

Release Notes

Version 8.1

Build 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

2. General

This is a major release with new features including the following (for more details on any of the following please see below):

- Default CC per share destination
- Multi share destination
- Manual CC adjust per share operation
- Ooyala native- replace existing
- Equipment alerts
- OTT Cloud configuration support
- STB support- Manual mode
- Schedule Recording

- EPG
- Slicer Integration
- LTW to AWS
- Hide Sub Encoders drop down
- Localization
- Slates detection
- No transcoding for OTT streams
- Support creating XDS based programs from encrypted TS

2.1 Hardware consideration

- 8.1 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

2.2 No Version Interoperability

There is NO Version Interoperability with the 8.1 QB1 software.

- The Central Server and Probe must both be on 8.1 QB1 in order to communicate.
- In addition, the player must match the 8.1 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 R2 x64
- Windows 10 x64
- AWS Win 2012 R2 servers
- Windows 7 x64

3.1.2 Probe Installations

- Windows 2012 R2
- Windows 10
- AWS Win 2012 R2 servers
- Windows 7 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)
- Dektec
 - o Latest driver in use: (Same as 7.2 QB2)
 - o DekTec DTA-xxxx Driver Version 4.10.0.144 (Driver Date 10/29/2014)
 - O Hauppauge: Hauppauge WinTV-HVR-2255 (old 2250) Driver Version 7.9.1.32199 (Driver Date 07/18/2014)
 - o Supported: DTA 2111, DTA 2135, DTA 2136, DTA 2137, DTA 2145, DTA 2160

3.2.2 Other Capture cards

- Blackmagic
- Ospray

3.3 Browsers

3.3.1 Multiple Browsers

The following HTML5 browsers are supported:

- Edge
- Safari
- Chrome
- Firefox

3.3.2 Internet Explorer

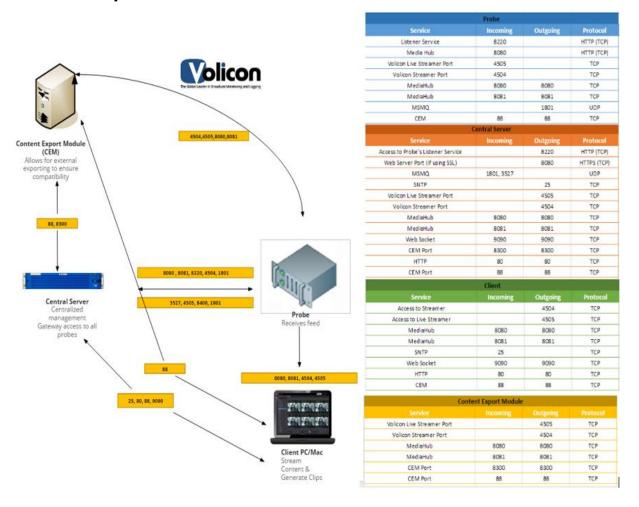
The following 64-bit versions of Internet Explorer are supported:

• IE11 (supported using Active X player)

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



3.4 Ports requirements:



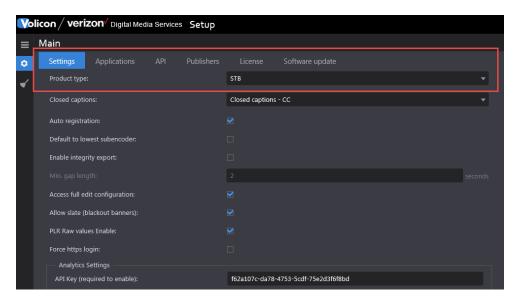
4. New Features

4.1 STB & Manual Mode

Manual mode allows users to manually access any channel or service on the Encoder (whose Input type is Set Top Box). It also enables users to do media recording (scheduled recording) by issuing channel change commands to STBs and recording the content.

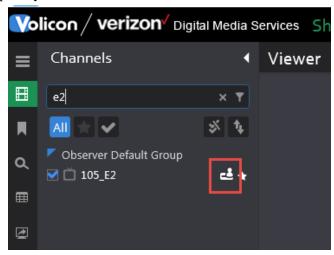
4.1.1 Enabling Manual Mode

- Encoder input type must be for STB
- On Volicon Setup page, Product Type needs to be set to STB instead of STD
- To enter Manual mode, go to Viewer page and click on "Remote control available" button



4.1.2 Exiting Manual Mode

- Close the player by unchecking the channel from the channel dashboard.
- Explicitly click on the STB Icon in front of channel name.



4.1.3 Using Manual mode

1) When user enters manual mode, a message is displayed that an "open" command has been issued.



2) The icon (highlighted in red) changes to indicate the user who is now controlling the STB.



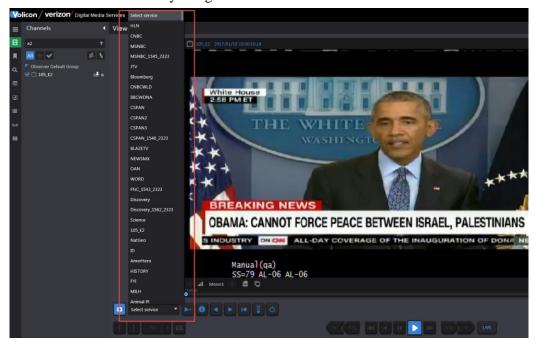
3) Player connects to LIVE port and starts playing Live. All player controls such as mark-in, mark-out, forward, rewind, calendar etc. are disabled except for volume buttons and change hour span.



4) In addition, a remote control bar opens to control STB.



1 – Services – Connect directly using Service name



2 – Command – Text box where user can enter different commands to be issued to STB such as Channel number or guide (similar to commands on remote)

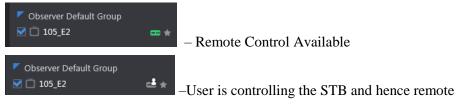


- 3 Enter Execute the command mentioned in Text box
- 4 Info Command STB to display information about the program currently running
- 5 Previous Channel Connect to previous channel
- 6 Next channel Connect to next channel
- 7 Last Channel Returns STB to last channel tuned to. For example, if tuned to channel 100 and then tuned to channel 123, clicking "Last" would return STB to channel 100.
- 8– Remote Control- Brings up a graphic remote control (if programmed for the type of STB used)
- 9– Power On/Off Command brings STB in/out of standby mode

4.1.4 Rules for Manual Mode

Observer Default Group

1) Different states of Remote Control-



control is not available (hover above icon to display name of user accessing STB)

- Scheduler is controlling it, which means Schedule recording is on (hence user will not be able to access manual mode for that encoder)

4.1.5 Definition of Key Terms

TERM	DEFINITION
Encoder/Stream	Encoder receives and processes media signals from STB.
Service/Channel	Network's media service content as perceived by the end user. Typically a cable , broadcast channel or specialty service
Bouquet	A mapping of channel numbers to virtual channel numbers to allow for use by STB in creating things such as scheduled record or manual mode channel changing

4.1.6 Configuring STB Information

The following steps need to be followed in order for STB and Schedule recording to work properly:

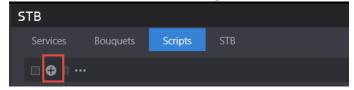
- 1) **Define Scripts** Used by Schedule recording module to define what should happen before and after the recording of a particular service/channel finishes.
- 2) **Define Services** Contains all the content provider's services that need to be available for the encoders/probes throughout the system.
- 3) **Define Bouquets** Associate services with their dial numbers (channel numbers) for specific providers and geographical locations. Multiple bouquets are defined according to the STB Type, location, provider etc.
- 4) **Define STB** Associate remote image with IR file (created by IR Trainer) and the corresponding PHP file.

4.1.7 Scripts

Scripts are used to execute commands on Services, like during a Schedule recording.

Defining Scripts

- 1) Go to Settings -> STB -> Scripts tab
- 2) Click on + button to add a new script.

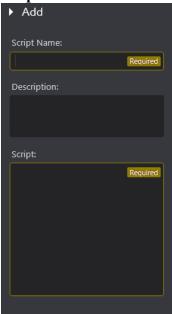


3) Complete the following script parameters:

Name – A meaningful name describing the script and its intent

Description – Script description

Script - Command to execute



Editing Scripts

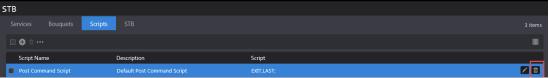
- 1) Go to Settings -> STB -> Scripts tab
- 2) Hover mouse on the record to be edited and click on Edit button



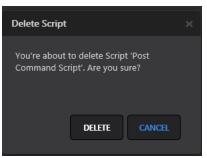
3) Save changes or Cancel them

Deleting Scripts

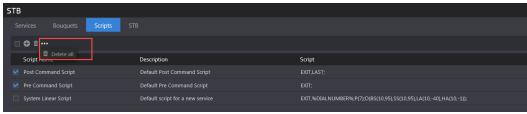
- 1) Go to Settings -> STB -> Scripts tab
- 2) Hover mouse on the record to be deleted and click on Delete button



3) Dialog box will appear for user's confirmation



- 4) Click on Delete button on dialog box to delete the script or cancel button to cancel deletion
- 5) Records can also be deleted by selecting several records and clicking the Delete All button



- 6) Dialog box will appear for user's confirmation
- 7) Click Delete button on dialog box to delete the scripts or cancel button to cancel deletions

Filtering Scripts

- 1) Go to Settings -> STB -> Scripts tab
- 2) At Search panel on the left side of the page, enter text that you want to search
- 3) Search will be performed on the Script Name field
- 4) Click on Reset button to clear the search results and restore all records on the page.

4.1.8 Services

A pool of services is defined on the CS to access channel programs through scripts, manual mode and schedules.

The broadcast types on different channels are:

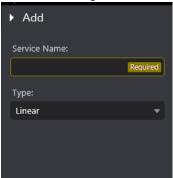
- Linear
- On-demand
- Interactive TV Services such as Arts & Entertainment, VOD Play Out, IMG Check, etc.

Defining Services

- 1) Go to Settings -> STB -> Services tab
- 2) Click on + button to add a new Service.

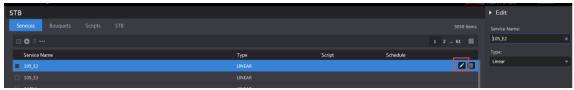


3) Enter a meaningful name for the service and click save



Editing Services

- 1) Go to Settings -> STB -> Services tab
- 2) Hover mouse on the record to be edited and click on Edit button



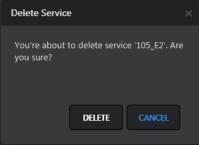
3) Save changes or cancel them

Deleting Services

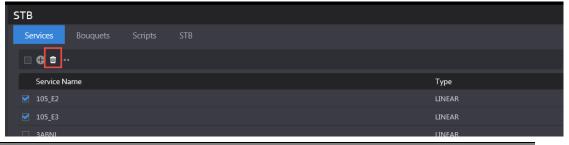
- 1) Go to Settings -> STB -> Services tab
- 2) Hover mouse on the record to be deleted and click on Delete button



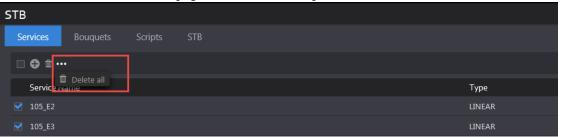
3) Dialog box will appear for user's confirmation



- 4) Click Delete button on dialog box to delete the service or cancel button to cancel deletion
- 5) Records can also be deleted by selecting several records and clicking the Delete All button



6) To delete all services from all pages, use Delete All option as shown below:



- 7) Dialog box will appear for user's confirmation
- 8) Click on Delete button on dialog box to delete the scripts or cancel button to cancel deletion

Filtering Services

- 1) Go to Settings -> STB -> Services tab
- 2) At Search panel on the left side of the page, enter text that you want to search
- 3) Search will be performed on the Service Name field
- 4) Click on Reset button to clear the search results and restore all records on the page.

4.1.9 Bouquets

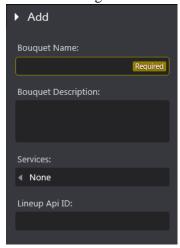
- A bouquet may be used with one or more encoders
- Different bouquets may have different associations
 - o A&E, 327 (in NYC)
 - o A&E, 528 (in NJ)

Adding a New Bouquet

- 1) Go to Settings -> STB -> Bouquets tab
- 2) Click on + button to add a new bouquet.



3) Enter a meaningful name for the bouquet and a description



4) Click on Services textbox to add services to the bouquet. This field will be disabled if no services exist on Services tab. If there are existing services, user can search the service name, enter a dial number in the textbox next to Service name and click on Ok Button.



5) If a user creates a new bouquet with an already existing name, an error message is displayed to the user that the same name cannot be used.

Importing a Bouquet

A bouquet can be imported from a CSV File. The format of the file is as follows (first column is Service name and second column is Dial number):

5 StarMAX	338
A&E Network	37
A&E Network HD East	837
ActionMAX	343

- 1) Go to Settings -> STB -> Bouquets tab
- 2) Hover mouse over an existing bouquet entry.

3) Click on Import Services button



4) On the dialog box, click on Select File button to select a CSV file from your folder structure.



5) User gets a confirmation message that "Services are imported successfully"



6) Notice that the description is set to "Bouquet created by import file" by default and the services number column is updated based on the number of services mentioned in the CSV file.

Rules for Importing Bouquet

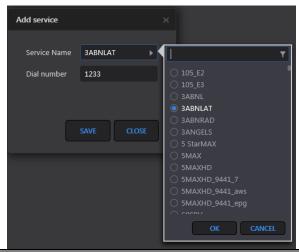
- 1) Services not existing in a bouquet will be added to it
- 2) Services missing in the imported file but defined in the Bouquet will be left in the Bouquet.

Editing Bouquets

Bouquet can be edited one at a time however, some functions can be performed on all bouquets simultaneously such as Add Service, Change service dial number or Delete service.

Add Service

- 1) Click on "Add service" option from the menu.
- 2) On the "Add Service" dialog box, click on the Service name arrow and select the service that needs to be added to all bouquets.
- 3) Mention the Dial number and click on Save.



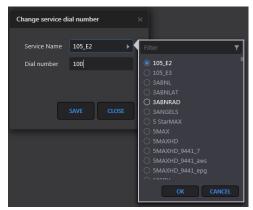
4) A confirmation message appears to the user when operation finishes.

Service "3ABNLAT" was added successfully on all bouquets ×

Change service dial number

This function allows users to change dial number for a service in all the bouquets.

- 1) Click on "Change service dial number" option from the menu and on the dialog box.
- 2) Click on the Service name arrow and select the service for which dial number needs to be changed.
- 3) Mention the new dial number in Dial number field.
- 4) Click on Save.



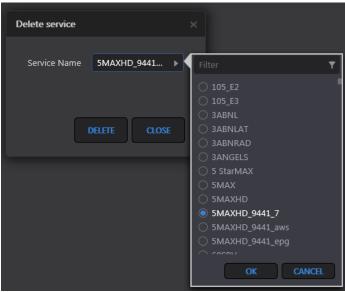
5) A confirmation message appears to the user when operation finishes.

Service "105 E2" was changed successfully on all bouguets

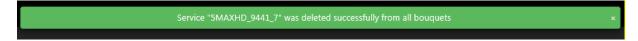
Delete Service

This function allows users to delete a service from all the bouquets

- 1) Click on "Delete service" option from the menu and on the dialog box
- 2) Click on the Service name arrow and select the service that needs to be deleted.
- 3) Click on Delete button.



4) A confirmation message appears to the user when operation finishes.



Deleting Bouquets

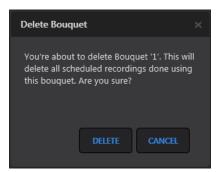
A Bouquet can be deleted one at a time or multiple bouquets can be deleted at once.

Delete a single bouquet

1) Hover mouse over a record and click on the Delete button.

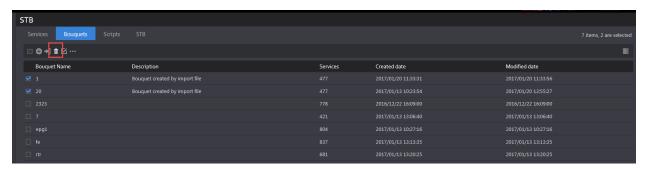


2) Click on "Delete" button on the dialog box.

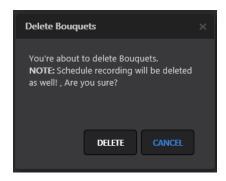


Deleting multiple bouquets

1) To delete multiple bouquets at the same time, select the bouquets and then click on the "Delete All" button on the menu.



2) Click "Delete" button on the dialog box



3) Users can also use "Delete All" option from the menu to delete all bouquets from all the pages.



4) Click the "Delete" button on dialog box for confirmation.

Filtering Bouquets

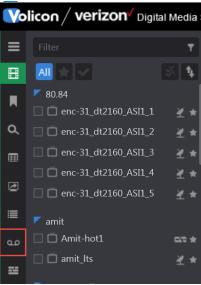
- 1) Go to Settings -> STB -> Bouquet tab
- 2) On Search panel at the left side of the page, enter text that you want to search
- 3) Search will be performed on the Bouquet Name field
- 4) Click on Reset button to clear the search results and restore all records on the page.

4.1.10 Manual Schedule Recording

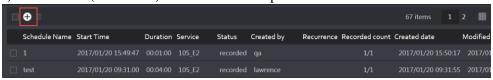
This module allows users to record a channel/service during specified periods. The events or jobs created can be a onetime recording or reoccurring recordings.

Creating an event

1) Go to a module such as Share, Comply or Monitor and click on the "Scheduled recording" page.



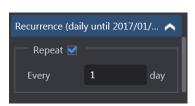
2) Click on + (Add event) button from the top menu

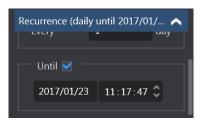


- 3) On "Add" screen, select the parameters:
 - Event Name Name of the recorded event
 - Bouquet Select the bouquet, which contains your service/channel
 - Service Select service/channel from the loaded list
 - From and To Select Start and End date/time for the program/recording
 - Encoder Select the stream, which will be displayed automatically after user selects the service/bouquet (The mapping of encoder with bouquet is done by the administrator in the Configuration page)



- 4) For recording options please see below:
 - To record only once, do not select the checkbox
 - b. To record a channel/service on multiple days, select the Repeat checkbox
 - If value in textbox = 1, then recording will happen daily
 - If value = 2, recording will happen every 2^{nd} day, and so on until end condition is specified for the recording
 - If "until" checkbox is not selected, recording will happen for an unlimited number of days.
 - If "until" checkbox is selected, user can specify the date/time until which job needs to record the channel.





5) Click on the Save button and observe that the job will be in "Scheduled" state.

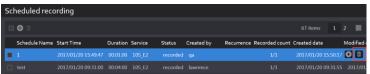
NOTE

When user creates a Scheduled record event and it is the same time for which another event has already been scheduled, then the encoder will appear disabled and user will be unable to select the radio-button for that encoder.

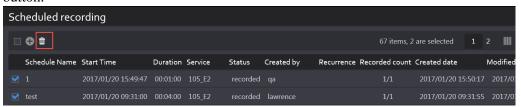
The Service name will appear in the parenthesis following Encoder name indicating which channel is being recorded during that time.

Deleting event

- 1) Go to an application like Share, Comply, Monitor and click on "Scheduled recording" page.
- 2) Hover mouse on the record to be deleted and click on Delete button.



- 3) Dialog box will appear for user's confirmation.
- 4) Click on Delete button on dialog box to delete the service or cancel button to cancel deletion.
- 5) Records can also be deleted by selecting several records and clicking on Delete All button.



- 6) Dialog box will appear for user's confirmation.
- 7) Click on Delete button on dialog box to delete the scheduled recording events or cancel button to cancel deletion.

Filtering events

- 1) Go to an application like Share, Comply, or Monitor and click on "Scheduled recording" page.
- 2) Scheduled recording events can be filtered on many parameters. They are as follows:
 - Keyword Returns records which contain searched text in "Schedule Name" field
 - Bouquet Select a bouquet in which search needs to be performed
 - <u>Service</u> List of services associated with selected bouquet will be loaded. User can select up to 10 services while performing search
 - <u>Status</u> A scheduled recording event has different statuses as follows:
 - Scheduled When recording Start Time has not yet reached
 - Recording When recording Start Time has reached and event is being recorded
 - o Recorded When event has been fully recorded
 - o Failed When event failed to record due various reasons
 - <u>Time Range</u> Enables user to perform search on the recorded events based on their "Created Date"
 - Only those records will be returned which are created between the "From" and "To" date/time in the search criteria.
 - Created By Select up to 10 users in search criteria
 - Encoders Search by selected encoders



- 3) Click on Search button. Search is performed based on the criteria selected in #2
- 4) Click on Reset button to clear the search results and restore all records on the page.

4.1.11 Additional Capabilities

1) When the event status changes to "recorded", the play button appears on the record. When user clicks on this button, player appears and user can view the clip. Along with viewing, user gets other clip capabilities like Export, Share, Edit, and Save Clip as Bookmark.



2) Edit button appears on the record when event is in Scheduled state or Failed state. User can change different parameters like Start/End Date/Time, name of the event etc. but if an event completes successfully, he is not provided with editing capabilities.

4.1.12 EPG (Electronic Program Guide)

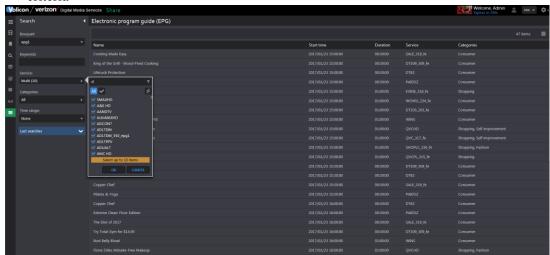
An electronic program guide (EPG) is used with digital set-top boxes to list current and scheduled programs that are or will be available on each channel and a short summary or commentary for each program.

- EPG is the electronic equivalent of a printed television program guide.
- EPG Scheduled Recording is a feature of the Observer STB that creates a "TV Guide" experience where the expected future broadcast schedule is displayed. Users can then select which program from this broadcast schedule should be recorded.

Loading the EPG

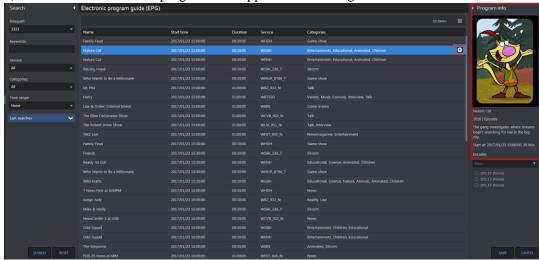
- 1) Go to an application such as Share, Comply, or Monitor and click on EPG icon.
- 2) User needs to fill up the Search form to load the page.
 - <u>Bouquet</u> Select the bouquet from drop down
 - Keyword Text matching program name
 - <u>Service</u> Select channel auto-populated according to the bouquet it is associated with. Maximum 10 items services can be selected in this field.
 - <u>Categories</u> Program categories
 - Time Range Define a time range Start and End Time of program

3) Click on Search button. A list of programs will be loaded on the page based on the search criteria



4.1.13 Adding Programs to Schedule Recording

- 1) Go to an application like Share, Comply, or Monitor and click on EPG icon.
- 2) Hover mouse over one of the records returned from Step 1 above.
- 3) Click on + button and program info appears as a sliding window.



- 4) Select the encoder (associated with the bouquet) for which recording needs to be done.
- 5) Click Save. A confirmation message appears to the user and an event is created on Scheduled recording page (please reference images below)



5. Appendix

5.1 Ooyala native: Replace Existing File Name

Overview

With 8.1QB1 software, user will have option to "Override old file with same name" on Share page

- If you check off this box:
 - O You will update or override an existing video file but keep original asset
- If you do not check off this box:
 - File will automatically be regenerated next day with updated file name (EX: "Evening news" video clip published on 1/1/17 will regenerate into a second file named "Evening news.1" on 1/2/17. "Evening news" will also still exist in system)

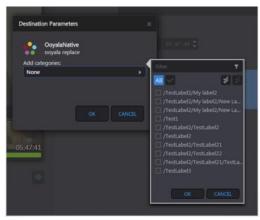


5.2 Ooyala native: Adding Labels

Overview

With 8.1QB1 software, user is able to add labels or tags from their Ooyala account directly to the content they are publishing

- On share page (before publishing clip), click right arrow on "Destination Parameters" window
- Select labels that are to be added to the clip and press "ok"



6. Bug Fixes

Description

Equipment alerts, including encoder stop start alerts

Apache login

Share/export enabled after clip has loaded

Integration with HTTPS

Manangement console visibility after search

When exporting with max time accuracy, pixalization will appear at the beginning and end of exported clip

DPI Indexing service error resolved

CC search with "OR"

HTML5 player no longer freezing after opening a program, or for no known cause at all

HTML5 player enabled on MAC to play encoders

HTML5 player with DPI events – error resolved

Faster login and navigation for users

Encoder sync error message has been corrected

Users can now edit email addresses without receiving an error message that email id is already in use

Improved layout and quality of video in player in player mode and split screen mode

Scheduled export job will execute the correct number of occurances pre-set by user

Share: If a job fails due to a stopped encoder, the job status will now update on the Share page

Loudness metadata on HTML5 player now displays correctly

User without "create clips" permission will no longer receive the "clip not created" message on multiview

7. Known Bugs and Limitations

7.1 HTML5 Limitations

Description

Audio loudness metadata disappears from player at end of clip

1F rewind button is occassionally stuck

When "Live" button is pressed on player, there is a momentary lapse when text turns gray instead of the blue "Live" indicator

Rewind and Play Rewind buttons play with lag time

Player displays a "Reseting after Video Decode Error" warning

Lag in Live stream with STB

7.2 Continuous and Scheduled Exporting

Description

User will see jobs for channels not present in their user set for both continuous and scheduled exporting

Need to allow read only option for both cont/scheduled export

Any user is able to edit a job created by super user

Unexpected behavior occurs when encoder is not running at the end time of the task

7.3 STB

Description

"Dial by" service changes to "dial by" number after clicking manual mode buttons

Sub encoder drop down is missing from the scheduled record clip page

User has no means to check number of recurrences selected for a job

Scheduled recording page needs an auto refresh in order to update statuses

7.4 Share and Export

Description

Sharing a 1 hour clip to Youtube will fail with an "Access token expired" message

Fail description is incorrect for a specific task with continuous and scheduled exporting

Share to Akamai fails on specific CEM servers

CC Burn to Video not working with CEM Export but successful with IE browser

The volume will change when the up or down keys are pressed on any drop down menu on the Share/Export page

Need to add option to not send a .jpg file to destination

Twitter not supported by x264 codec.

User who is assigned to two roles, one for Share and one for Observer Classic, cannot share (button will be greyed out) unless Classic role has publish profiles added.

Sharing to Ooyala fails occasionally. User will receive "undefined" error.

Publishing without "maximum time accuracy" may result in garbled pixelated video

7.5 Front End

Description

Accepted file formats should be specified with Slate

Scheduled recording "play" button does not appear without page refresh

Validation button appears after an export has failed instead of the disabling button

Scheduled recording: pressing cancel does not cancel the selection

EPG: No indication to user that search is running

Manual mode: Remote buttons become un-clickable when user opens multiple encoders

DPI/Loudness Graph: Graph disappears from page when user clicks on Start or End track

A deleted destination is not removed from the drop down automatically

Share/Export with CEM: "Other" timezone is burned to video even when Auto is selected

You cannot edit Mediahub configuration- all fields are disabled.

User unable to send clips via email if he or she only has view permissions

CC Search: Incorrect highlighted keywords when "And" is included in search

7.6 Permissions and Settings

Description

User is unable to delete clips if those particular channels are not added to their role

User is unable to send clips via email when they have View permissions only

User is able to delete themselves from their assigned role

Any changes made from the roles page will display a "license" error