain share destinations, including:

- Twitter
- Network
- Local Export
- FTP
- Amazon S3
- AOL
- Akamai
- GTXcel
- BOX
- The Platform MPX
- Brightcove

You can choose a low or high-quality GIF in the Export video parameters. For most destinations such as Twitter, to meet site requirements, using the low quality GIF setting is recommended.

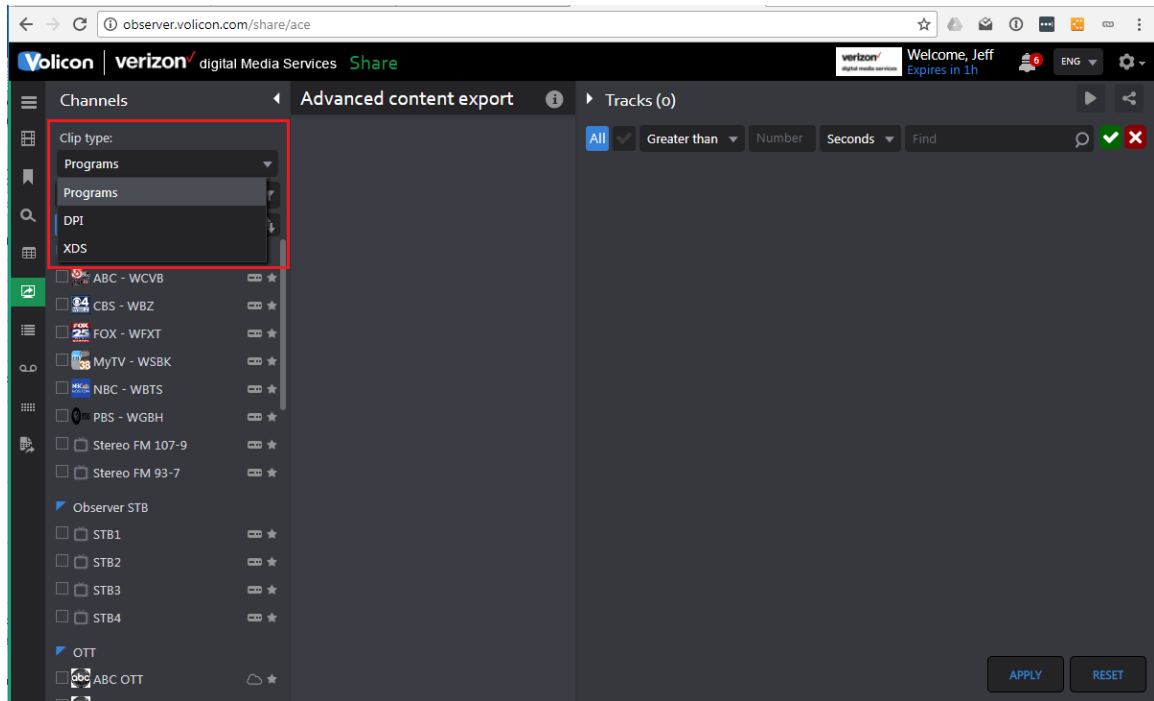
The screenshot displays the Volicon Publish interface. The top navigation bar includes the Volicon logo, Verizon Digital Media Services, and a 'Share' button. The main interface is divided into three panels:

- Clip Panel:** Shows a video clip titled 'ERICA'S #1 QUESTION' from Channel CBS - WBZ. It includes fields for 'Video title' (CBS - WBZ_2017_09_06_10_44...), 'Description', and 'When' (Immediate/Delayed). A 'Save clip to bookmarks' checkbox is checked. A blue box at the bottom of this panel displays clip details: CBS - WBZ, Start: 2017-09-06 10:44:50.04, End: 2017-09-06 10:45:05.04, Duration: 00:00:15.00, Expires in: 91 days.
- Video parameters Panel:** Titled 'Video parameters (1: Simple + All Des)'. It features a 'Transcoding' dropdown menu with options: None, HD H264 Video .mp4, HD Flash Video .flv, Flash Video .flv, Center Crop .mp4, H264 Video .mp4, **Low Quality GIF .gif** (highlighted with a red box), and High Quality GIF .gif. Below this are several unchecked checkboxes: Resolution, Target bitrate, Reduce frame rate by half, Timestamp, Banner, and Maximum time accuracy. At the bottom are 'LIGHT EDITOR' and 'SIMPLE MODE' buttons.
- Destinations Panel:** Titled 'Destinations (not selected)'. It has a 'Filter' dropdown set to 'All'. A list of destinations is shown with expandable arrows: 1. Simple + All Des, 2. Simple + New Des, 3. DFXP + new des, 4. Simple + network and FTP, 5. mp4 trans + all, 6. mpeg trans + all supported, 7. flv trans + all supported, All Destinations, IBC Demo, and SMI + Banner + supported. A red warning message 'Destinations are not selected' is visible at the bottom. 'PUBLISH' and 'CLOSE' buttons are at the bottom right.

4.9 Advanced Content Export (ACE) using XDS or DPI in addition to ARL

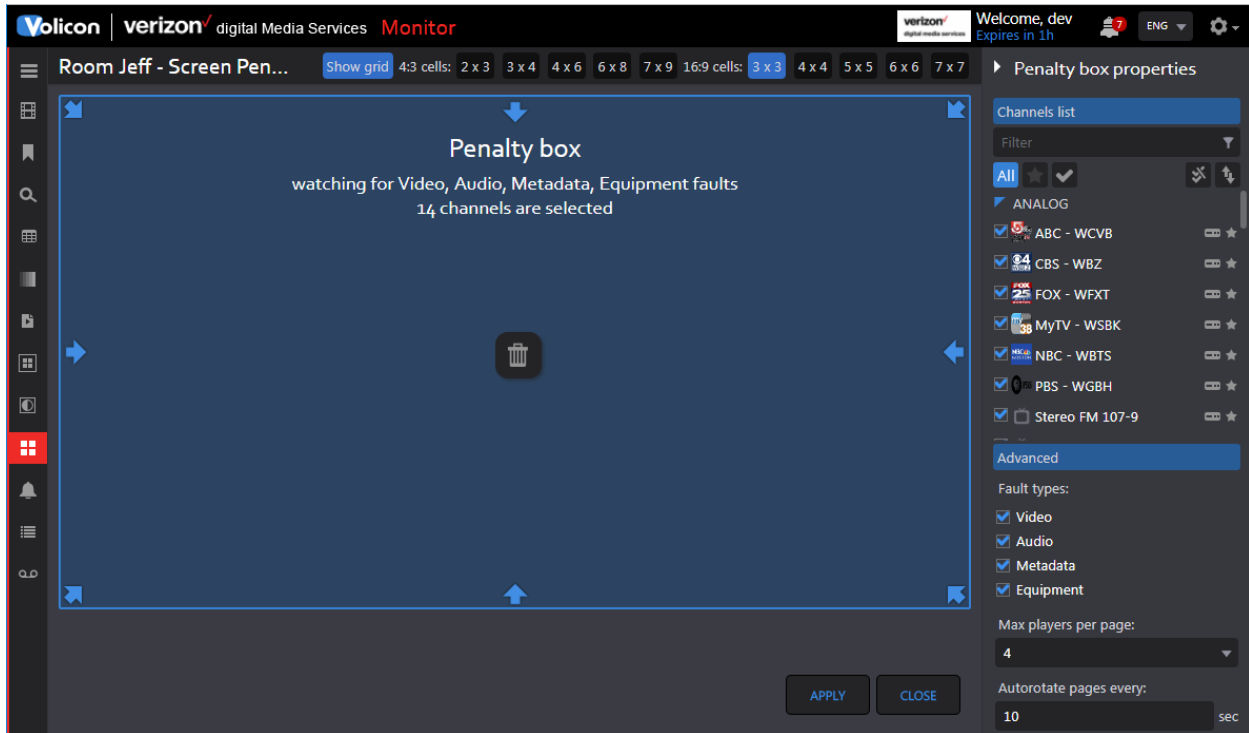
The purpose of the Advanced Content Export (ACE) feature is to easily cut out advertisements from linear content and intelligently and automatically create VOD assets based on metadata marking the boundaries of programs and ad breaks. Previously, this feature only worked with metadata from as-run logs (Programs) loaded to the Volicon system.

In 8.2, this feature was extended to also allow the use of DPI or XDS metadata to determine the ad boundaries and to generate the correct marks for the content segments.



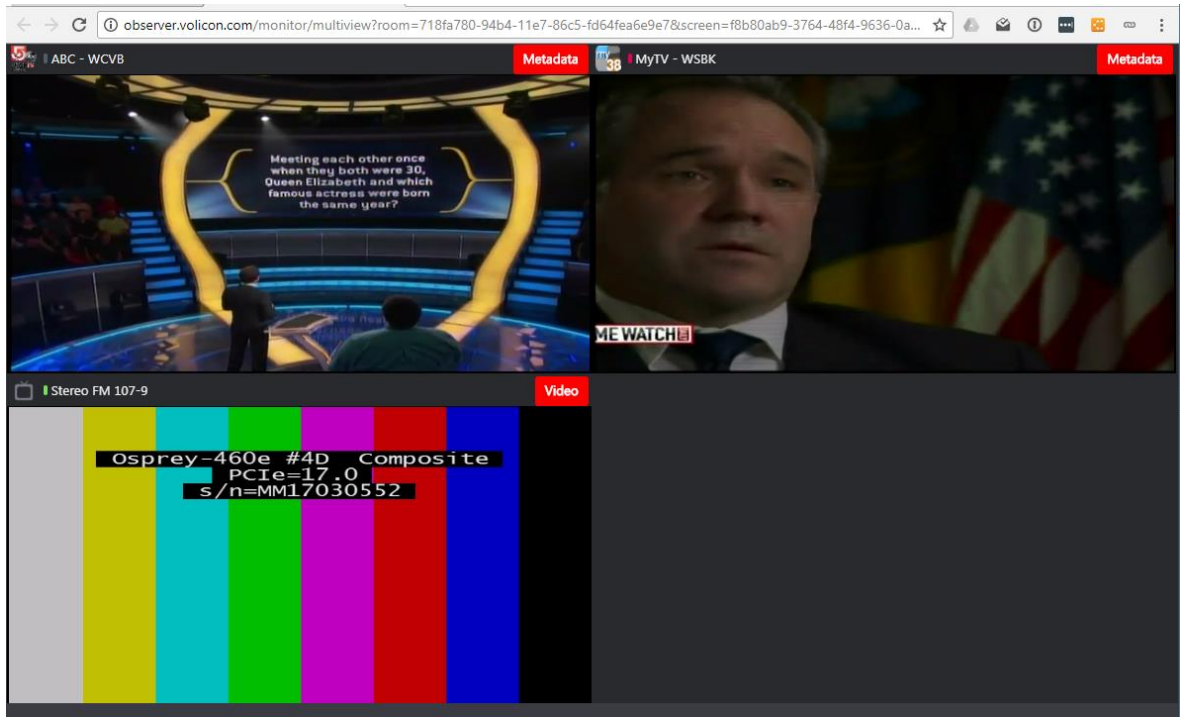
4.10 Penalty Box (Show Faults only) in Volicon Multiviewer

The Penalty Box is a new Volicon Multiviewer widget that will only present video players for channels that are currently experiencing fault conditions (e.g. black screen, low audio, metadata, etc). This allows operators in a central NOC to reduce the number of video screens they are regularly monitoring, and focus their attention only on problem channels rather than visually monitoring all channels operating in normal condition.



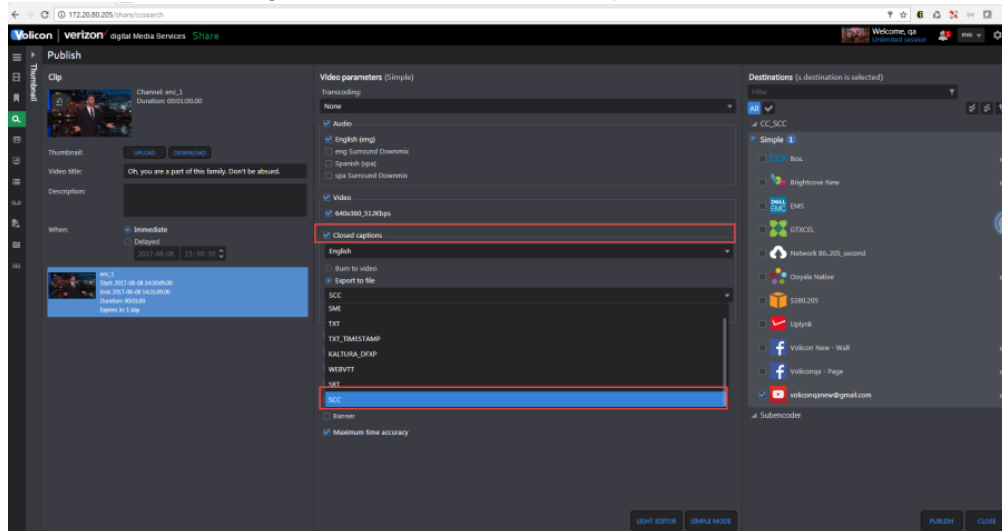
You can select the specific channels that the penalty box should monitor, as well as the maximum number of players per page. If the number of channels currently in fault exceeds the max players per page, the system will auto-rotate through all faults. You can define the auto-rotate wait time on each page.

When viewing the chosen penalty box, the multiviewer will display no channels unless any are currently in fault condition. Each channel will display the fault type as a red overlay in the upper right corner.



4.11 SCC sidcar closed caption support for Share

Version 8.2QB1 adds support for the .SCC (Scenarist Closed Caption) format as a sidcar file when using Volicon Share to send clips to social media or CMS destinations.

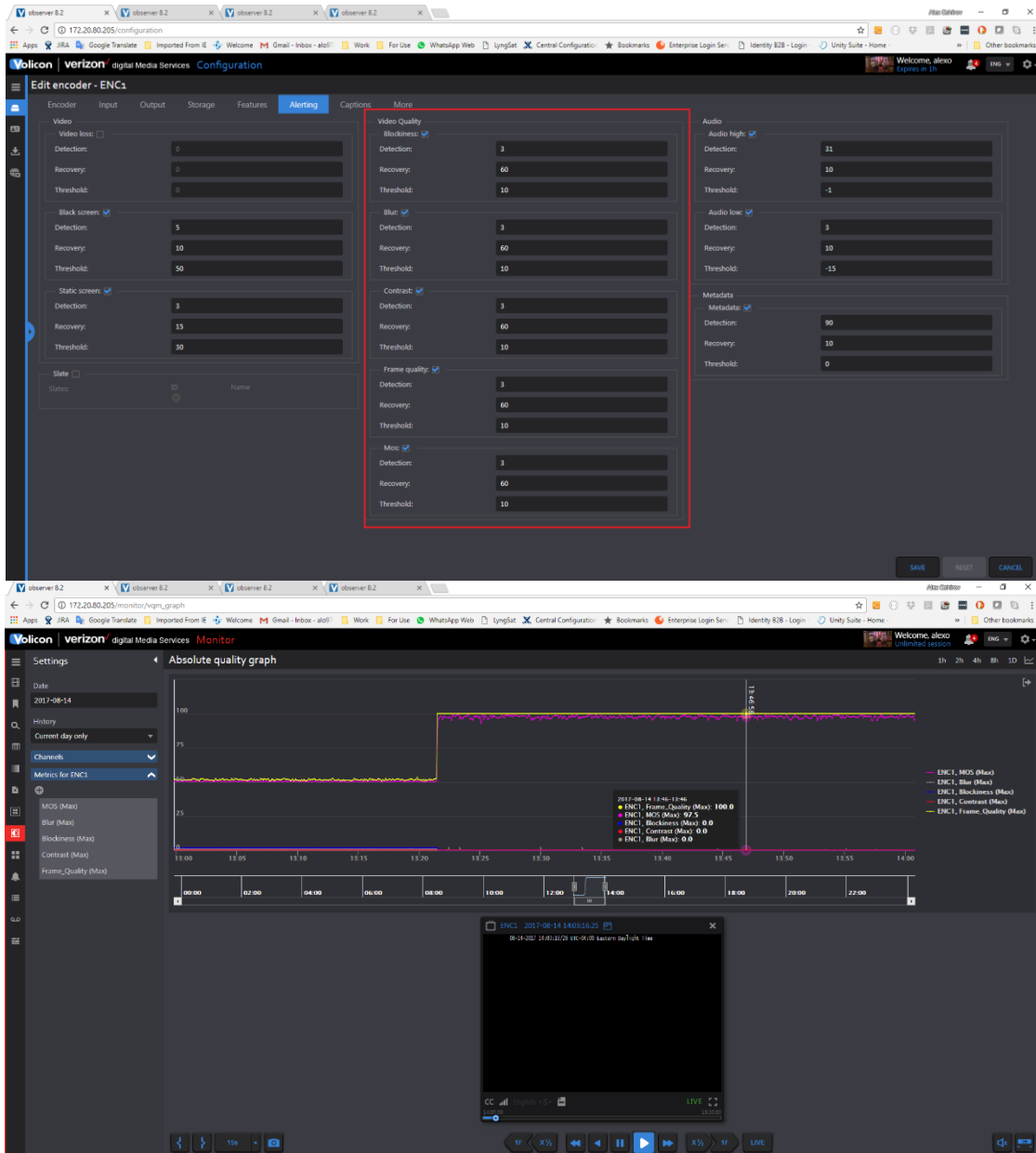


Note that the SCC export option is only available in Share, not export. If you need to obtain a local copy of the .SCC file, use the “share to local link” destination.

4.12 New option for QoE analysis of perceived video quality (MOS)

Volicon Version 8.2 QB1 introduces support for video Quality of Experience (MOS) monitoring in addition to our standard Quality of Service (QoS) detection such as static screen, black screen, low/high audio, etc. This is a new optional add-on to your system. Available monitoring metrics include:

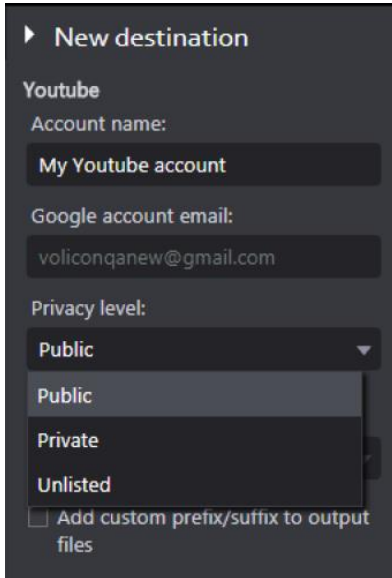
- Mean Opinion Score (MOS)
- Blurriness
- Blockiness
- Contrast
- Frame Quality



Contact your Volicon sales representative for more information about this add-on option.

4.13 Adjust privacy of shared clips to YouTube

You can now adjust the privacy level of clips shared to YouTube destinations.



▶ New destination

Youtube

Account name:
My Youtube account

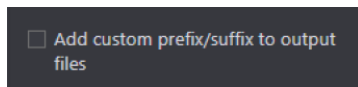
Google account email:
voliconqanew@gmail.com

Privacy level:
Public
Public
Private
Unlisted

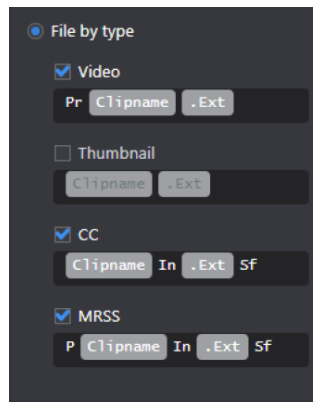
Add custom prefix/suffix to output files

4.14 Unique Prefix/Suffix on sidecar files in Share

You can now define unique prefixes or suffixes for supporting sidecar files such as the cc, mrss, and thumbnail files during the Share process. For example, if my exported clip name is mymovie.mp4, you can specify that the closed caption file is called mymovie-en_US.srt. This is useful for certain social media or CMS sites which have specific requirements for the naming conventions of these files.



Add custom prefix/suffix to output files



• File by type

Video
Pr Clipname .Ext

Thumbnail
Clipname .Ext

CC
Clipname In .Ext Sf

MRSS
P Clipname In .Ext Sf

4.15 Email equipment alerts when probes are not responsive

New email alerting feature to notify customer administrators when probe has not responded to the central server in a set amount of time. Once the probe recovers, the system will send a recovery notification email.

The screenshot displays the 'Create Equipment Alert' configuration interface. The 'General' section includes fields for 'Alert name' (alert1), 'Email to' (dev dev (dev)), and 'Email subject' (attention!), with an 'Enabled' checkbox checked and a 'TEST DELIVERY' button. The 'Advanced' section allows setting 'Do not send email on days' (Su, Mo, Tu, We, Th, Fr, Sa) and 'Do not send email in hours' (from/to: None). The 'Event type' section lists various events, with 'Probe not responsive' checked and a 2-minute timeout set. The 'Assign Channels' panel on the right shows a list of channels including ANALOG (ABC-WCVB, CBS-WBZ, FOX-WFXT, MyTV-WSBK, NBC-WBTS, PBS-WGBH, Stereo FM 107-9, Stereo FM 93-7), Observer STB (STB1-4), and OTT (ABC OTT, ABC OTT1, ABC OTT2).

5. Bug Fixes in v8.2 QB1

HTML5 Fixes:

- Audio Loudness metadata disappears from the HTML5 player at the end of clip
- 1 frame rewind occasionally gets stuck
- HTML5\OTT encoders - 1 frame rewind is stuck on frame 00
- HTML5 player jumps over gaps in content without providing the user notification of the jump/missing content
- HTML5 streamer does not support https protocol
- Playback for certain encoders experience "hiccups"

Continuous and Schedule Export Fixes:

- The Cont/Sch Export pages do not support a "read only" option for completed jobs
- For Schedule Recording pressing "Cancel" does not cancel the selection
- For Schedule Recording the "Play" button does not appear without performing a page refresh
- If a specific Content Export task is unexpectedly interrupted, the next task does not run
- When using a Client Machine with laptop resolution, the "Search and "Reset" buttons overlap on the Channels Dashboard on the Schedule Record page

STB Fixes:

- The sub encoder dropdown is missing from Schedule Record clip page
- The user has no means to check the number of recurrences selected for a job after it is created
- The Schedule Record page does not auto refresh, so the statuses being displayed may appear out of date
- The STB Services section is missing page numbers
- The "Country" drop down should be accessible with first character
- *Manual mode*: Remote buttons become un-clickable when user opens multiple encoders

Share Publishing and Export Fixes:

- *YouTube Destination*: Sharing a 1 hour clip fails due to an access token expired message
- *Facebook Destination*: The "Save" button should be grayed out until logged in
- The tooltips for Share Thumbnails Editing are missing
- Dual Language Teletext support for some languages
- Add ability to manage external videos and images for "intro/outro" and "embargo" on share
- On the Share Export Page the volume goes up and down when the up/down key is pressed on any dropdown
- Add download link for Exported clips on the Management Console
- Inconsistent tooltips appear for the "Upload/Download Thumbnails" section
- When exporting locally or with Share, the incorrect Time Zone is burned to video even when Auto is selected
- The Accepted File Formats are incorrect for the Banner
- Validation message appears after the export has failed, instead of disabling button

DPI Fixes:

- DPI Clips are not playing after reaching the end of the track. This behavior does not match other pages
- Clicking on the graph on the DPI Monitoring Page should highlight the corresponding event in the table
- On the DPI Monitoring Page, if the users selects the "End Track" button, it does not display message to user if the user is LIVE (for both HTML5 and ActiveX)
- On the DPI Monitoring Page, the Graph loses focus when user clicks on Hour interval
- DPI Monitoring does not refresh by itself and requires manual intervention
- When viewing the DPI Graph from an HTML5 browser, the Player opens in the play state though the controls show pause

General Front-End Fixes:

- *Slate*: Accepted file formats should be specified
- *XDS*: Extra apostrophe appears in Clip name
- *EPG*: No indication is provided to the User that a search is going on
- *EPG*: After a search, "List is empty" should be displayed if no records are found
- *Multiview*: Indication should be provided when "Delete" button is disabled
- *Management Console*: "Already exporting" job should not display the "Edit" button
- *Management Console*: Status search is not filtered correctly
- *CC Search*: Selecting one of the "Last Searches" returns wrong results
- *CC Widget*: The widget does not open synced to player time
- *Audio Description*: An alert appears on widget but list is empty
- *CC widget on Viewer page* does not work when the seekbar is bigger than 15min
- *Schedule Export*: Adding a destination to a specific profile adds it to schedule export job too

Permissions and Settings fixes:

- *Settings/Permissions*: User is able to delete himself from the assigned role
- *Bookmarks*: Users with "View" permission is unable to send clip via email
- *Roles*: Any changes made on the Roles page results in an license error being displayed
- *Destinations*: If a change is cancelled on the Designation page but the field has already by authenticated, the cancelation will not occur
- *Distribution Profiles*: Need to show which destination type when adding new destination
- *Export Profiles*: Need to add option of "reduce frame rate by half"
- *Users*: When adding a new User, the "Save" button should be grayed out if the required field "Email" is not entered
- Publish profiles created by a specific user are not visible to him

6. Known Bugs and Limitations

- *Multiview*: Memory leak on client server, browser hangs after a few hours of running
- *CEM*: CC/Thumbnails won't work for Brightcove if transport S3 has special characters
- *CEM*: S3 directory wild cards will not work if the destination is a transport
- Central Server fails to display encoder configuration after adding new TS encoder via Probe Manager
- *DPI Graph*: Sharp peak is shown on bottom graph is not reflected on the main graph
- When the ActiveX player is switching between different LTS chunks, it gets stuck during playback
- Configuration page – When an encoder enters dummy mode, this is not reflected in the status section
- Player gets stuck and reports Format change due to encoder being in dummy mode
- If the same Users logs in twice, the system does not log out the first instance until the second instance performs an action i.e. creating a bookmark
- Exported long Programs displayed as "short" in the Excel file
- *HTML5*: When an encoder is stopped, instead of freezing playback, the player continues to move up in frames
- The Encoder Service crashes when one encoder cannot access the LTS storage
- *HTML5*: The player becomes "stuck" when the encoder switches back and forth between dummy_mode and normal mode