

digital media services

Volicon Media Intelligence service

8.2 User Guide

Warranty and limitations

The information in this document is subject to change without notice and does not represent a commitment on the part of Verizon Digital Media services' Volicon Media Intelligence service; it's not a binding contract. Volicon Media Intelligence service will not be held responsible for failures or errors in the text of the document. Nor be liable for it to any claim from any third party. Documentation is provided "as is". All conditions, representations and warranties, expressed or implied, including any implied warranty of merchantability, fitness for a particular purpose or non-infringement, are disclaimed, except to the extent that such disclaimers are held to be legally invalid. This document contains proprietary information belonging to Volicon Media Intelligence service. Such information is supplied solely for assisting properly-authorized users of Volicon Media Intelligence service systems. No part of its contents may be used for any other purpose or disclosed to any person or firm. No part or parts of this document shall be copied, used for commercial purposes or passed to any third party for any use, without approval from Volicon Media Intelligence service. The text and graphics are for the purpose of illustration and reference only. The information herein is subject to change without notice.

Document details

Document name:	Volicon Media Intelligence service 8.2 User Guide
Part number	
Related software versions	8.1, 8.0



Table of contents

1		duction	
	1.1 P	urpose	6
	1.2 D	efinitions and acronyms	7
2	Volic	on Media Intelligence service overview	10
		sing your stored content	
		tored content parameters	
	2.2.1	Storage duration customization	12
3	Initia	I connection	13
Ū		C client minimum requirements checklist	
		ogin	
	3.2.1	•	
	3.2.2	•	
	3.2.3	Log out	
	3.2.4	Volicon Media Intelligence service Internet Explorer settings	15
	3.3 V	olicon Media Intelligence service home page	17
	3.4 Ir	stalling the Volicon Media Intelligence service media player	17
	3.4.1		
	3.4.2	Updating the Volicon Media Intelligence service player	20
4	Com	mon functions	21
-		hannel viewer tab	
	4.1.1	Channel dashboard	
	4.1.2	Miscellaneous viewer controls	
	4.1.3	Using the Player window	
	4.1.4	Seeking back in time	
	4.1.5	Controlling your video streams	
	4.1.6	Player thumbnail	
	4.1.7	Stream advanced actions bar	
	4.1.8	Storyboard view	42
	4.1.9	Snapshots	43
	4.1.10		
		losed captions tab	
	4.2.1	- 17 5	
		ookmarks tab	
	4.3.1	Managing bookmarks	
		rograms tab	
		lanagement console tab	
	4.5.1		
		cheduled recording tab	62
	4.6.1	Create a scheduled recording	
5		g Share	
		dvanced content export (ACE) tab	
		s-run-log-based exporting	
	5.2.1	Adding an ARL export job	66



5.3.1 Asset search	78888 446 7889011112
5.3.3 Deleting library assets 6 5.3.4 Editing asset metadata 6 5.3.5 Preview an asset 6 5.3.6 Editing video assets 6 6 Using Deliver 7 6.1 Slicer monitor 7 6.2 Uplynk Video Streaming service CMS 7 7 Using Review 7 7.1 DPI monitoring tab 7 7.2 XDS clips tab 7 7.3 Rating graph tab 7 7.3.1 Select ratings 8 7.4.4 Keyword alerts tab 8 7.4.3 Create a keyword alert. 8 8.4 Editing/deleting a keyword alert. 8 8.3 Program Loudness Report tab 8 8.3.1 Report measurement fields. 8 8.4.1 Graphing options 8 8.5 DPI graph tab 8 9.1 GPI clips tab 8	8888 446 7889011112
5.3.4 Editing asset metadata 6 5.3.5 Preview an asset 6 5.3.6 Editing video assets 6 6 Using Deliver 7 6.1 Slicer monitor 7 6.2 Uplynk Video Streaming service CMS 7 7 Using Review 7 7.1 DPI monitoring tab 7 7.2 XDS clips tab 7 7.3 Rating graph tab 7 7.3.1 Select ratings 8 7.4.4 Keyword alerts tab 8 7.4.3 Create a keyword alert 8 7.4.4 Editing/deleting a keyword alert 8 8.1 Schedule export tab 8 8.3 Program Loudness Report (PLR) tab 8 8.3.1 Report measurement fields 8 8.4.1 Graphing options 8 8.5 DPI graph tab 8 9.1 GPI clips tab 8	888 446 7889011112
5.3.5 Preview an asset 6 5.3.6 Editing video assets 6 6 Using Deliver 7 6.1 Slicer monitor 7 6.2 Uplynk Video Streaming service CMS 7 7 Using Review 7 7.1 DPI monitoring tab 7 7.2 XDS clips tab 7 7.3 Rating graph tab 7 7.3.1 Select ratings 8 7.4.1 Search 8 7.4.2 Alert controls 8 7.4.3 Create a keyword alert. 8 7.4.4 Editing/deleting a keyword alert. 8 8 Using Comply 8 8.1 Schedule export tab 8 8.2 Continuous export tab 8 8.3 Program Loudness Report (PLR) tab 8 8.4 Loudness graph tab 8 9 Using Monitor 8 9.1 GPI clips tab 8 9.1.1 GPI search 9	88 446 7889011112
5.3.6 Editing video assets	8 446 7889011112
6 Using Deliver 7 6.1 Slicer monitor 7 6.2 Uplynk Video Streaming service CMS 7 7 Using Review 7 7.1 DPI monitoring tab 7 7.2 XDS clips tab 7 7.3 Rating graph tab 7 7.3.1 Select ratings 8 7.4.4 Keyword alerts tab 8 7.4.3 Create a keyword alert. 8 7.4.4 Editing/deleting a keyword alert. 8 7.4.4 Editing/deleting a keyword alert. 8 8.1 Schedule export tab 8 8.2 Continuous export tab 8 8.3 Program Loudness Report (PLR) tab 8 8.4.1 Graphing options 8 8.5 DPI graph tab 8 9 Using Monitor 8 9.1 GPI clips tab 9	4467889011112
6.1 Slicer monitor	467889 0 1 1112
6.1 Slicer monitor	467889 0 1 1112
6.2 Uplynk Video Streaming service CMS 7 7 Using Review 7 7.1 DPI monitoring tab 7 7.2 XDS clips tab 7 7.3 Rating graph tab 7 7.3.1 Select ratings 8 7.4.1 Search 8 7.4.2 Alert controls 8 7.4.3 Create a keyword alert. 8 7.4.4 Editing/deleting a keyword alert. 8 7.4.4 Editing/deleting a keyword alert. 8 8.1 Schedule export tab. 8 8.2 Continuous export tab. 8 8.3.1 Report measurement fields. 8 8.4.1 Graphing options 8 8.5 DPI graph tab 8 9 Using Monitor 8 9.1 GPI clips tab 8 9.1.1 GPI search 9	6 7889011112
7 Using Review 7 7.1 DPI monitoring tab 7 7.2 XDS clips tab 7 7.3 Rating graph tab 7 7.3.1 Select ratings 8 7.4 Keyword alerts tab 8 7.4.1 Search 8 7.4.2 Alert controls 8 7.4.3 Create a keyword alert 8 7.4.4 Editing/deleting a keyword alert 8 8 Using Comply 8 8.1 Schedule export tab 8 8.2 Continuous export tab 8 8.3 Program Loudness Report (PLR) tab 8 8.4.1 Graphing options 8 8.5 DPI graph tab 8 9 Using Monitor 8 9.1 GPI clips tab 8	7889 0 1 112
7.1 DPI monitoring tab	889 0 1 112
7.2 XDS clips tab 7 7.3 Rating graph tab 7 7.3.1 Select ratings 8 7.4 Keyword alerts tab 8 7.4.1 Search 8 7.4.2 Alert controls 8 7.4.3 Create a keyword alert 8 7.4.4 Editing/deleting a keyword alert 8 8 Using Comply 8 8.1 Schedule export tab 8 8.2 Continuous export tab 8 8.3 Program Loudness Report (PLR) tab 8 8.4.1 Graphing options 8 8.5 DPI graph tab 8 9 Using Monitor 8 9.1 GPI clips tab 8 9.1.1 GPI search 9	89 0 1 112
7.3 Rating graph tab 7 7.3.1 Select ratings 8 7.4 Keyword alerts tab 8 7.4.1 Search 8 7.4.2 Alert controls 8 7.4.3 Create a keyword alert 8 7.4.4 Editing/deleting a keyword alert 8 7.4.4 Editing/deleting a keyword alert 8 8 Using Comply 8 8.1 Schedule export tab 8 8.2 Continuous export tab 8 8.3 Program Loudness Report (PLR) tab 8 8.4.1 Graphing options 8 8.5 DPI graph tab 8 9 Using Monitor 8 9.1 GPI clips tab 8 9.1.1 GPI search 9	9 0 1 1 1 2
7.3.1 Select ratings. 8 7.4 Keyword alerts tab. 8 7.4.1 Search. 8 7.4.2 Alert controls 8 7.4.3 Create a keyword alert. 8 7.4.4 Editing/deleting a keyword alert. 8 7.4.4 Editing/deleting a keyword alert. 8 8 Using Comply 8 8.1 Schedule export tab. 8 8.2 Continuous export tab. 8 8.3 Program Loudness Report (PLR) tab. 8 8.3.1 Report measurement fields. 8 8.4.1 Graphing options. 8 8.5 DPI graph tab. 8 9 Using Monitor	0 1 1 1 2
7.4 Keyword alerts tab	1 1 1 2
7.4.1Search	1 1 2
7.4.2Alert controls87.4.3Create a keyword alert87.4.4Editing/deleting a keyword alert88Using Comply88.1Schedule export tab88.2Continuous export tab88.3Program Loudness Report (PLR) tab88.3.1Report measurement fields88.4Loudness graph tab88.5DPI graph tab89Using Monitor89.1GPI clips tab89.1.1GPI search9	1 1 2
7.4.3Create a keyword alert.87.4.4Editing/deleting a keyword alert.88Using Comply88.1Schedule export tab.88.2Continuous export tab.88.3Program Loudness Report (PLR) tab.88.3.1Report measurement fields.88.4Loudness graph tab.88.5DPI graph tab.89Using Monitor89.1GPI clips tab.89.1.1GPI search9	1 2
7.4.4 Editing/deleting a keyword alert 8 8 Using Comply 8 8.1 Schedule export tab 8 8.2 Continuous export tab 8 8.3 Program Loudness Report (PLR) tab 8 8.3.1 Report measurement fields 8 8.4 Loudness graph tab 8 8.5 DPI graph tab 8 9 Using Monitor 8 9.1 GPI clips tab 8 9.1.1 GPI search 9	2
8 Using Comply 8 8.1 Schedule export tab. 8 8.2 Continuous export tab. 8 8.3 Program Loudness Report (PLR) tab. 8 8.3.1 Report measurement fields. 8 8.4 Loudness graph tab. 8 8.4.1 Graphing options 8 8.5 DPI graph tab 8 9 Using Monitor 8 9.1 GPI clips tab. 8 9.1.1 GPI search 9	
8.1 Schedule export tab	
8.1 Schedule export tab	2
8.2 Continuous export tab	
8.3 Program Loudness Report (PLR) tab 8 8.3.1 Report measurement fields 8 8.4 Loudness graph tab 8 8.4.1 Graphing options 8 8.5 DPI graph tab 8 9 Using Monitor 8 9.1 GPI clips tab 8 9.1.1 GPI search 9	
8.3.1 Report measurement fields	
8.4 Loudness graph tab	
8.4.1 Graphing options 8 8.5 DPI graph tab 8 9 Using Monitor 8 9.1 GPI clips tab 8 9.1.1 GPI search 9	
8.5 DPI graph tab 8 9 Using Monitor 8 9.1 GPI clips tab 8 9.1.1 GPI search 9	
9 Using Monitor 8 9.1 GPI clips tab 8 9.1.1 GPI search 9	
9.1 GPI clips tab	
9.1.1 GPI search9	9
	9
9.1.2 GPI clip display options9	0
	0
9.2 DPI clips tab9	0
9.2.1 DPI search9	1
9.2.2 DPI clip display options9	1
9.3 Fault clips tab9	2
9.3.1 Fault search9	~
9.3.2 Fault clip display options9	2
9.3.3 Manual fault clip creation9	
9.4 Multiview tab	3
9.4.1 Using Multiview9	3 4
9.4.2 Configure Multiview rooms9	3 4 4
9.4.3 Create Multiview screen	3 4 4 5
9.4.4 Configure Multiview screen	3 4 4 5 7



9.4.5	Copy Multiview screen	
9.4.6	Rename Multiview screen	
9.4.7	Delete Multiview rooms or screens	
9.5 Q	oE alerts tab	101
9.5.1	Search	
9.5.2	Alert controls	
9.6 At	osolute quality graph tab	104
9.6.1	Graphing options	104
10 Voli	con Media Intelligence service tools	
10.1	Preferences	106
10.1.2	Password	
10.2	Help and tutorials	107
10.3	About	108
10.4	Contact us	108
10.5	Reset page settings	108
10.6	Log out	108
11 App	endix	109
	Revision history	
11.1.1	Volicon Media Intelligence service releases	
	Revision change history	
About Vo	licon Media Intelligence service	110



1 Introduction

1.1 Purpose

Welcome to the Volicon Media Intelligence service 8.2 User Guide. This document will provide the details and instructions necessary to guide you through Volicon Media Intelligence service operations. It addresses specific functions, including the use of bookmark media clips, proving FCC compliance, advertisement verification and general media management.



1.2 Definitions and acronyms

8VSB	8-level vestigial sideband modulation: Used for ATSC over- the-air broadcast	
AC3	Dolby Digital Audio Codec 3: Compression used by ATSC	
ACE	Automated Content Export	
AFD	Active Format Description: Metadata describing format (i.e. 4:3 or 16:9)	
ARL	As-run logs: Used to extract program schedule	
ASI	Asynchronous Serial Interface: Used to carry MPEG-TS	
ATSC Advanced Television System Committee: Set of standa US digital television		
Bookmark	Short program segments marked on the Volicon Media Intelligence service server to facilitate auditing and sharing	
Bouquet	A logical grouping of channels	
CALM Act	Commercial Advertisement Loudness Mitigation: FCC requirement for audio loudness	
CEM	Content Export Module: Optional software package to export program clips to social media sites	
CC/TT	Closed captioning/ SMPTE timed text: Protocols used to add text description of the audio	
CDN	Content Delivery Network: Distributed network of servers to host content as geographically near to the user as possible	
Clear QAM	Clear Quadrature Amplitude Modulation: Non-encrypted cable video distribution	
Component video	Analog video with separate red, green, blue channels using three RCA connections	
Composite video	Analog video over a single RCA connection	
Dialnorm	AC3 metadata used to control playback gain	
DPI	Digital Program Insertion: Metadata that allows downstream insertion of commercial or short programs	



DPI – In point	Entry point to switch to a different stream	
DPI – Out point	Return to normal stream	
DvB	Digital video broadcasting: International suite of digital television standards	
Encoder	Volicon Media Intelligence service function that receives and processes media signals	
Fault clips	Portions of audio or video stream that fail to meet Volicon Media Intelligence service quality thresholds	
SD/HD-SDI	Uncompressed standard or high definition video serial data interface	
GPI	General Purpose Interface metadata: Used for broadcast automation	
HDMI	High Definition Multimedia Interface: Digital interface used to transport audio and video short distances	
IP	Internet Protocol: Used to send digital data from one computer to another	
Metadata	Data about the data: Additional information carried by the program used to describe program details	
мн	Media Hub: Internal Volicon Media Intelligence service component	
MPEG	Motion Picture Expert Group: International organization that sets audio and video compression and transmission standards	
MPEG-TS	MPEG Transport Stream: A standard container for audio, video and Program and System Information Protocol (PSIP)	
Multiview	Volicon Media Intelligence service feature that allows you to configure multiple channels and monitoring widgets into a single display screen	
NAVE	Nielsen Audio Video Encoder: Psychoacoustic symbols inserted in programs to facilitate automatic viewer tracking	
NTP	Network Time Protocol: Internet standard used to synchronize computer real-time clocks	



ОТТ	Over-the-top program delivery using Internet protocols	
PID	Packet identifier: A unique 13-bit value used to identify elementary streams of a program in a single or multi-program transport stream	
Probe	Ingest server housing one or more encoders	
PSIP	Program and System Information Protocol: Method used to transport program metadata (e.g., sub channels, program guide and content ratings)	
S-video	Separate video: Variation of composite video that separates luminance (black and white) from chrominance (color) to enhance video quality	
Services	A/V program content with the associated metadata	
SMPTE	Society of Motion Picture and Television Engineers: Creates numerous technical standards	
STB Set-top box: Device used to make programming availab customers		
Storyboard	Sequence of video frames to assist visualization	
VANC	Vertical ancillary data space in digital streams	
W3C	World Wide Web Consortium: Sets standards to advance use of the World Wide Web	
XDS	Extended Data Services: Analog NTSC metadata	



2 Volicon Media Intelligence service overview

A firm understanding of Volicon Media Intelligence service will help you with your workflow. Core features include:

- Record and store: Broadcast content (multiple interface/qualities); support for a variety of input broadcast signals with storage built to scale; different encoding qualities and proxies
- · Collaborative platform: To exchange content between colleagues
- **Professional multi-player:** Gives easy access to channels and groups of channels, with dynamic searches, PIP, full-screen and split-screen features
- **Enhanced player:** Provides professional frame-by-frame (even with live content) and fast-forward and rewind speeds to allow for maximal efficiency
- On-screen metadata: Display with multi-language, various metadata and visuals alerts
- Content sharing: With social media sites
- Export content: To your computer or other servers
- **Error alarms**: Volicon Media Intelligence service constantly monitors each stream and generates alarm if doesn't meet programed quality metrics
- Web-based user access: Via multiple browsers and OS
- Enterprise scale: Easy to configure and maintain system with access control and auditing, designed for high-availability tools to ease administration and built to scale

Volicon Media Intelligence service has the ability to log content from multiple video sources in the post-production, transmission, delivery and reception video distribution chain. You can log content at any stage of the video production or delivery process. The amount of content you can log is limited only by available storage space.

Volicon Media Intelligence service logs video content down to the individual frame level, at the same standard frame rate as the source. Volicon Media Intelligence service allows you to log content from many different input types (e.g., HD/SD-SDI, ASI, IP, DvB-(S, S2, T, T2), 8VSB, Clear QAM, component, composite, S-video and HDMI).



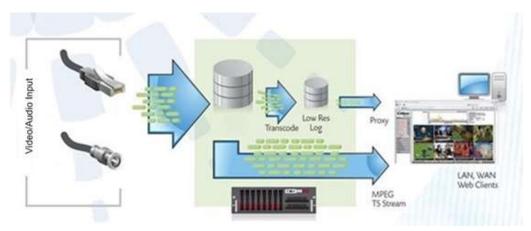


Figure: Volicon Media Intelligence service data flow

Volicon Media Intelligence service constantly ingests and stores each video and audio stream in native resolution and bit rate. The Low Bit Rate Proxy (LBRP) is used to create lower-resolution copies of the original stream. There are several reasons for creating a LBRP of incoming video content:

- It allows multiple users to access the Volicon Media Intelligence service simultaneously, without interfering with one another.
- · It minimizes impact on network resources.
- It allows the Volicon Media Intelligence service to store content on each server for much longer periods of time.

2.1 Using your stored content

Your stored content serves multiple purposes.

Share: This is an easy-to-use mechanism to share your stored content with social media sites and other delivery methods.

Compliance: In the event of FCC inquiries about noncompliance about any video segment you aired, you can use your stored content to investigate the charge and to either a) prove compliance with FCC regulations, or b) establish precisely which frames of the video were out of compliance.

Customer complaint resolution: You can use your stored content for business purposes, especially as a historical record to support resolving customer complaints about whether or not a commercial played during the contractual time frame. Volicon Media Intelligence service's frame-by-frame record allows you to investigate whether or not the commercial played, if it played in its entirety and at what time.



Playing back broadcast clips on your website: Volicon Media Intelligence service allows you to bookmark the start and end of each clip you want to display and export the content. You can then post that content to your website. You can use this feature for current clips and older clips as well – as far back as you have stored content.

Monitoring what you and your competitors are doing: Volicon Media Intelligence service can access and record public programs, not merely the ones you generate.

Assessing Nielsen ratings on a particular program or set of programs: Volicon Media Intelligence service can import the Nielsen ratings and tie them to the video with which they are associated.

2.2 Stored content parameters

By default, Volicon Media Intelligence service stores every frame of transmitted content:

- From every active input
- · Locally on each Volicon Media Intelligence service server
- · In the high definition/standard definition format native to that input

2.2.1 Storage duration customization

The number of days each video stream is stored on the Volicon Media Intelligence service system is customized based on preconfigured parameters requested by each customer. Please inquire with your local Volicon Media Intelligence service administrator about the storage days configured for your specific system.



3 Initial connection

Volicon Media Intelligence service is a web-based system accessible from a wide variety of computers using a multitude of different browsers. This section discusses client requirements and how to access the system.

3.1 PC client minimum requirements checklist

Before using Volicon Media Intelligence service, check that your computer meets or exceeds the PC client minimum requirements listed below:

- Windows 7, Windows 10, Mac 64-bit
- 3.5 GB of RAM or greater
- Browser
- Microsoft Internet Explorer 11 (ActiveX)
- Chrome, Edge, Firefox, Safari (HTML5)
- Minimum network bandwidth
- You will need bandwidth greater than or equal to 1.2-1.5x the sum of the bandwidth of the streams you are viewing. For example, to view two 512 Kbps streams smoothly, you need between 1.2 Mbps and 1.5 Mbps of available bandwidth.
- In addition to the physical requirements listed above, you must also:
 - Place the URL or IP address of the web server in your browser's "Trusted sites" zone
 - Have administrative privileges on your machine, to install the signed ActiveX control used by Internet Explorer

3.2 Login

- 1. At the top of your browser search bar, enter the IP address or URL provided by your Volicon Media Intelligence service system administrator.
- You will then be prompted for your login credentials (username/password). This will also be provided to you by your Volicon Media Intelligence service system administrator.

3.2.1 Your initial login screen

Volicon Media Intelligence service greets you with a login screen. Enter your username and password, then press **<Sign in>**.

The browser may ask if you want it to remember your password. If this is the computer you always use and trust, allowing the browser to remember your



password is convenient. If you are not sure what to do, click on the **<X>**, and the browser will ask again the next time you log in.

Would you like to store your password for volicon.com?	Why am I seeing this?		Not for this site	×
······				1

Figure: Browser password storage





Figure: Volicon Media Intelligence service home page

Assuming you entered your account credentials correctly, you will be greeted with the Volicon Media Intelligence service home page. The specific icons displayed depend on your account settings and the installed Volicon Media Intelligence service options.

3.2.2 High-level page controls

At the upper right-hand side of each Volicon Media Intelligence service page are a number of high-level controls. Your account name is displayed, and below it is the automatic logout timer. Volicon Media Intelligence service monitors your account activity. If it has been idle for a period of time, the system automatically logs you out.

To the right is a **<System warning>** icon. If this feature is enabled for your account and there are active alerts, the number is displayed in a red circle. Left clicking on the icon displays warning details.

Volicon Media Intelligence service can be configured to use different languages. Use the dropdown to select the desired language

At the extreme upper-right is the **<Tool>** icon. This will be discussed in detail later.



Figure: Home page controls



3.2.3 Log out

To log out, click the **<Gear>** icon at the upper-right corner of any Volicon Media Intelligence service page. The **<Gear>** icon appears on all Volicon Media Intelligence service pages so you don't have to go back to the home page to log out. This opens another menu; click on **<Log out>** at the bottom of the list. Volicon Media Intelligence service asks you to confirm that you really want to log out.

Tech tip

Click on the Volicon Media Intelligence service **<Gear>** icon, not the browser **<Tool>** icon.



Figure: Volicon Media Intelligence service logout

3.2.4 Volicon Media Intelligence service Internet Explorer settings

When using Internet Explorer for the first time, you must set compatibility mode.

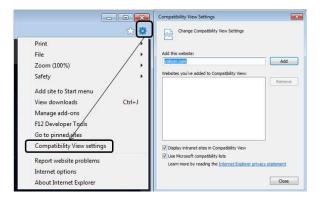




Figure: Setting IE compatibility view

- After you log in to Volicon Media Intelligence service, left click the <Gear> icon at the upper-right of IE; then choose <Compatibility view settings>. Note that this is the IE <Tools> icon, not the lower <Tool> icon for Volicon Media Intelligence service.
- 2. The URL or IP address of the Volicon Media Intelligence service server should automatically populate under "Add this website". Click on <Add> to set IE to access the Volicon Media Intelligence service website in compatibility mode. Next, set the location of the Volicon Media Intelligence service server as a trusted site. This allows you to restrict ActiveX (used by the Volicon Media Intelligence service player) when browsing the internet while still allowing its use when logged into Volicon Media Intelligence service.
- From the same <Tool> icon used to set compatibility mode, select <Internet options>. Select the <Security> tab and click on <Trusted sites>. Then click the <Sites> button. The Volicon Media Intelligence service website URL should show under "Add this website to the zone". The IE default policy to allow placing a server in a trusted zone is that it must use SSL/TLS security (HTTPS). If the Volicon Media Intelligence service server does not use SSL/TLS, you need to uncheck the "Require server verification" box. Press <Add> to update the trusted site list, then <Close>.
- To verify you successfully added Volicon Media Intelligence service, click <Trusted sites> again, then <Sites>. The Volicon Media Intelligence service server URL should show in the <Websites> box.

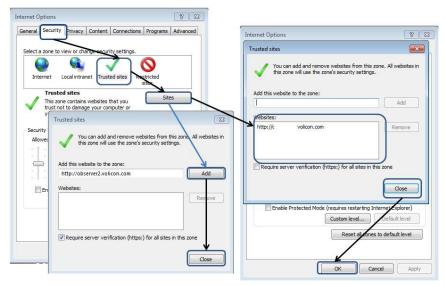


Figure: Add Volicon Media Intelligence service to trusted sites



3.3 Volicon Media Intelligence service home page



Figure: Main menu

The main action buttons are in the center of the screen. Your account name is displayed in the upper-right corner along with the session expiration time. If Volicon Media Intelligence service detects an idle session, it will eventually time out and automatically close the session. Click on the **<Gear>** icon in the upper-right to log out or access Volicon Media Intelligence service tools.

The main menu gives you access to the various Volicon Media Intelligence service functions. Depending on installed options and account permissions, a different set of icons may be visible.

3.4 Installing the Volicon Media Intelligence service media player

When you log in to Volicon Media Intelligence service for the first time using Internet Explorer, you are prompted to install the Volicon Media Intelligence service media player.

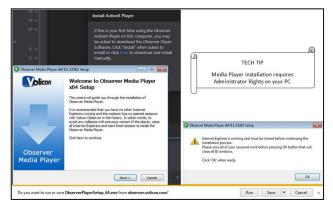


Figure: Initial connection



If your Volicon Media Intelligence service administrator has not previously installed the media player on your PC/laptop, you must have administrative rights (the ability to install software on your PC) for the initial install of the player software. Any subsequent logins will require only the permissions you currently have on your PC/laptop. The first time you connect to the Volicon Media Intelligence service, IE will take approximately 30 seconds to load the Media Intelligence player and install the software.

To shutdown IE, accept the browser warning by clicking **<Run>**, then press **<Next>**. Volicon Media Intelligence service will launch the Media Player Setup Wizard.



Figure: Media Player Setup Wizard

If an older version of Volicon Media Intelligence service media player has been installed, it will be removed automatically. Click **<Next>** to continue. Accept the terms of the license agreement and click **<Next>** to continue.



Figure: License agreement

You have the option of choosing into which folder Volicon Media Intelligence service will install the media player. Unless Volicon Media Intelligence service Support has instructed you otherwise, accept the default folder and click **<Install>**.



3.4.1 Optional settings

Volicon Media Intelligence service will present you with the "Optional settings" window.



Figure: Optional settings window

Optional setting/selection – Internet Explorer shortcut:

If you want to add a quick connect button to your Internet Explorer toolbar, enter the URL or the IP address for your Volicon Media Intelligence service in the field provided. Leave the field empty if you do not want Volicon Media Intelligence service on your toolbar.

Optional setting/selection - Intel video adapter workaround:

Volicon Media Intelligence service recommends that if your computer has an Intel video card, or a video card with an Intel chipset, that you enable the Intel "Flickering video" workaround checkbox as a precaution. Enabling the checkbox will not affect the performance of the Intel chipsets that do not have issues with multiple video streams, and it will protect you in the event that your chipset is one of those with known issues.

Optional settings/selection – Favor quantity over quality:

Volicon Media Intelligence service also recommends that you check the "Enable favor quantity over quality" checkbox for the best experience, using Internet Explorer to run multiple players.

Make your choices and click <Next>.

Volicon Media Intelligence service presents you with the "Completing the Media Player Setup Wizard" window.



Volicon	Observer Media Player x64 Setup finished
<u></u>	Observer Media Player x64 8, 1, 53262 has been installed on your computer.
	Click Finish to dose this wizard.
Observer Media Player	

Figure: Completing the Media Setup Wizard window

Click <Finish> to exit setup.

3.4.2 Updating the Volicon Media Intelligence service player

From time to time, you may receive a notification that there is a new version of the player available. Follow the prompts and install the upgrade. You will be prompted to shutdown IE to perform the install.

Install ActiveX Player
There is a new version of ActiveX Player, please download and install. Installed version: 8.0.0.48755 New version: 8.0.0.49196
DOWNLOAD
Figure: Update media player

Tech tip Upgrading the player requires administrator rights, just like the initial installation.



4 Common functions

Each of the task icons takes you to a task-specific suite. At the left side of each page is a ribbon with multiple icons optimized for the task at hand and color-coded to the home page icons. Several tasks are common to multiple suites. The remaining tasks are unique to the specific suite. Depending on your permissions and optional components, not all icons may be visible.

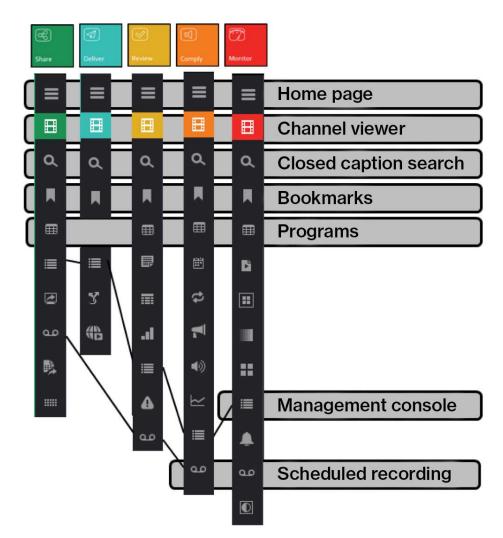


Figure: Common functions



We will use the Share suite to illustrate how to use the common Volicon Media Intelligence service functions, and then we will delve into the specific details of each suite.

4.1 Channel viewer tab

Pressing the **<Share>** icon on the home page opens the Share suite in viewer mode. The viewer initially shows up as a large grey space to the right of the channel dashboard. Multiple programs may be viewed simultaneously; you may either view different channels or different programs within a single channel.

		Title bar	High level controls
Volicon verizor	V digital Media Services Share		werkzon' approximation Unlimited session
E Channels	Viewer		cc 🏢 🖩 🕄
Navigation	Press the triangle to expand Clicking the desired channel If Multiple streams are select	nel dashboard /contract dashboard. opens the stream in the Viewer. ted defaults to storyboard view.	Misc. controls
		Viewer Pane Displays one or more programs	
		Player controls	

Figure: View page layout

As channels are selected, they appear in the viewer. If more than one channel is selected, audio of subsequent channels is inhibited. To activate the audio of another channel, hover over that program and left click. The channel name turns blue, indicating it is the active audio channel.

At the bottom of each channel player are various controls. If the channel is available in more than one bit rate or resolution, the options are displayed in a dropdown to the left of the **<Live>** icon.

If Volicon Media Intelligence service does not have enough space to display all the controls, they are collapsed; hovering over the control ribbon expands to display any hidden icons. If multiple channels are selected, the channel viewers are shrunk to fit the available space while maintaining the correct aspect ratio.

The number of video streams you can watch simultaneously depends on the Volicon Media Intelligence service software license, your computer's performance and the speed of your network connection. Assuming there's



sufficient network bandwidth, the player should be able to display up to 24 SD or 12 HD programs.

4.1.1 Channel dashboard

The **<Viewer>** tab gives you access to the channel dashboard, which lists all the video channel(s) to which you have been allowed access. Clicking the triangle at the upper-right of the "Channels" heading expands/contracts the "Channel" pane. For quick access to a particular video channel, click the checkbox beside the desired channel. Volicon Media Intelligence service will open that stream in the "Player" window.

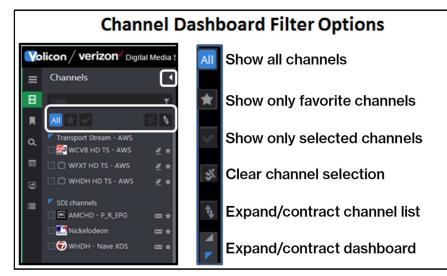


Figure: Channel dashboard

The **<Filter>** feature at the top of the dashboard provides a quick way to restrict the channel display. Type in the desired channel name into the "Filter" text box. Volicon Media Intelligence service then displays only channels that match the string. You do not need to enter the entire channel name.

To set a favorite channel, hover over the **<Favorite>** icon to the right of the desired channel and left click to turn it gold **1**. Left clicking toggles it back to grey. To restrict the dashboard to your favorites, click **<Show favorites**.

The **<Show only selected channels>** feature works in a similar manner, restricting the dashboard to only selected channels. To select a channel, check the box to the left of the channel name.

The channel dashboard displays all the channels available to you. To display a video stream in the "Player" window, click the check(s) by the video stream



names you wish to display. The Volicon Media Intelligence service will display your video streams in the "Player" window.

Volicon Media Intelligence service automatically adjusts for different aspect ratios and resizes player windows if multiple streams are selected. Audio is enabled on the first stream selected and disabled on subsequent streams. To enable audio on a different video stream, click on the desired **<Player>** window. The stream with active audio is indicated with a blue background in the channel dashboard, and the channel name changes from white to blue in the player.

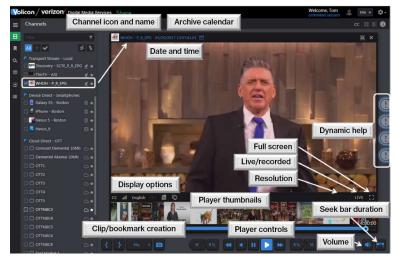


Figure: Player controls

4.1.2 Miscellaneous viewer controls

At the upper-right of the viewer are controls to select **<Split-screen>** or **<Picture-in-picture>** view when multiple players are active. At the extreme right is an **<Info>** i button that displays Volicon Media Intelligence service hotkeys. Lastly, if only a single player is active, the **<CC>** icon is displayed; this enables you to view timestamped CC text to the right of the player.



V	olicon verizon ^v d	igital Media S	ervices Share		verizon/	Welcome, Tom	¢.
=	Channels		Viewer		C II II 0	Closed captions A	uto scroll
B		Ŧ		PBS - WGBH 2017-09-15 15:33:40.15 🖭 16:9 🗙		tree	×т
R	All 🖸 🖌	55 %				11 items found.	the
٩	ANALOG			CC text search		trees now "I	bugh
	🗆 🎎 CBS - WBZ			CC		the trees now \$	see
æ	E FOX - WFXT			pr 10		pine trees in a desert? 15:11:02 Yeah, this a	lives
-	MyTV - WSBK MyTV - WBTS	··· *				1 P	
	MBC - WBIS					Automatically update CC in syr	nc
						with player	
						15:31-58 forgets about it, a ne	
P3.						growst	C
						15:32:16 There are ants who e wooded trees.	at the
	G G ST83			C all English (Sinned States) - S - 🗂 🕞 👘 Live 门		15:32:21 under control, which those trees.	helps
				18.000 L8.000		15:32:24 Trees provide homes	for
						raccoonst	
	гоп			1F X 4 4 1 D 🕨 X 1F UVE			
	ABC OTT						
	ABC OTT1			154 * 🖸	•	COPY TO CUP	BOARD

Figure: Timestamped closed captions

Click on the **<Copy to clipboard>** icon to paste the CC text into your computer's clipboard. Depending on which browser you are using, this may require the installation of Adobe Flash. Volicon Media Intelligence service displays an alert at the top of the page once the text has been successfully copied.

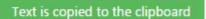


Figure: Copy CC to clipboard

Once copied to the clipboard, you can paste the text into another document.

4.1.2.1 Player views

Use the two icons at the upper-right corner of the "Viewer" page to switch between **Split-screen>** and **Picture-in-picture>** view. To return to channel view, press **SESC>**.





Figure: Channel view

Figure: Picture-in-picture view





Figure: Split-screen view



4.1.2.2 Keyboard hotkeys

In addition to the on-screen icons, many viewer functions can be controlled via keyboard hotkeys. This is often more convenient than using the mouse for common operations. Pressing the **<Information>** 1 button at the top-right of the player window opens the "Hotkey info" page.



Figure: Keyboard hotkeys

4.1.2.3 Online help

Depending on your browser and system configuration, you may see a series of icons at the extreme right of your screen. Click on these for quick access to help topics about specific features. There are more help topics available from the toolbar under the "Help & tutorials" section. They will be discussed in details in the "Tools" section.

4.1.3 Using the Player window

To close a stream, click the **<X>** in the upper right-hand side of the stream, or click the **<Channel name>** in the channel dashboard. The player displays the program date and time at the top of the "Player" window. The **LIVE** symbol at the lower-right of the player is green when the program is being displayed in real time. When a recorded program is playing, the **LIVE** icon is white.



4.1.4 Seeking back in time

Volicon Media Intelligence service lets you switch between watching the channel live or a recorded version up to the limit set by your Volicon Media Intelligence service administrator.

To select a different date and time, click on the **<Calendar>** icon to the right of the date/time display.

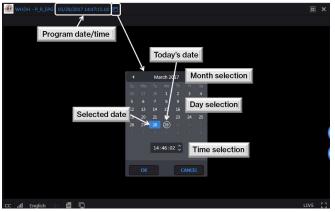


Figure: Recorded program time and date

The **<Calendar>** function allows you to access your historical feeds by date and time. The **<Calendar>** function is sticky; if you close the stream and reopen it, the player resumes from where it left off. Pressing the **<LIVE>** button on the right of the media player bar switches to live stream and resets the calendar to the current time.

Info tip

You can only view historic video back to the date either when the system was initially installed or back to the time configured for video storage duration, whichever time is most recent.

If you select a video that is not available, an error message is displayed at the top of the "Viewer" frame. The player will continue with the previous time. The alert indicates the oldest date that is available.

WHDH - Nave XDS -- No video found. Nearest available time is: 03/02/2017 01:30:35

Figure: 'Video not found' error message



In some cases, the desired program is archived offline. In that case, you are presented with a dialog box asking if you want to retrieve the archived program.

Warning - WFXT_HD	×
Content is archived. Would y retrieve it? (retrieval wait tin 5 minutes.)	
ОК	CANCEL
	LIVE

Figure: Offline program retrieval

An alert message at the top of the screen indicates the program is being retrieved.

WFXT HD TS - AWS: Retrieving archived content from remote storage. Player will resume when content becomes available. Press LIVE to abort. × Figure: Offline retrieval status

4.1.5 Controlling your video streams

After you select a video stream(s) for display, a media player bar opens along the bottom of the display frame. The media player bar controls all of the video stream(s) in your window simultaneously.



Figure: Media player bar



The player buttons allow you to rapidly scan through historical programs. From left to right, the buttons perform the following functions:

- 1F: Frame rewind; rewinds one frame each time the button is pressed
- X1/2 half-speed rewind: Rewinds at half the normal frame rate
- **Fast rewind:** Rewinds at twice the normal frame rate, or continue to click for 8x
- Rewind: Rewinds at the normal frame rate
- Pause: Pauses playback
- Play: Moves forward at the normal frame rate
- Fast forward: Moves forward at 2x the normal frame rate, continue to click for 8x
- X1/2: Half-speed forward playback
- 1 Frame forward: Advances one frame each time button is pressed
- LIVE: Synchs up all the video streams in the player window with the most recent content; two ways to ensure you are viewing the most recent content:
 - 3. The **LIVE** indicator on player turns green when playing a live feed and white when playing a historical program
 - 4. Most recent view by the date/time identification at the top of the player

The power of Volicon Media Intelligence service is in its ability to support many sessions or users simultaneously without affecting other users. For example, what you do in the "Player" window only affects your "Player" window. It has no effect on other users. Volicon Media Intelligence service is the only program of its kind that provides you with the complete freedom to perform your job functions when and as you need to perform them.

In the example below, both video streams are paused. Clicking on the **<LIVE>** button causes the Volicon Media Intelligence service to simultaneously retrieve the current live content for both streams.

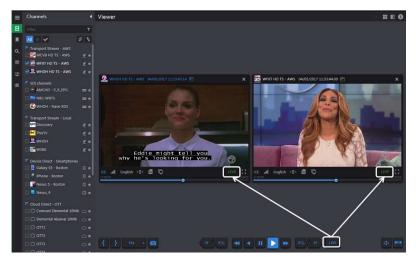


Figure: Simultaneous control



4.1.5.1 Volume control



Mute – Clicking the speaker icon toggles audio on and off

Volume adjustment – Clicking the speaker icon toggles audio on and off

Figure: Volume control

Use the volume control, located in the lower right-hand corner of the page, to set or mute audio. If you have multiple video streams open, you only hear audio from a single stream. Left clicking inside any open video stream enables audio for that stream and mutes the others. The channel name turns blue to indicate the active audio channel.

4.1.5.2 Seeking within a program

The Volicon Media Intelligence service media player video feeds do not have a finite end to the video stream like other internet-based video streams. Therefore, we cannot count down to the end of the currently playing video. Instead, the seek bar is used to select a time duration. Once selected, the value is displayed in the seek bar as a reminder.



Figure: Seek control

Clicking anywhere on the **<Seek>** bar resets the program to a new time relative to the duration of the bar. If the program has been recorded, you can easily seek forward or backward in time. When the program reaches the end of the seek bar duration, the bar is automatically reset to the next interval, either forward or backward in time.

Click on the **<Seek time>** button at the lower right-hand corner to change the duration of the seek bar.

Time info is displayed at the top of the player. To return to the most recent content, click the **<LIVE>** button, and all video streams will begin playing live content again. Each open window may be individually controlled in the same manner by clicking on the **<LIVE>** icon within the individual video player.



4.1.5.3 Live program time accuracy

In this context, "live" means "real time to Volicon Media Intelligence service." Volicon Media Intelligence service ingests live video, transcodes it, stores it and streams it out to you as an end user. This process takes a few seconds. Thus, the "live" feed is several seconds behind real time.

Due to the amount of time it takes Volicon Media Intelligence service to ingest the video stream, and the accuracy (or lack thereof) of your PC real-time clock, the time displayed on the live video stream may lead or lag the time on your computer by several seconds. The size of the difference is a combination of the time it takes Volicon Media Intelligence service to ingest the video stream and how accurate and often your PC is synchronized to an NTP server.

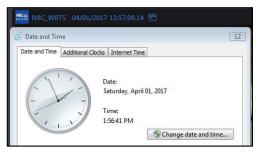


Figure: Time accuracy

4.1.6 Player thumbnail

A few moments after the video beings playing, you may see it resize and thumbnails populating below the video. Thumbnails are only displayed when viewing a single channel, and if the service has been enabled by your Volicon Media Intelligence service administrator. With a recorded program, you can use the thumbnail storyboard to quickly move forward and backward in time. With a live program, obviously, you are only able to move backward.

At the end of the seek interval, the thumbnails are automatically updated with the next time increment.



Figure: Recorded and live thumbnails

4.1.7 Stream advanced actions bar



Figure: Advanced actions bar

ali

📭 S 🕈 📋 🖸

Volicon Media Intelligence service provides you with several tools for managing individual video streams within the "Video stream" window itself. Located below each player window is the **<Advanced actions>** bar. From right to left, these actions are:

- · Closed captions display CC text.
- · Audio loudness meter displays the audio level bar chart.
- Language selects the audio track and is greyed out if there is only a single audio track.
- **Synch to me** forces other players to the same time as this one. It's only visible when watching more than one program.
- Metadata displays various metadata about the program.
- Clone opens another viewer with the same program.
- **Resolution** action is accessible using the **<Resolution>** icon when a program is available in more than one resolution or bit rate, and you want to make a selection. This icon is only visible if more than one version of the program is available.
- **LIVE** is green when live and white for recorded programs. Clicking this icon will change the player to live and does not affect other players.
- Full screen changes the program to full screen. Press <ESC> to return.

4.1.7.1 Closed captioning

You can turn closed captioning on or off for individual streams by using the **<CC>** button in the lower-left portion of the "Viewer" window. If the stream is not configured for closed captioning, the **<CC>** button is greyed out.

The default closed captioning setting (on or off) can be set from the "Preferences" section of the Volicon Media Intelligence service toolbar. This is explained in the "Tools" section of this manual.



Volicon Media Intelligence service always captures the CC data if the admin has configured it to do so, which allows you to go to any point in time and view it. When Volicon Media Intelligence service displays the CC text, it conforms to the SMPTE profile of W3C Timed Text Markup Language (TTML), which preserves the position, transparency, font, color and timing.



Figure: Closed captioning

4.1.7.2 Loudness meter

The loudness meter displays real-time audio loudness in a bar graph format.



Figure: Loudness meter

4.1.7.3 Audio language

If the program supports multiple languages or numbers of audio channels, use this button to select the desired version. The loudness meter automatically reflects how this option is set.



Figure: Language selection



4.1.7.4 Sync to me

If you have several video streams open, and need to know what each one is displaying at a specific date and time, you can move a single video stream to a specific date and time, then click the **<Sync to me>** button. Volicon Media Intelligence service will set all open video streams to match the date and time of your selected program.



Figure: Sync to me

4.1.7.5 Metadata

The data stream contains additional information about the program; this is called metadata, or data about the data. Clicking the **<Metadata information>** icon allows you to select metadata sets associated with the video stream. Available metadata will vary depending on the specific channel.

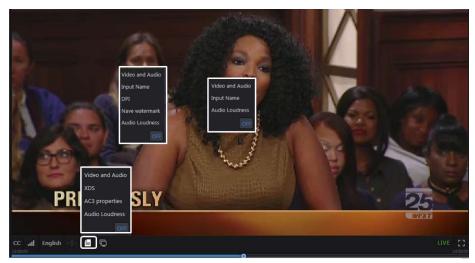


Figure: Different channel metadata menus



The **<Video and audio metadata>** option displays the video codec, resolution, bits per second, frames per second and audio sampling frequency of each video stream. The audio status displays the metadata for selected active audio if the program includes multiple audio tracks, such as English and Spanish.

If the CC display is turned on, the "CC" field lists details about CC; otherwise, it is listed as "None".



Figure: Video and audio metadata

XDS displays the source, title and program rating if present in the video stream.



Figure: XDS metadata

NAVE (Nielsen Audio Video Encoder) watermark will display the metadata of the video stream you are watching if the stream carries a NAVE watermark.



Figure: NAVE watermark



Audio loudness displays the audio regulatory environment from which the video stream originated. If the channel includes multiple audio versions, the active one is displayed.

AudioLoudness(eng)	
DIALNORM:27	and the second se
SPEECH :TRUE ,-33.10] M:-24.7]kfs S:-27.1 A	kfs dj:0.0
	TruePeak
10s 70-3 -26.2 2.1 15s 70-3 -25.8 2.2	
205 70-3 -25.4 2.2	
	-11.0
45s 70-3 -25.4 2.1 1.0m 70-3 -25.3 1.9	-10.9 -10.9
1.0h dial -26.9 4.00	-9.88
6.0h dial -26.8 3.79 1.0d dial -26.8 4.07	-9.44
1.0d dial -26.8 4.07	-0.52

Figure: Audio loudness metadata

AC3 Properties is the technical name for Dolby Digital Audio Compression. It has been standardized by the Advanced Television Systems Committee (ATSC), and is used for the efficient encoding of surround sound. If your video stream is carrying AC3 information to create surround sound, choosing AC3 will display that metadata.



Figure: AC3 metadata

AFD (Active Format Description) is a standard set of codes for television or set-top box decoders. AFD displays that metadata on your video stream. The AFD information instructs the Volicon Media Intelligence service as to what specific format is being sent (either 4:3 or 16:9). Since programs can vary in format in a given stream, the Volicon Media Intelligence service will use the AFD to adjust the format dynamically for display.

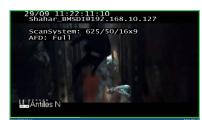


Figure: AFD metadata



DPI (Digital Program Insertion) allows cable headends and broadcast affiliates to insert locally-generated commercials and short programs into remotely-distributed regional programs before they are delivered to home users. If your video stream is displaying locally-generated programming, you can see its parameters by observing the DPI metadata.

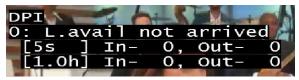


Figure: DPI metadata

Input name displays the name of the Volicon Media Intelligence service input used to ingest the stream.



Figure: Input name metadata

4.1.7.6 Clone

The **<Clone>** Image function allows you to open multiple viewers displaying the same video stream. Once opened, each stream may be set to a different date and time and display different metadata. In the example below, a live stream displays both English and Spanish audio loudness.



Figure: Player cloning



4.1.7.7 Resolution

If the program is available in more than one bit rate or resolution, use the dropdown to select the desired version.



Figure: Program resolution and bit rate

4.1.7.8 Live

The LIVE icon at the bottom-right of each player is green if a program is live and turns LIVE white when playing recorded material. Use the **<Calendar>** feature at the top of the screen to select a recorded program. Clicking the **<LIVE>** LIVE icon on each player toggles that player between live and recorded.

Pressing the **<LIVE>** button at the bottom of the page switches all players to real-time view.

4.1.7.9 Full screen

The **<Full screen>** icon expands the viewer to full screen. If multiple viewers are active, only the viewer selected for full screen is expanded; the others are unaffected. Pressing the **<ESC>** key reverts back to normal view.

4.1.7.10 Manual tuning mode

Normally Volicon Media Intelligence service permanently assigns a probe ingress port to each channel. Optionally, one or more ingress ports may be configured for manual control using a virtual set-top box (STB). This allows the viewer to be switched between multiple programs. Channels thus configured will have a **<Set-top box>** icon to the left of the "Favorites" star.

When using this feature, the player connects in live mode, and most player controls are locked out, except for volume and hour span.



Manual mode control options

An ingress port configured for manual mode may be in one of several states. In addition to direct user control, Volicon Media Intelligence service allows the recording of specific channels and programs to be performed automatically under scheduler control. This is typically configured by the Volicon Media Intelligence service administrator. To take control of the STB, hover over the **<STB>** icon and click.

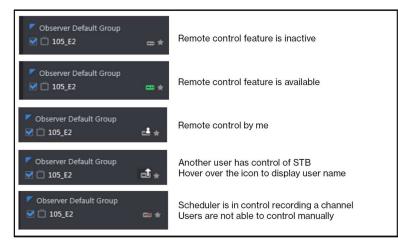


Figure: Manual STB operational modes



Figure: Manual tuning controls



When this feature is activated, a remote control tuning bar is displayed above the normal player controls. From left to right, the controls are as follows:

Dial by command	Opens list of preprogramed STB channels – bouquet
Command	Sends direct text commands to STB
Send command	Sends command to STB
Info	STB displays info about current program
Previous channel	Switches to previous channel
Next channel	Switches to next channel
Last channel	Switches STB to last view channel
Open remote	Displays image of remote control (optional)
Power	Switches STB between normal and standby

Table: STB manual tuning controls

Bouquets

In manual tuning mode, the channel list displays station names, eliminating the need to remember specific channel numbers. This association is called a "Bouquet", a high-level grouping of channels accessible from the specific STB.

Virtual remote control

The system may be configured with a virtual remote control. In that case, an image of the STB hand-held remote control appears to the right of the player. Hover over a function and click, just as if using a real remote.



Figure: Virtual remote control



4.1.8 Storyboard view

The **<Storyboard>** feature works when viewing a single channel. Open the player and click on the **<Storyboard>** icon at the upper-right corner of the player. The player will reduce in size and move to the left. The right-hand side of the screen is populated with storyboard thumbnails. Use the icons at the top of the storyboard to select the storyboard duration and to move forward or backward in time.

Click on a thumbnail to have the player move to that frame. To exit, click on the **<Exit>** icon in the upper-right corner of the screen.

You can create bookmarks in storyboard view. Click on a thumbnail to mark in the beginning of the bookmark and a later thumbnail to mark the end. Once created, process the bookmark the same way as others.



Figure: Storyboard view



4.1.9 Snapshots

Clicking the **<Camera>** I icon (located on the lower-left side of the screen) creates a JPG of the active player. The storage location defaults to the browser-download setting. Volicon Media Intelligence service automatically creates an alphanumeric file name consisting of the channel name and sequence number. You can override the default location and the file name by using the **<Save as>** dropdown. The exact status message depends on which browser you are using. The figure below is IE.

Do you want to open or save AB1_130912217376390871.jpg from observer2.volicon.com?			e V Cancel lave lave as lave and open	×
The AB1_130912217376390871.jpg download has completed.	Open	• Open folder	View downloads	×

Figure: Program snapshot – IE

		_
OTT_ENC_10_1315jpg ^	Show all	×

Figure: Program snapshot - Chrome

Once saved, the image can be manipulated and shared like any other picture.

4.1.10 Bookmarks

Volicon Media Intelligence service allows you to identify portions of your video streams called bookmarks, and it stores those identifications for future use. Creating a bookmark does not create a unique copy of the video; it simply marks a portion of a video stream and is available for as long as that particular channel stream is archived within Volicon Media Intelligence service.

The term "clip" can be misleading, as it implies that when you create a clip, you are choosing content, cutting it out of the stream (or perhaps making a copy of it) and storing it somewhere else. Volicon Media Intelligence service does **not** use this process for clip generation. Instead, Volicon Media Intelligence service creates a clip by inserting bookmarks at the start and at the end of your chosen content. It stores those bookmarks, along with the streams themselves, in your main storage folder. When you call up a clip, Volicon Media Intelligence service uses those bookmarks to rapidly search your stored content to play the stream you are looking for.



This process provides many benefits:

- · It allows rapid retrieval of content you have identified and clipped.
- Because the clips are actually bookmarks inserted in the main stream, you can create as many clips as you like, without consuming any of your storage space. This allows you to save metadata along with segments of video.
- It allows you to export a permanent copy of content from Volicon Media Intelligence service to your PC/laptop.

Volicon Media Intelligence service stores clips for the same amount of time as the video is stored. After that time, the clip, and any associated video, will be deleted.

For example, you create a clip from live content; if the content is retained on Volicon Media Intelligence service for 90 days, the clip will be stored for 90 days. If you create the clip from 60-day-old historic content, the clip will be stored for the next 30 days. The clip will be saved on the system based on the origination of when the video was logged, not from when the clip was created.

Volicon Media Intelligence service allows you to search manually for the content you wish to bookmark. You can create individual clips by marking the video stream. You can also create multiple clips at once by opening multiple streams. For example, if you **<Mark in>** and **<Mark out>** with four streams open, Volicon Media Intelligence service will create four clips.

4.1.10.1 Setting bookmark length

Using the **<Mark out>** button lets you manually set bookmark length. Clip length may also be preset. Clip length is relative to the start time. That way, you can easily create bookmarks that begin before you click **<Mark in>**. To define clip length, press the **<Up>** triangle located to the right of the **<Quick clip>** button. Select the desired clip length. Once you select a length, it is displayed on the face of the **<Quick clip>** button.



Figure: Setting bookmark length

4.1.10.2 Creating a bookmark

Consider a circumstance in which a customer wants assurance that their commercial did in fact play at 4:13 PM on WFXT. Start by calling up the WFXT stream. Use the **<Calendar>** function to select desired date and time.



Press the **<Mark in>** button to initiate the clip-creation process. To mark the end of the clip, you have two options: 1) pressing the **<Mark out>** button to manually terminate the clip, or 2) use the **<Quick clip>** button to the right of the **<Mark out>** button. As a reminder, it displays the preset clip length.

The player control buttons allow stepping forward and backward on a frame-byframe basis, enabling you to precisely mark the section of interest.

If you have multiple players open, Volicon Media Intelligence service creates a bookmark of each one. The bookmark is relative to the current seek time, so individual players do not need to be set to the same time or date.

4.1.10.3 Bookmark clip management pane

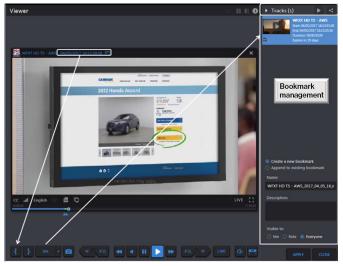


Figure: Bookmark creation

When the **<Mark in>** button is pressed, the viewer automatically opens the "Clip management" pane on the right-hand side of the screen.



Figure: Bookmark control pane

From left to right, the controls are as follows:

Triangle collapses and expands the "Management" pane.

Tracks (x) denote number of bookmarked tracks in the pane.



Play plays the track if there is only one, or plays the next track if there are more than one. When the last track is played, it goes back to the first. Each time the button is pressed, the next clip is played.

Share all tracks as one combines them into a single group if there are multiple clips. Except for grouping, the **<Sharing>** feature is the same as under the individual clip.

4.1.10.4 Individual bookmark clip controls

There are several controls that apply to individual clips. Position the mouse cursor over the **<Clip preview>** frame to activate the additional controls.

From left to right, the controls are as follows:

Play plays the individual clip.

Share track publishes the clip to external sites. The sharing options are set via the **Tools** \rightarrow **Settings** option.

Export track allows you to copy the clip to your PC.

Trash deletes the bookmark.

Edit track allows you to make changes to the bookmark.

Start jumps to beginning of the bookmark.

End jumps to end of the bookmark.

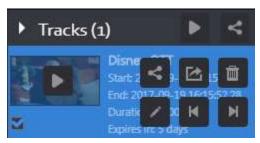


Figure: Bookmark controls



4.1.10.5 Saving and naming bookmark clips

The lower portion of the "Tracks" pane lets you name the clip and determine who has access to it.

Immediately below the thumbnail(s) are two radio buttons: **<Create a new bookmark>** and **<Append to existing bookmark>**. **<Create>** is the default. When you save the clip(s), a new bookmark will be created; if the **<Append>** option is selected, the new clip(s) will be appended to an existing bookmark. Begin typing the name of an existing clip in the "Name" field. As you type, Volicon Media Intelligence service will display a list of matching clip names. Keep typing until the desired clip is displayed, or use the mouse to highlight the one you want.

<Name> defaults to the channel name with date and time appended. If multiple clips are created, <Name> is that of the first clip. To change the name, hover the mouse over the text string and left click. An <X> will appear to the right of the name. Click on the <X> to delete the text and type the new name. To edit the name, position the mouse over the location you want to change and insert the new text.

Description is the field where you enter text to further identify the purpose of the clips.

Visible to defaults to **Everyone**. Select **<Me>** or **<Role>** to change who has access to the bookmark.

Apply saves the clip(s). To view the clip(s), press the **<Bookmark>** button at the left of the screen.

Close closes the "Clip bookmark management" pane; any unsaved bookmarks will be lost.

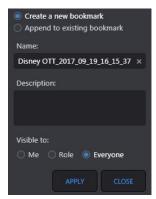
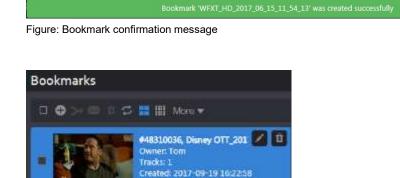


Figure: Create bookmark



When you click **<Apply>**, the bookmark is added to the bookmark list. This will be discussed in detail later. A confirmation bar appears at the top of the page.



Modified: 2017-09-19 16:22:58

Expires in: 4 days

Figure: Saved bookmark

4.1.10.6 Publishing and exporting clips

The **<Share>** and **<Export>** options are used to publish clips to a third party or save them on your PC. There are two slightly different versions of the buttons. At the top of the "Clip management" pane, the **<Share all>** and **<Export all>** buttons combine multiple tracks and publish them as a single entity. The feature requires the combined clips to all be derived from the same channel.

Sharing Clips

Pressing the **<Share>** icon opens another window, allowing you to select how the clip is shared and to select and modify the thumbnail. This feature requires the Volicon Media Intelligence service CEM export module.

Clip title and description

If desired, the title and description may be changed at any time.

Selecting and cropping the thumbnail

By default, the thumbnail is the first frame of the clip. If you want to use a different frame, press the **<Select thumbnail>** button below the player. This expands the player and allows you to move the frame cursor. When you have selected the desired frame, press the **<Capture>** button to replace the default thumbnail. Volicon Media Intelligence service allows you to crop the thumbnail. Press the **<Crop>** button and adjust the borders of the crop outline. At the bottom of the crop box, press the **<Checkmark>** I to save the thumbnail, or the **<X>** I to exit without saving.



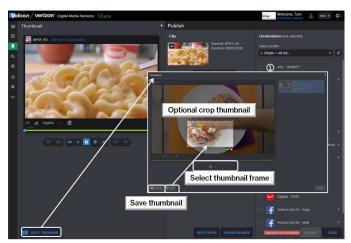


Figure: Changing and cropping thumbnail

Saving a thumbnail to your PC

The **<Download>** and **<Upload>** buttons allow you to download the thumbnail image to your workstation, modify it and then upload it back to Volicon Media Intelligence service. This enables you to do things like incorporate a corporate logo or add annotation as shown in the example above.



Figure: Download and upload thumbnail

Share Light Editor (SLE)

The SLE enables you to add the following features: intro, outro, slate, fade in, fade out and splice tracks. It is discussed in detail in the "Asset management" section.





Figure: Light editor

Advanced mode/simple mode

Clicking the **<Advanced mode/simple mode>** button at the bottom of the center panel toggles between the two modes. **<Simple mode>** is the default. **<Advanced mode>** opens another panel to give you greater control over the clip. Clicking **<Simple mode>** resets the center pane.

- **Transcoding** is accessed by using the dropdown to save the clip in a different video format.
- **Streams** default to both audio and video. Unchecking audio or video deletes that from the clip.
- **Default video** is the option to use to select a different resolution/bandwidth if there are sub-encoders configured for this channel.
- **Closed captions** allow CC to be included with the clip. If the option is selected yet the stream is not captioned, an error message appears.
- Metadata selects metadata to include with the clip.
- **Resolution** is accessed in the dropdown to select the desired resolution.
- Target bit rate is accessed in the dropdown to select the desired bit rate.
- **Timestamp** allows you to burn a timestamp to the video and select a different time zone.
- **Banner** uploads a file. Use the alignment arrows to position the banner and the **<Transparency>** option to select transparency. The **<Width>** and **<Height>** options let you control how much of the screen is occupied by the banner.
- **Maximum time accuracy** gives accurate frame-by-frame time in the export file.





Figure: Advanced mode

Publish clip

When publishing a clip, the default setting is "Immediate". If desired, you can specify a delay. Once set, Volicon Media Intelligence service will automatically publish the clip at the specified date and time.

Destinations are grouped by profile. Select the profile and one or more destinations. A single clip may be sent to multiple destinations simultaneously. Some destinations allow the entry of additional information, denoted by a triangle to the right of the name. Click the **<Triangle>** to open the dialog box. Enter the relevant information and click **<OK>** or **<Cancel>**. Then press the **<Publish>** button at the bottom of the page.

Status messages appear at the top of the screen, announcing publishing has started and whether or not it was successful. These announcements will close after a short period. Publish destinations are typically configured by your Volicon Media Intelligence service administrator, rather than individual users.

The **<Export duration>** and **<File name>** tags are at the top of the left-hand pane. Duration information is read-only. The bookmark name defaults to the channel name and timestamp. If desired, you can change it to something more descriptive.



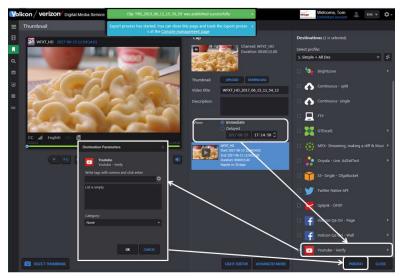


Figure: Publish clip

Export clip – Using Internet Explorer

This feature works similarly as publishing, only it allows you to save the clip to your PC. When using IE, pressing **<Export>** opens a dialog box, allowing you to select the location and specify how the clip is encoded. A completion message is displayed once the clip has been saved.

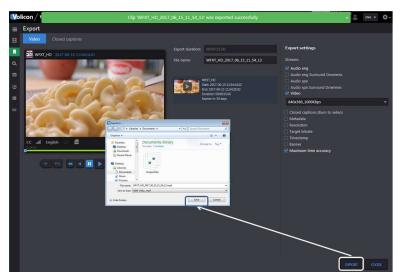


Figure: IE clip export

Export clip – Using Volicon Media Intelligence service Content Export Module (CEM)

The export of a clip is an accessible process when using Volicon Media Intelligence service CEM. When using other browsers, the process is slightly



different; the clip is saved on the CEM server. The server generates a link that allows the user to access the clip.

ır file (WFXT_HD_2017_06_15_11_54_13.mp4) is ready. <u>click here</u> to downlo
	Opening WFXT_HD_2017_06_15_11_54_13.mp4
	You have chosen to open:
	WFXT_HD_2017_06_15_11_54_13.mp4
	which is: MP4 Video (2.4 MB)
	from: http://52.207.171.105:88
	What should Firefox do with this file?
	Qpen with Windows Media Player (default)
	⊙ Şave File
	Do this automatically for files like this from now on.

Figure: CEM links to saved clip

4.2 Closed captions tab

This page displays clips of programs that include CC text. When this tab is first clicked, the page displays all CC programs. The clips can be displayed in either **<Grid view>** or **<List view>** by pressing the appropriate icons at the top of the program list. **<Grid view>** displays a thumbnail of each clip, CC text and the time and channel. In **<List view>**, the icon is smaller, and information about the clip is displayed in a columnar format. The **<Customize columns>** icon only appears in **<List view>**; use it to specify which columns to display.

In a typical system, there will be a large number of CC clips; Volicon Media Intelligence service lists the page numbers at the upper-right of the screen. Use this feature to move through multiple pages.

Use the **<Search>** feature at the left of the page to reduce the number of clips displayed.

In the example below, we search the ABC-WCRB channel for 20-second clips.



		Closed captions search		
				3456720
		Video Caption	Time of appearance	Channel
		HOW ARE YOU?		
chp duration (minutes):	10 20	₩ <u>₩</u> >> ELLEN: 6000.		
Channel list	Ŷ	>> HOW ARE YOU?		
	5 1	CHEERS AND APPLAUSE		
Transport Stream - AWS WCVB HD TS - AWS	z .	PLEASE WELCOME ADAM SANDLER.		
WFXT HD TS - AWS WHDH HD TS - AWS	2 * 7 *	WEXLER.		
		IEHIS NEW MOV IS"SANDY CALLED		
NBC-WBTS WHDH - Nave XDS	œ * œ *	AGO.		
Transport Stream - Local		VEARS TURDAY NIGHT LIVE" 27		
Discovery	± * ± *	VERY FUNNY GUY WHO GOT HIS START		
Service Servic		>>> ELLEN: OUR FIRST GUEST IS A		
Analog Channels		ASK YOUR DOCTOR ABOUT ONCE-WEEKLY TRULICITY.		
ABC_WCVB		CLICK TO ACTIVATE YOUR WITHIN.		
		WITH A NON-INSULIN OPTION.		

Figure: CC search result

Left clicking the desired clip opens up the player and displays the CC text to the left with a movable highlight bar synchronized to the video. The clip name is displayed above the player.

While viewing the clip, you are able to edit and share it with others.



Figure: Playing closed-captioned clip

4.2.1 Copying closed-captioned text

At the bottom of the CC text is a **<Copy to clipboard>** button. Pressing the button copies the CC text from the clip to the clipboard on your computer. From there, you can paste it in a document. A status bar appears once the text has been copied to the clipboard.

ext is copied to the clipboard

Figure: Copy of CC text to clipboard



If this feature has not been enabled, you will receive the following error message.



4.3 Bookmarks tab

Bookmarks are short sections of video. Volicon Media Intelligence service allows bookmarks to be accessible to just you, accessible to everyone or limited to particular roles.

4.3.1 Managing bookmarks

To access your bookmarks, click on the **<Bookmarks>** icon in the left-hand pane.

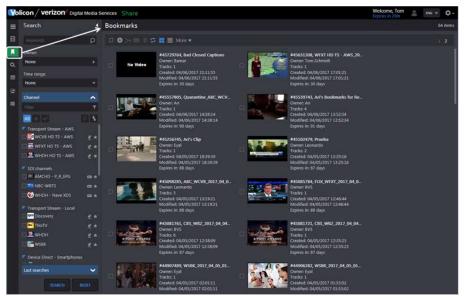


Figure: Bookmarks page

This will display your bookmarks and any bookmarks that others have chosen to share with you.

4.3.1.1 Searching bookmarks

The left-hand search pane allows you to select only those bookmarks of interest. Search criteria include:



Keyword searches words in the bookmark description.

Owner is the account name of the person who created the bookmark. Volicon Media Intelligence service does smart matching as you type the account name, so you don't have to type the entire name.

Time range limits search to the date the bookmark was created or modified or to a video time range.

Channel list restricts search to specific channels. The feature may be expanded or collapsed by pressing the chevron on the right. Typing all or part of a channel name into the **<Filter>** text box limits the display to matching channels.

Last searches remember the last five searches. This feature may also be expanded or collapsed by pressing the chevron on the right.

Once you have entered your search criteria, press **Search>** at the bottom of the pane. The page will be refreshed with only bookmarks that match the search criteria. To clear search parameters, press **Reset>**.

Let's say you want to review all the bookmarks for CBS and PBS. Expand the channel list, if not already expanded, and select CBS and PBS. Press **Search>**. The page will refresh; but now it only shows bookmarks that match your search criteria. The number of matches is displayed in the upper-right. In this case, there are more bookmarks than can be displayed at one time; therefore, you need to use the **Scroll>** bar at the extreme right.



Figure: Bookmark search result



Note that since we searched by channel, the displayed clips have multiple owners. Whether or not a particular bookmark is visible depends on how the bookmark owner set the sharing policy.

🗆 🔁 >> 🖾 🏛 🗢 🚻 More 🖣

1 2

Figure: Bookmark ribbon

The ribbon above the bookmarks provides tools to manage and combine bookmarks. Icon descriptions from left to right are:

Select/deselect all is useful if you need to merge bookmarks, rather than individually selecting each one.

Add bookmark displays the channel list, allowing you to select a channel, time and date to create a new bookmark.

Merge combines multiple clips into one. This **<Edit>** feature operates the same as when the clip was first created.

Send select bookmarks emails bookmarks to specific entities.



Delete deletes all selected bookmarks.



Auto refresh automatically updates the page every 30 seconds.



Grid view displays the thumbnail and description of the bookmark.

List view shrinks the thumbnail and displays more information about the bookmark.

Customize columns is only displayed in list view. Check or uncheck desired columns.



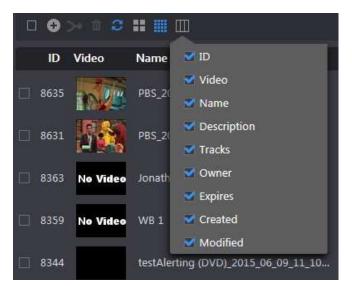


Figure: Customize bookmark columns

More indicates there are three options: **<Delete all>**, **<Deselect all>** and **<Export list>**. **<Delete all>** removes all bookmarks. If any bookmarks are selected, pressing **<Deselect all>** unchecks them. Pressing **<Export list>** creates an Excel spreadsheet of all bookmarks. A dialog box appears, allowing you to view or save the spreadsheet.

Do you want to open or save bookmark_2017_04_07-18_53_41.xisx from observer.volicon.com?	Open	Save	-	Cancel	×
					-

Figure: Save bookmark dialog

Page # allows you to go to a specific page if there is a lengthy bookmark list that straddles multiple pages.

4.3.1.2 Editing and playing bookmarks

Hover over the desired bookmark, and the area surrounding the bookmark turns blue. Click the desired thumbnail to play the clip. Clicking the **<Pencil>** allows you to edit the bookmark. Clicking on the **<Trash>** deletes it.



Figure: Play/edit bookmark



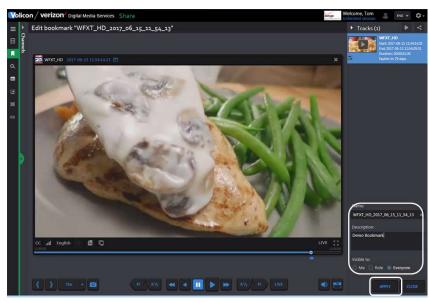


Figure: Bookmark edit window

The "Edit" window functionality is identical to what you are able to do when initially creating a bookmark (i.e., sharing, naming, visibility, etc.). Press **<Apply>** to update your changes.

4.3.1.3 Sharing and exporting your bookmarks

Sharing and exporting work functions the same way in the "Edit" window as it does when first creating the bookmark.

4.4 Programs tab

A program is typically a one-track clip normally used to save broadcast assets like commercials.

Programs are usually set up by the Volicon Media Intelligence service administrator in the form of as-run files. This will automatically insert programs into the system using the hot folder.

This feature works similarly to the **<Bookmarks>** feature. You can search for a particular program by hovering over the program, which opens the player and allows you to view and share it.





Figure: Program viewer

To manually add a program, use the **<Add program>** I icon at the top of the page. This opens the "New program" page. Select a channel and use the **<Mark in>** and **<Mark out>** icons to create a new program as you would with any other clip.

4.5 Management console tab

This tab only appears if the Content Export Module (CEM) server is installed. It displays jobs that were exported using the optional CEM server.

The **<Column selector>** (extreme right) specifies what information is displayed.

If the list is long, page numbers appear in the upperright of the page, allowing you to quickly move to different pages. To reduce the amount of displayed information, use the **<Search>** function.

In the collapsed view, only the jobs are shown. Click **<Expanded view>** to display job tasks and parts of each task.



Figure: Management console display ribbon



Management console										37 iter
\ O = Ⅲ										
Name	Type Channel	Destination	Video start time	Duration	Created by	Faults	Status	Process	Created on	Last run
										04/05/2017 12:46:4
+ WSBK_2017_04_05_01_42_08_1 Simple + All Des										
+ WSBK_2017_04_05_01_49_34_1 Simple + All Des										

Figure: Collapsed view

Management console										37 item
\$ O ≇ Ⅲ										
Name	Type Channel	Destination	Video start time	Duration	Created by	Faults	Status	Process	Created on	Last run
										04/07/2017 14:33:4
- Ari's Bookmarks for Review_1 Simple + All Des	WHDH	Multi	04/06/2017 11:04:44	00:03:15					04/06/2017 13:52:34	04/06/2017 13:52:
Ari's Bookmarks for Review_1 Simple + All Des_Volicon Q	WHDH	Volicon Qa Ori - Page					Completed			04/06/2017 13:54:
- Local Export_FOX_WFXT_2017_04_05_11_41_55	FOX_WFXT		04/05/2017 09:39:49	00:00:30	BVS		Completed		04/05/2017 12:46:44	04/05/2017 12:46>
- WSBK_2017_04_05_01_42_08_1 Simple + All Des	WSBK	MPX- Streaming, making a diff & Mus	04/05/2017 01:42:08	00:00:15			Completed		04/05/2017 02:01:11	04/05/2017 02:01:
WSBK_2017_04_05_01_42_08_1 Simple + All Des_MPX- Str		MPX- Streaming, making a diff & Mus								

Figure: Expanded view - jobs and parts

Depending on the specific status, hovering over an item highlights it in blue and may bring up additional icons at the far-right, with detailed information. Rerun the event or delete it.

09/28/2017 09:38:24	00:00:15	dev	0/1	Completed	09/29/2017 14:49:21	09/29/2017 14:51:08	
09/28/2017 09:38:20	00:02:02	dev	<i>n</i>	Faller	09/29/2017 14:48:32	09/29/2017 14:51:08	0 1

Figure: Failed task info

4.5.1 Management console search

The **<Search>** feature enables you to home in on a specific event rather than needing to scroll through the entire list. At the bottom of the "Search" pane are two buttons: **<Search>** and **<Reset>**. **<Search>** refreshes the page with new search results; **<Reset>** clears search parameters back to default for the next search.



Keyword accepts matching text string. The search is not case sensitive.

Status is accessed in a dropdown to limit a search to the selected status type.

Destination limits a search to the selected export destinations.

Time range limits a search to a specific beginning and end time.

Created by limits a search to a specific user account.

Channel list may be expanded or collapsed. It allows you to limit a search to a specific channel. Entering text into a filter restricts channels to those that match the text.

Last search displays recent search criteria. Clicking on the search refreshes the view with that search result.

4.6 Scheduled recording tab

The **<Scheduled recording>** feature enables you to capture a program using the **<Set-top box remote control>** feature. The channel dashboard works like other tabs. Use the **<Search>** function to limit the display to specific encoders.

Pending and completed jobs are displayed to the right. Hovering over a job highlights it in blue. Clicking the **<Play>** icon plays the program once it has been recorded, and it enables you to create a bookmarked clip. The **<Delete>** icon removes the recording. If the program has not yet been recorded, use the **<Edit>** icon to modify the event.



Figure: Schedule recording display



4.6.1 Create a scheduled recording

To create a new scheduled recording, click the **<New>** icon at the top of the page. This opens the "Add scheduled recording" pane.

Event name is where you enter a descriptive name for the recording.

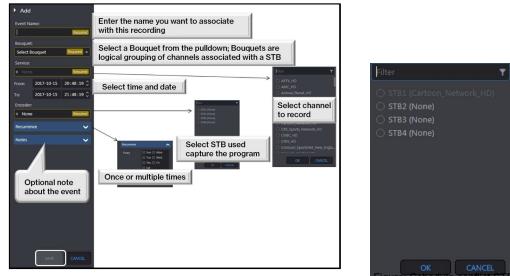
Bouquet is the dropdown you use to select a bouquet. Bouquets are logical groupings of channels associated with a STB.

Service is where you select the specific channel you are interested in recording.

From/to is where you enter the start and end times.

Encoder refers to the STB used to capture the program. At any given time, only a single program can be recorded on a given STB. If there is a scheduling conflict, that STB is greyed out. In the example shown, STB1 is busy during the needed time period, so you need to select one of the other STBs.

Recurrence allows you to override and capture the program multiple times; the default occurrence is a single recording.



Notes refer to the optional descriptive text about the event.

Figure: Create new scheduled recording

Press **<Save>** to create the event. A confirmation appears at the top of the screen indicating the event was created.



5 Using Share

Share provides a convenient workflow for the dissemination of captured assets to multiple distribution channels. The broadcaster can clip and export segments of existing content or repurposed content complete with accurate captions. One-button publishing profiles facilitate the rapid processing of content to meet appropriate container and encoding requirements for an array of platforms, including target websites, YouTube, Twitter and Facebook. **Share** also makes use of existing closed-captioned text to publish content that is compliant with government regulations.

Most **Share** features are common to the other Volicon Media Intelligence service sections and have been documented previously.

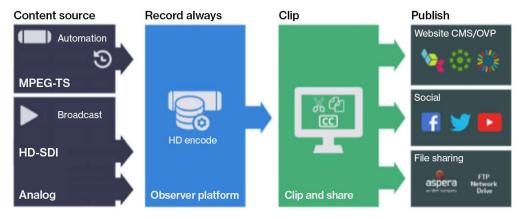


Figure: Share workflow

5.1 Advanced content export (ACE) tab

ACE facilitates monitoring and ad verification use cases as well as content creation. ACE is integrated with as-run log (ARL). It provides the ability to automatically create assets and place them in predefined locations. For example, with ACE, you can quickly choose an interval (e.g., from 5PM to 7PM), and the system will show the breakdown of individual assets with their names. From that, you are able to filter by name or duration to quickly remove irrelevant ads and merge the remaining assets into a single video file and share it.



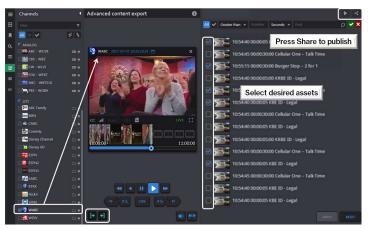


Figure: Advanced content export

Select the desired channel from the channel dashboard. The viewer is launched automatically. Press the **<Mark in>** button to begin the capture process. The right-hand panel is populated with assets until the **<Mark out>** button is pressed.

Initially, all assets are unchecked. Use the search bar to select the desired assets.

All 🗸 Greater than 👻 Number	Seconds 👻 Find 🛛 🖉 💙 🔀
Figure: ACE asset search bar	
	Toggles search between all assets or only those checked
Greater than	Selects assets longer than preset time
Less than	Selects assets shorter than preset time
Number	Selects number of occurrences
Seconds/minutes	Selects time interval
Find	Text box that selects matching assets
~	Enables search
×	Resets search criteria

Once the desired assets are selected, press **<Play all>** to view, and press **<Share tracks as one>** to share/export the track like other bookmarks.



5.2 As-run-log-based exporting

This section enables you to schedule a program export based on the ARL. The channel dashboard enables you to restrict the display to desired jobs.

The ribbon at the top of the list area allows you to manage jobs.



5.2.1 Adding an ARL export job

Several fields are required and highlighted in gold. Press the **<Info>** icon for additional information about specific fields.



Figure: ARL scheduled export

5.3 Asset library tab

This page allows you to upload pre-defined assets (video or static image) in order to use them as input for the SLE.



5.3.1 Asset search

If there are a large number of assets, use the left-hand "Search" pane to find the desired asset. Search criteria may be any combination of keyword(s), type, owner and time range. The "Search" function works like **Search>**. Use the **Search>** icon at the bottom to restrict the display to desired assets, or the **Reset>** icon to clear previous search criteria.

5.3.2 Adding an asset to the library

Click the **<Add>** icon to access the CEM assets folder structure. By default, the name of the asset is the same as the uploaded file name.



Figure: Adding file to asset library - Part 1

Click the **Save>** button at the bottom of the page to upload the asset. An "Asset uploaded successfully" message will appear at the top of the page.

Each asset will have properties, such as name, description, duration, ownercreated and resolution.

Image assets have "Image" in the duration column to differentiate them from videos.

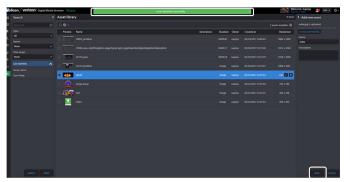


Figure: Adding file to asset library - Part 2



5.3.3 Deleting library assets

To delete an asset, hover over it and click the **<Trash>** icon at the right of the highlighted area. To delete multiple assets, check the ones to delete and click the **<Delete all>** icon at the top of the page.

5.3.4 Editing asset metadata

Hover over the desired asset and click the **<Edit>** icon. The "Edit asset" pane on the right displays asset metadata. This allows you to change the asset **<Name>** and **<Description>** but not edit the asset itself.

5.3.5 Preview an asset

Hovering over the asset highlights the entry in blue, indicating it is selected. Click the thumbnail to launch the asset player. Click **<Play>** to view the asset. To the lower-right are icons to adjust **<Volume>** and play in **<Full-screen mode>**. To close, click the **<Close>** icon at the bottom of the player or the **<X>** on top.

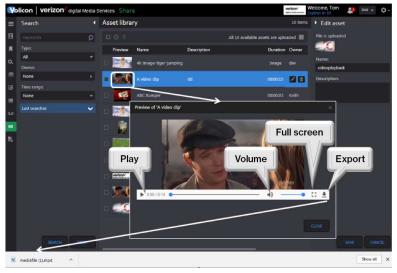


Figure: Asset preview

5.3.6 Editing video assets

The SLE enables you to add the following features: intro, outro, slate, fade in, fade out and splice tracks.

Any asset or track can be deleted by clicking the **<Delete>** icon for the respective asset.



Note

Once the clip is edited with the Share Light Editor (SLE), the **<Light editor>** button is renamed to **<Clip is edited>**, as a reminder.

Select the clip you want to edit; this can be either an existing bookmark or one newly created for the purpose. Click on **<Share track>** to access the clip.



Figure: Selecting bookmark clip to edit

Once you have the desired clip in sharing mode, click the **<Light editor>** icon at the bottom of the page to open the SLE.



Figure: Invoking the SLE



5.3.6.1 Intro/outro

To add an intro/outro, the clip must be created and shared in the asset library. Click **<Insert before>** to insert an intro, and click **<Insert after>** to insert an outro. Use the **<Zoom in>**, **<Zoom out>** and **<Fit all>** functions to adjust the timeline display.



Figure: Intro and outro

A panel pops up on the left to select the asset to be inserted as the intro/outro. Click on the asset to select it.

Note

Only video assets, as defined in the asset library page, are displayed.



Figure: Selecting intro or outro asset



After the asset is selected, it is displayed in front and back of the clip in a different color to differentiate it from the original track. Press the **<Save>** icon at the bottom of the page to update the clip.



Figure: Inserting intro and outro

5.3.6.2 Fade in/fade out

Click **<Fade in>** to add black frames at the start of a track, and **<Fade out>** to add them at the end. Press the **<Save>** icon at the bottom of the page to update the clip.



Figure: Inserting fade in and fade out



5.3.6.3 Slate

To insert a slate, click on **<Insert asset over (slate)>**. A panel will appear with the list of image assets as defined in the asset library.



Figure: Insert slate

Once the **<Slate>** function is selected, you can change the start and end time and duration. Press the **<Save>** icon at the bottom of the page to update the clip.



Figure: Adding slate

Slates cannot overlap intro and outro, but they can overlap multiple tracks, spliced or otherwise.



Figure: Slate overlap restriction



5.3.6.4 Splice tracks

A track can be divided into multiple tracks by using the **Splicer>** function located below the player. Click on the desired time in the "Track" pane, then click the **Splice>** icon to divide the track. If the track is too short to split, an error message appears at the tip of the page.





After splicing, you will see multiple tracks on the "Bookmark" page, instead of just one.



Figure: Splice result



6 Using Deliver

The Deliver suite ingests video, transcodes it into multiple profiles, encrypts it and pushes it to the Edgecast Content Delivery Network.

This section provides information about unique Deliver features. Functionality common to all Volicon Media Intelligence service sections has been documented in the previous section.

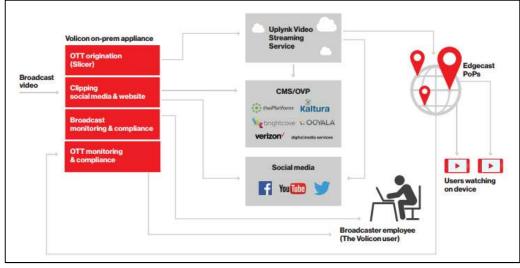


Figure: Deliver suite

6.1 Slicer monitor

The Slicer prepares content for encoding and uploads it to the Uplynk Video Streaming service CMS system. The page displays all Uplynk Video Streaming service accounts and channels. Use the slide switch at the top of the page to hide encoders that have not been configured to upload to Uplynk Video Streaming service CMS.

The first step is to enter the Uplynk Video Streaming service credentials to create a new account.

Once the account has been configured in Volicon Media Intelligence service, assign a probe encoder channel to the Uplynk Video Streaming service. This setting can only be changed when upload is disabled. Use the **<Enable Uplynk>** side-switch icon to enable/disable the program Uplynk.



Figure: Uplynk credentials



Uplynk Accounts	Encoders					
					ONLY UPLYNK OTT	
conventions live	Volicon Encoder Name	Uplynk Account	Uplynk Channels	Enable Uplynk	Uplynk status	Test Player
conventions_live	nt PBS - WGBH	conventions_live +	pbs	DIF ON		
	Record TV	conventions_live +	RecordTV	DIFF ON		
	Discovery DPI	conventions_live >	IBC Channel	DIFF ON		
	Verizon	conventions_live >	IBC volisheer 2	DIFF ON		

Figure: Uplynk channels

Once set, enable the Uplynk Video Streaming service upload and click on the **<Test player>** icon. This opens a new browser tab and plays the video.

Note

The Uplynk Video Streaming service test player requires Adobe Flash Player.



Figure: Uplynk Video Streaming service test player



6.2 Uplynk Video Streaming service CMS

This is the portal to the Uplynk Video Streaming service CMS system.

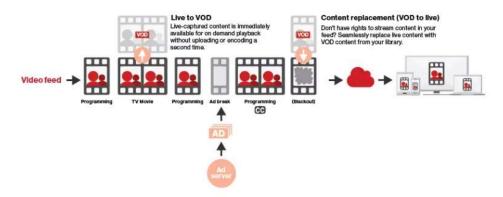


Figure: Uplynk Video Streaming service program flow



Figure: Uplynk Video Streaming service portal login



7 Using Review

Review gives you the power to monitor what other channels are doing, review ratings and analyze content. This power is essential, especially in the world of competitive news and sports. In the newsroom, where time is always of the essence, broadcasters want the ability to compare, review and analyze program content of other channels, or multiple channels, within a particular area or across networks.

This section provides information about unique Review features. Functionality common to all Volicon Media Intelligence service sections has been documented in the previous section.

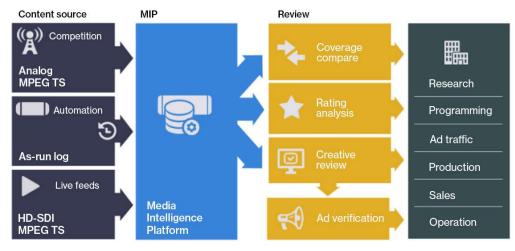


Figure: Review workflow



7.1 DPI monitoring tab

This feature allows you to view DPIs used to insert additional programs into the video stream. In the example, we monitor the Discovery Channel, and DPI metadata is enabled in the viewer.

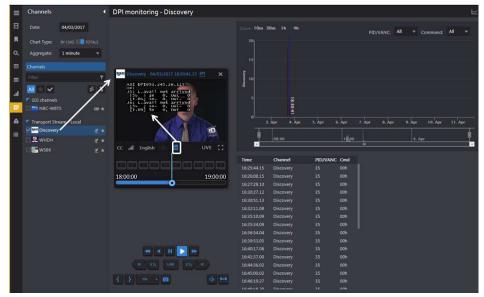


Figure: DPI channel monitoring

7.2 XDS clips tab

This section enables you to search for Extended Data Services (XDS) metadata. Note that XDS is limited to NTSC analog video streams.

If any of the video channels include XDS metadata, use this feature to display relevant bookmarks. The **<Search>** feature works like other Volicon Media Intelligence service searches. When the page first opens, all search constraints are wildcarded, so the page will show all bookmarks that include XDS metadata. If needed, use the **<Search>** function to narrow the list.

The icons at the top of the clip section allow you to do the following: select/deselect all clips, merge clips, delete a clip or all clips, refresh the clip page, change how clips are displayed, enable/disable specific columns and export the clip list. If there are a large number of clips, refer to the page list on the far-right.

Hovering over a clip allows you to play, edit or delete the clip.



XDS clips								4559 items
	2 💵 🖩	IIII More 🔻					1 2 3 4 5 6	7 92
ID	Video	Name	Description	Channel	Duration	Start time	End time	Expires
47434222	No.	Judge Alex	XDS Clip	WHDH	00:30:00	04/12/2017 02:05:03	04/12/2017 02:35:03	91 days
47434183	J.	Comics Unleashed With Byron Allen	XDS Clip		00:30:00	04/12/2017 02:00:02	04/12/2017 02:30:02	
47411207		Judge Alex	XDS Clip	WHDH	00:30:00	04/12/2017 01:35:03	04/12/2017 02:05:03	91 days

Figure: Select, play, edit XDS clips



Figure: XDS clip

7.3 Rating graph tab

The **<Ratings graph>** tab allows you to display rating information for one or more channels. The feature extracts data from the customer's rating file.

In the example, two channels are selected and the **<Sync to me>** feature is used, so the ratings chart is synchronized for both channels.



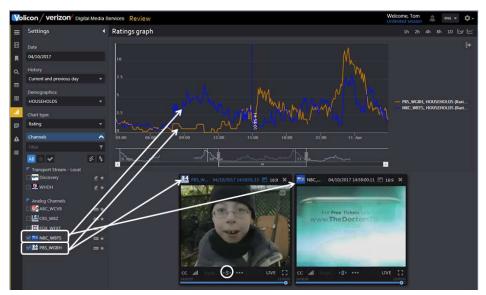


Figure: Two-channel ratings graph

Hovering over the ratings graph displays the instantaneous value.

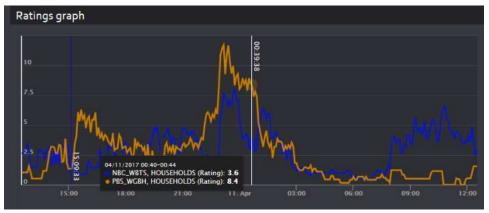


Figure: Instantaneous ratings

7.3.1 Select ratings

The settings dashboard on the left side of the screen has the following features:

Date allows you to select and the set date using the viewer **<Calendar>** function.

History sets the graph duration.

Demographics select desired demographics.



Chart type toggles between ratings and share.

Channels select one or more channels to display. This functions like other Volicon Media Intelligence service features. If more than one channel is selected, the graph is color-coded by channel.

The icons at the upper-right of the page control the chart time frame and channel color. Clicking on the timeline advances or retards the playback. Clicking the **<Chart only>** icon hides the viewers.

7.4 Keyword alerts tab

Use this section to have Volicon Media Intelligence service monitor closed captioning for specific words and generate a notification email. The "Channel" dashboard works like other Volicon Media Intelligence service sections to restrict the display to specific alerts.

7.4.1 Search

The "Search" field works like it does in other Volicon Media Intelligence service applications. You are able to search by keyword, alert type, time, email recipients and channel.

7.4.2 Alert controls



7.4.3 Create a keyword alert

Pressing the **<New alert>** icon opens a new page composed of three sections.

The left-hand pane allows you to set which email addresses Volicon Media Intelligence service uses to send out the alert and define the alert name and email subject line. By default, the alert is sent to your email address. You can delete your address and add multiple other addresses. If there are multiple addresses, the "Email to" field changes from the email name to **Multi(x)**, indicating how many emails are selected. Opening the dropdown displays a list



of email addresses. Below that are **<Advanced options>** used to limit how often and when to send the alert.

The "Keywords" middle pane is used to specify keywords. Each time you enter a keyword, the system automatically generates another text box to enter an additional keyword. If you enter multiple keywords, Volicon Media Intelligence service will generate an alert if any match the CC text.

Lastly, the "Assign channels" pane on the right allows you to select the channel or channels you want to monitor. Typing all or part of the channel name into the "Filter" text box at the top of the display list restricts the display to matching channels.

Y	licon / verizon ^v Digital M	edia Services Review			Welcome, To Expires in 29m	ENG V	¢-
=	Create 'Keywords' Aler				 Assign 	n Channels	
⊞			Keywords				
н		Alert name is required Required					\$ \$
a		Multi (2) +				ort Stream - AWS VB HD TS - AWS	¥ *
		Email subject is required Required				T HD TS - AWS	4 × 4 ×
ш	Chabled				🗆 🚨 WHI		
at					🔽 SDI cha		
B					🗌 🖭 AMO		
		None 👻				DH - Nave XDS	
						ert Stream - Local	
1					Disc		¥ *
	Do not send email in hours:				🗌 🏊 This		¥ *
	Do not send email in nouis.	from: None 🔻			🗆 🧟 whi		<u>*</u> *
		to: None 🔻			🗆 🌇 wse		
		from: None 🔻				Direct - Smartphones xxy S5 - Boston	
						ixy S5 - Boston one - Boston	
		to: None 👻				us 5 - Boston	0 *
					🗌 🔤 Nex		U *
						ncast Elemental 10M	
		Keywords must not be empty. Email's subject length should	be between 1 and 250 characters. At least one o	hannel must be selected SAVE CHANGE			

Press <Save changes> at the bottom of the page to add an alert.

Figure: Closed captioning alert

7.4.4 Editing/deleting a keyword alert

To edit or delete an alert, hover over the alert. Volicon Media Intelligence service will display the **<Edit>** icon on the right-hand side of the alert. Pressing the icon opens the same page you used to create the alert, except now it is filled in. Press **<Save changes>** when you are finished editing the alert. Use the **<Trash>** icon to delete the alert.



8 Using Comply

Comply continually and automatically captures, stores and streams on-air feeds, offering simultaneous users 24 x 7 access to live and recorded broadcast content from desktop computers or smart devices. Producing compliance reports with extracted A/V affidavits simplifies the ability to respond to public or legal inquiries while providing complete and unambiguous proof of compliance.

This section provides information about unique Comply features. Functionality common to all Volicon Media Intelligence service sections has been documented in the previous section.

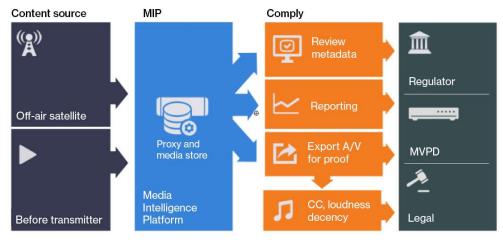


Figure: Comply workflow

8.1 Schedule export tab

This feature allows you to schedule grabbing video clips and publishing them to one or more social media sites.



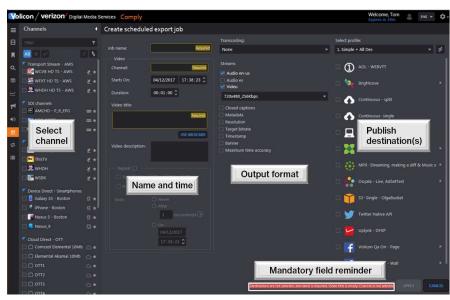


Figure: Schedule export

Job name	User-friendly description of job			
Channel	Channel to export; creates separate jobs for each exported channel			
Starts on	When the job starts			
Duration	Duration of program to be exported			
File name	User-defined file name			
Wildcard Predefined Volicon Media Intelligence service f names Predefined Volicon Media Intelligence service f				
Start overlap	Seconds added at the start of the clip to capture previous program			
End overlap	Seconds added at the end of the clip to capture next program			
Ends	Never: Exports continuously After: Number of times job will run; occurrence is duration previously specified (e.g., if duration set to one hour and occurrences set to three, Volicon Media Intelligence service to export three hours of programming beginning at start time On: Date/time job will terminate			



8.2 Continuous export tab

This feature works like the **<Scheduled export>** feature, except you can configure it so it never ends, or ends automatically after it has exported a number of programs. Continuous export is used to archive programs from within Volicon Media Intelligence service to internal Share or via FTP.

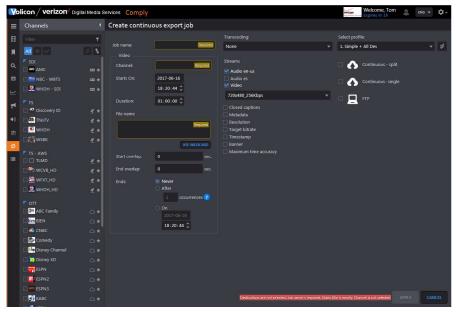


Figure: Continuous export

8.3 Program Loudness Report (PLR) tab

The **<PLR>** tab is used to display audio levels of digital content. Volicon Media Intelligence service compares the program to a user-defined reference value. If a violation occurs, Volicon Media Intelligence service turns that portion of the graph red. The **<Info>** icon provides more information about each of the reporting options.

Use the **<Search>** feature to select the channel/program of interest, loudness settings and report timeframe. Volicon Media Intelligence service supports several loudness monitoring methods. Once the method is selected, additional fields are displayed.

To hide programs that do not contain loudness data, click the **<Show/hide>** icon at the top of the report page.

Use the **<Audio channels>** selector to set which channels are used by the report.

If desired, you can play the clip by clicking on the **<Video>** icon.



Search	Prog	iram loudness rej	part		55348 items	Audio Channels
		el: CBS - WBZ : ATSC1	Loudness Ave.DialNorm: Post Adjustment: 0	Short form: DI Long form: BS-1770-1		Select All
Reference:		More 🕶			6 7 1107	🔲 eng
Fixed Number	* Vide	Name M	lonitoring threshold	Violations	Started	eng Surround Downmix
Fixed number:						spa spa Surround Downmix
-31.00		KMYT ID 10				
	/	S4 COMMUNITY			2017-06	at and a share
-3.00 3.00					and the second se	ect audio channe
		63			2017-06-16 17:24:39	
	_/ _	Home Saver Netw				
		-				
	_ T 🖾	T-Mobile N/TMB/				
	k N 👗	Okla State Depart				
		- V				
ABC Family	6* 🚅	Church's Chicken				
Bien BIEN	O*	5P Image 10				
	D* 🦉	My41 Prime 8-17				
ANALOG		S3 COMMUNITY				
CW - WLVI						
EOX - WEXT		Weather Promo				
E NBC - WBTS10	•*	US Cellular Family				
Last searches					2017-06-16 17:14:3	

Figure: Channel loudness report

8.3.1 Report measurement fields

Gating	This pauses loudness measurement during soft passages for a more accurate report.			
Dialnorm	The dialogue normalization level is metadata received from the digital AC3 stream used to control playback gain. It has an integer value with a range of $1 - 31$ corresponding to a playback gain of 030 dB (unity). The loudness graph is displayed as Loudness K-weighted relative to full scale (LKFS) for compliance with FCC CALM requirements.			
Long IPL	This is the weighted average selectable for the last hour or last 24 hours.			
Fixed number	umber Use this setting to override the default Dialnorm value of - 31.			
Min/max	Use these values to set the "Loudness" window. If loudness is lower than or higher than the set point, Volicon Media Intelligence service turns that section of the graph red, indicating a loudness violation.			



8.4 Loudness graph tab

The **<Loudness graph>** feature is used to display channel volume. Click the **<Speaker>** icon. At the bottom of the "Settings" pane, select a channel. This opens the media player and populates the bottom of the "Settings" pane with another icon title: **<Metrics>**. Clicking the **<Chevron>** icon displays the name of the audio subsystem used to ingest the stream. Hovering over the subsystem displays a **<Plus>** ficon. Press it to display a list of available graphs. In some cases, the system allows you to display multiple graphs; in other cases, only a single graph.



Figure: Loudness graph

In the "Setting" pane, specify the program date and time. You can adjust the date/time by using the **<Calendar>** feature of the player. If this option is left blank, the player is opened in the mode specified in user preferences in the **<Tools>** menu. The example shown is live, which is why the loudness graph does not extend all the way to the end. The **<History>** dropdown sets the maximum duration of the graph.



Figure: Loudness detail

Positioning the cursor in the graph lets you zoom in on an area of interest and display the instantaneous loudness level. To examine the graph in more detail, slide the bars at either end of the lower graph image to expand the upper graph. Once the graph is expanded, use the left and right arrow keys of the lower graph to step through the entire range.



The graphs are color-coded. Hovering over the graph identifies each color and the instantaneous value at the cursor position.

8.4.1 Graphing options

M measurement	Momentary sliding rectangular (.4s) integrated window; sampling every 100 milliseconds, calculating its average every 400 milliseconds; values not configurable			
S measurement	Short-term sliding rectangular (3s) integration window; sampling every 100 milliseconds, calculating the average every three seconds; values not configurable			
SI measurement	Short Integrated measurement; sampling every 100 milliseconds; Volicon Media Intelligence service calculates average every X seconds within, up to six defined durations (usually left at default value of 10 seconds)			
Speech_exists	Binary true/false indication of speech			
Speech_level	Speech audio level			
Min	Graph minimum loudness level			
Avg	Graph average loudness level			
Мах	Graph maximum loudness level			
Range	Shades the area between min and max graph			

8.5 DPI graph tab

The **<DPI graph>** tab displays insertion and end points for inserted streams.



Figure: DPI graph



9 Using Monitor

With 24 x 7 monitoring and notification capabilities, you are able to monitor broadcast quality, report faults, respond to and fix issues and use full recording to instantly review the impact of detected errors. Monitor measures loudness and DPI, alarms and record quality impairments such as black screen.

A unique Volicon Media Intelligence service Monitor feature is **<Multiview>**, which allows you to configure a single screen to display the various items you are tracking.

This section provides information about unique Monitor features. Functionality common to all Volicon Media Intelligence service sections has been documented in the previous section.

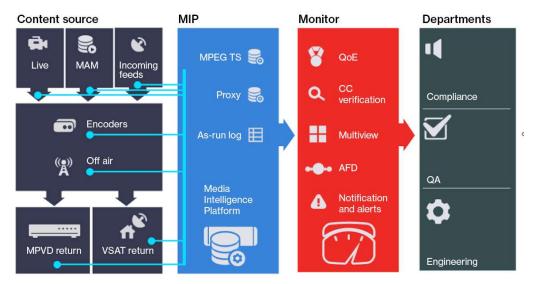


Figure: Monitor workflow

9.1 GPI clips tab

If any of the video channels include broadcast automation General Purpose Interface (GPI) metadata, use this feature to display relevant bookmarks.

The **Search>** feature works like it does in other Volicon Media Intelligence service sections, allowing you to search by keyword, time and channel.



9.1.1 GPI search

The GPI **<Search>** feature works like it does in other Volicon Media Intelligence service searches. When the page first opens, all search constraints are wildcarded so the page will show all clips that include some GPI metadata. If there are a lot of GPI clips, the **<Search>** function allows you to narrow the list.

9.1.2 GPI clip display options

The ribbon at the top of the "GPI clips" pane allows you to manage and modify captured clips.

Select/deselect all GPI clips. If there are no clips, this option is greyed out.

Merge multiple DPI clips. Unlike bookmark merge, there are no restrictions on merging clips from different sources. Otherwise, GPI merge works just like bookmark merge. If there are no clips, this option is greyed out.

Delete selected GPI clips. This option is greyed out if no clips are selected.

When the **<Refresh>** icon is blue, the page is automatically refreshed every few seconds. When the icon is white, the page does not change once it is opened. Clicking the **<Auto refresh>** icon toggles between the two modes.

Grid and **List view** are similar to other Volicon Media Intelligence service settings. **Grid** displays a large thumbnail and limited descriptive detail about the clip. In **List view**, the thumbnail is smaller, and the selection of descriptive detail is much greater.

More Use this icon to open an Excel spreadsheet listing details of each clip, or delete all GPI clips.

9.2 DPI clips tab

Digital Program Insertion (DPI) metadata allows cable headends and broadcast affiliates to insert locally-generated commercials and short programs into remotely distributed regional programs before they are delivered to customers. If this feature is enabled in the encoder, Volicon Media Intelligence service automatically creates a clip each time it detects DPI metadata.

If any of the video channels include DPI metadata, and the feature is enabled in the associated encoder, use this feature to display relevant bookmarks.



9.2.1 DPI search

The DPI **<Search>** feature works like other Volicon Media Intelligence service searches. When the page first opens, all search constraints are wildcarded so the page will show all clips that include some DPI metadata. If there are a lot of DPI clips, the **<Search>** function allows you to narrow down the list.

9.2.2 DPI clip display options

Select/deselect all DPI clips. If there are no clips, this option is greyed out.

Merge multiple DPI clips. Unlike bookmark merge, there are no restrictions on merging clips from different sources. Otherwise, DPI merge works just like bookmark merge. If there are no clips, this option is greyed out.

Delete selected DPI clips. This option is greyed out if no clips are selected.

When this icon is blue, the page is automatically refreshed every few seconds. When the icon is white, the page does not change once it is opened. Clicking the **<Auto refresh>** icon toggles between the two modes.

Grid and **List view** are similar to other Volicon Media Intelligence service settings. **Grid** displays a large thumbnail and limited descriptive detail about the clip. In **List view**, the thumbnail is smaller and the selection of descriptive detail is much greater.

More Use this icon to open an Excel spreadsheet listing details of each clip, or delete all DPI clips.



9.3 Fault clips tab

Clicking this icon displays video clips flagged as meeting one or more Volicon Media Intelligence service automatic monitoring fault conditions. When the page first opens, all search constraints are wildcarded so the page will show all bookmarks that include a Volicon Media Intelligence service-flagged fault. If there are a lot of faults, the **<Search>** function allows you to narrow the list.

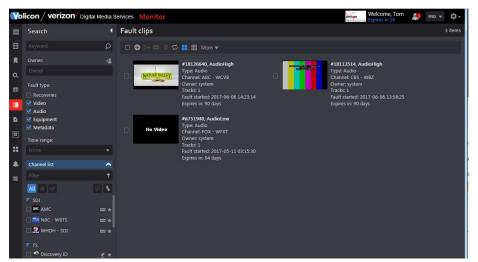


Figure: Fault clips

9.3.1 Fault search

Keyword	Searches free-form text			
Owner	Owner to which clip is assigned			
Fault type	Recoveries, video, audio, equipment and metadata			
Time/date	Restricts time and date range			
Channel list Expands or collapses channel list				
Filter	Limits dashboard display to matching channels			
Last searches	Caches recent searches to allow quick redo of existing search			



To reuse a previous search, expand the <Last search> icon at the bottom of the "Search" pane by clicking the title. Highlight the desired search and press <Search>. To manage your search history, delete unnecessary old searches, hover over the search name and press the **<X>** to the right. Pressing **<Reset>** at the bottom of the dashboard clears all searches.

9.3.2 Fault clip display options

The ribbon at the top of the "Fault clips" pane allows you to manage and modify captured faults.

Select/deselect all fault clips. If there are no clips, this option is greved out.



• Manually create a **New** fault clip.

Merge multiple fault clips. This allows you to combine multiple reported faults into a single combined clip. The new composite clip shows up in the <Bookmarks> tab. If there are no clips, this option is greyed out.

Send selected fault clips. This opens a dialog box to email one or more clips to the selected user. Optionally, create an email subject title. This option is greyed out if no clips are selected.

Delete selected fault clips. This option is greyed out if no clips are selected.

When this icon is blue, the page is automatically refreshed every few seconds. When the icon is white, the page does not change once it is opened. Clicking the **<Auto refresh>** icon toggles between the two modes.

Grid and **List** view are similar to other Volicon Media Intelligence service settings. Grid view displays a large thumbnail and limited descriptive detail about the fault. In List view, the thumbnail is smaller and the selection of descriptive detail is much greater.

More **Export list** opens an Excel spreadsheet showing details of each clip. The spreadsheet may be opened or saved to your desktop. The **<Delete all** fault clips> option allows you to quickly remove all fault clips.



9.3.3 Manual fault clip creation

The system allows you to manually create a fault clip. This works much the same way as creating a bookmark. Press the **<Add clip>** icon at the top of the page. This opens a new page with the channel list on the left. Select a channel, mark the clip and name the clip—optionally, include descriptive text for more information and use the **<Fault type>** radio button to specify the type of fault. Press **<Apply>** at the bottom to create the clip.



Figure: Manual fault clip creation

9.4 Multiview tab

The **<Multiview>** tab allows you to set up customized screens displaying multiple video channels along with other relevant information.

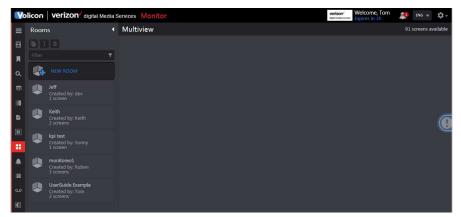


Figure: Multiview home



Once a room or screen has been configured, Volicon Media Intelligence service allows you to create a duplicate copy. For example, let's say you need to monitor two channels. You could locate all the information in a single screen or, once you have set up a screen displaying the relevant information, use the **>Duplicate>** command to clone the screen and change the relevant cells within the new screen.

9.4.1 Using Multiview

From the **Monitor** page, click on the **<Multiview>** icon on the left side of the screen. Scroll down to the desired room in the "Rooms management" pane. If there are a large number of rooms, use the **<Search>** feature to find the desired room.

Click the desired room to display the screens associated with that room. As an example, we click **<UserGuide example>**. Note the area around "UserGuide example" turns blue as a reminder that this is the room being displayed. Under each room name, the number of configured screens is displayed. "UserGuide example" has two screens: "UserGuide" and "TestScreen". For the moment, ignore **<Add screen>**; that will be discussed later.



Figure: Select Multiview room

9.4.1.1 Displaying a screen

Hover over the desired screen – in this case we are selecting the one called **<UserGuide>** – and left click on the **<Eyeball>** icon. This opens the screen in a new tab on your browser.



Figure: Select "Activate Multiview" screen



The screen is configured to display three video thumbnail streams and several widgets.

9.4.1.2 Multiview thumbnails

The room can be configured to display multiple channel thumbnails. This is a low-resolution image along with any fault status.



To the left is the channel logo (if configured) and channel name. If there are any faults, they are identified in red.

Click **<Inspect>** at the top of the video thumbnail to open the Quarantine player. The Quarantine player supports most of the same features as the regular viewer. The player is always in live mode.

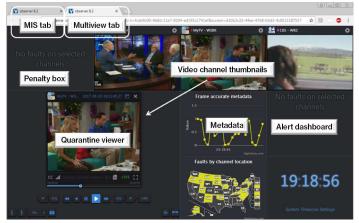


Figure: Multiview screen

9.4.1.3 Using the Quarantine player to create a bookmark

To create a bookmark in one of the room screens, the screen must be configured with the Quarantine player.

Click **<Inspect>** on the desired video thumbnail to open the player. Creating bookmarks with the Quarantine player is similar to using the player in other Volicon Media Intelligence service sections. Mark the start and end time to create a new bookmark. This automatically creates a new bookmark in the bookmark section. The status bar at the top of the screen lets you know if the bookmark was created successfully. The bookmark is automatically titled "Quarantine_ [Channel Name] [Date] [Time]".



Once a bookmark is created, you are able to view it under the **<Bookmark>** icon in any Volicon Media Intelligence service screen. From there, you can edit the bookmark and, if desired, change the name.



Figure: Quarantine player bookmark

To manage bookmarks created by the Quarantine player, use the **<Bookmark>** tab.

9.4.2 Configure Multiview rooms

To create a new room, you have two choices: create one from scratch or copy an existing room and rename it.

9.4.2.1 Copy an existing room

Let's start by copying an existing room. In the "Rooms" pane above the search filter are three icons. From left to right, they are: **<Duplicate>**, **<Rename>** and **<Delete>**. As an example, we left click the **<UserGuide example>** room to select it. Then click the **<Duplicate>** icon. A dialog box opens with the name of the room prefixed by the duplicate. If you click **<OK>**, that will become the name of the new room. At any time, you can rename a room by selecting it and using the **<Rename>** icon. To create a new room with the desired name, simply enter the name in the duplicate text box and hit **<OK>**.

The new room is automatically added to the rooms list.





Figure: Duplicating a Multiview room

9.4.2.2 Creating a new room from scratch

To create a new room from scratch, click the **<New room>** button towards the top of the "Rooms" pane. This opens a dialog box; type in the desired name and press **<OK>**. The new room is automatically populated in the "Rooms" pane. Note the new room is flagged as empty.

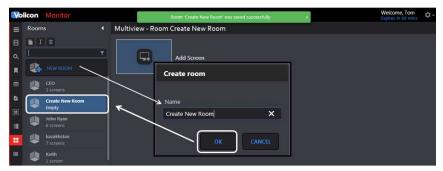


Figure: Create new Multiview room

9.4.3 Create Multiview screen

A room consists of one or more screens. Screens may be created from scratch or cloned and then edited to customize each one.

To create new screens, use the **<Add screen>** icon at the top of the page. This opens a dialog box; enter the name of the screen and press **<OK>**. At the top of the new page, select the number of the cells you want. These may be either 4:3 or widescreen 16:9 with different cell matrix sizes. Select the matrix type and size and click **<Save changes>**. The new screen will be added to the room.





Figure: Create Multiview screen

Info tip

Note that cells may be merged (to create a larger cell) but not subdivided. When creating a new screen, be sure to create one with enough cells.

9.4.4 Configure Multiview screen

Once the new screen matrix is created, it needs to be configured. Hover over the desired screen and click the **<Edit layout>** icon. Position the cursor over the desired cell and left click to open the widget list. Notice the cell turns blue. Depending on which cell you select, you may see some inward- or outwardfacing arrows. Clicking an outward-facing arrow expands the cell. Clicking an inward-facing arrow reduces its size. The corner arrows expand or reduce the cell by a factor of four, maintaining the same aspect ratio. Arrows are only populated if the expand/reduce operation is permissible. For example, in the figure below there are no inward-facing arrows showing in the smaller widget cell. That indicates the cell size cannot be reduced. Likewise, the larger cell does not have any outward-facing arrows at the bottom, for it is at the bottom of the screen and cannot be expanded in that direction.

Once you create a widget, you are not able to reposition it. If you need to move a widget, use **<Delete>** (right click on the widget) and recreate a new widget.

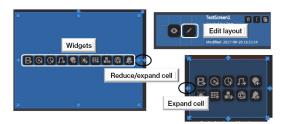


Figure: Widget cell sizing



Screen widgets

There are 10 widget icons.



Player displays a low-resolution thumbnail of the channel. Use the right-hand pane to select the desired channel. At the bottom are **<Advanced options>** to display the audio bar graph, faults and closed captioning. In Multiview, the player is always live.

Quarantine is a modified streaming viewer similar to the viewer in other Volicon Media Intelligence service suites. However, unlike other widgets, only one instance is supported. Click the **<Inspect>** icon on one of the thumbnail players to play in the Quarantine player.

Clock defaults to your computer's system time, but it can be changed to use any time zone by using the right-hand panel.

Loudness displays the loudness graph.

Map allows you to display faults by region. Select the region from the side of the page.

Path displays the channel name but not an active thumbnail. Click on the **<Bullseye>** to open the Quarantine player.

Faults display the fault status of one or more channels. Select the channels to monitor from the right-hand panel.

Penalty box displays channels experiencing fault conditions.

URL displays any desired web page or image from a website. Enter the URL in the right-hand panel. If desired, Volicon Media Intelligence service can be set to automatically update content.

Alerts display selected channel alerts.



9.4.5 Copy Multiview screen

Another way to create a new screen is by cloning an existing one. If you hover over a screen, the **<Duplicate>** icon appears in the upper-right corner. Use that to create a copy of one of your screens. A dialog box opens, allowing you to change the name. Once the new screen is created, use the **<Edit>** feature to modify the various cells.

9.4.6 Rename Multiview screen

To change the name of a particular screen, hover over the screen and click the **<Rename>** icon.

9.4.7 Delete Multiview rooms or screens

To delete an entire room, click on the room and press the **<Trash>** icon at the top of the "Rooms" pane. As a safeguard, you can only delete rooms without configured screens. If the room has screens, you need to delete them first and then delete the room. To remove a single screen within a room, hover over the desired screen and click on the **<Trash>** icon in the upper-right corner.

9.5 QoE alerts tab

This section lists fault notifications and allows you to create notification lists for various faults. Alerts may be triggered on:

- · Black screen
- Static screen
- No video
- Audio level
- Closed captioning

9.5.1 Search

The "Search" field works like it does in other Volicon Media Intelligence service applications. You are able to search by keyword, alert type, time, email recipients and channel.



9.5.2 Alert controls



The ribbon at the top of the page gives you control over the **<Alert>** feature and treats a fault condition and who is notified. The **<Enable>** and **<Disable>** buttons allow you to selectively enable or disable each alert. Lastly, the **<Customize>** button controls which alert fields are displayed. Use the dropdown to select which alert columns you want Volicon Media Intelligence service to display.

9.5.2.1 Create a QoE alert

Pressing the **<Add>** button opens a new page composed of three sections. The left-hand pane allows you to set which email addresses Volicon Media Intelligence service uses to send out the alert and to define the alert name and email subject line. The default email address is that of the user account creating the alert. Below that are options to limit how often and when to send the alert.

The middle pane consists of checkboxes to select the fault conditions that generate the alert. The checkboxes are organized so you are able to select a generic fault (e.g., video) or a specific fault within a video (e.g., black screen).

Lastly, the right-hand pane allows you to select the channel or channels you want to monitor. Typing all or part of the channel name into the "Filter" text box at the top of the display list restricts the display of matching channels.



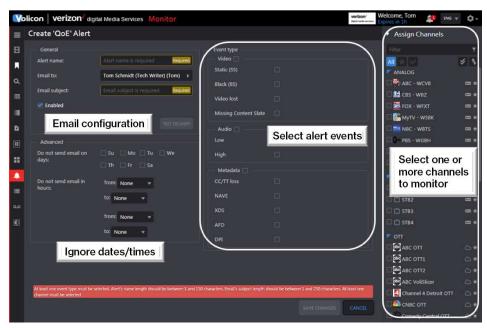


Figure: Create a new alert

Once you have created the alert, press the **<Save changes>** button at the bottom of the page. Press the **<Test delivery>** icon to send a test email to insure the alert was configured properly

9.5.2.2 Editing an alert

To edit an alert, hover over the alert. Volicon Media Intelligence service will display the **<Edit>** icon on the right-hand side of the alert. Pressing the icon opens the same page you used to create the alert, except now it is filled in. Press **<Save changes>** when you are finished editing the alert.



9.6 Absolute quality graph tab

This tab allows you to monitor one or more channels. Use the "Channel" dashboard to select the channel or channels you want to monitor.

Click the **<Add metric to graph>** icon associated with each channel to add one or multiple graphs. Select a unique color for each graph to make it easy to identity.

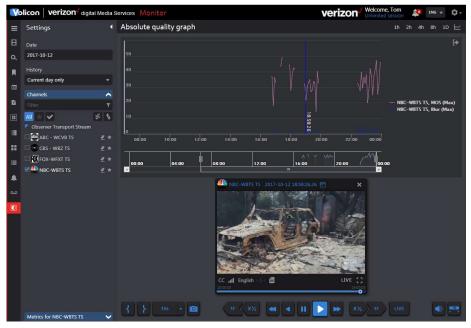


Figure: Absolute quality graph

9.6.1 Graphing options

There are five metrics. Each one may be color-coded and selected to display the following: average, maximum, minimum or range.

Video quality: Aggregation of all four metrics

MOS: Mean Opinion Score; perceived video quality

Blur: Image sharpness

Blockiness: Discrete Cosine Transform (DCT) digital encoding

Contrast: Difference in color and light over the image



10 Volicon Media Intelligence service tools

Pressing the **<Gear>** icon, located at the upper-right corner of each page, opens the **<Tools>** menu. Access to these features is controlled by your account permissions.



Figure: Volicon Media Intelligence service tools

Preferences: User-account-specific setting and time zone

Help & tutorials: Online video tutorials

About: Volicon Media Intelligence service player versions

Contact us: Link to Volicon Media Intelligence service website

Reset page settings: Clears selected channels

Log out: Terminate Volicon Media Intelligence service session



10.1 Preferences

This section allows you to change your password and customize the way Volicon Media Intelligence service displays your information.

If you make changes, press the **Save changes** icon at the bottom of the page. If Volicon Media Intelligence service is able to successfully save your changes, it displays a banner at the top of the page. To exit without making any changes, press **Cancel**.

Preferences	are saved. You	need to re-login for the	e changes to take effect
Figure: Preferen	ices successfully u	pdated	
Volicon / verizon ^v _{Digit}	al Media Services Preferences		Welcome Tom 🛔 Exe 🔻 🗘 -
Man Password Tame zone	System Timezone Settings 🔹 🔹	Default metsdata state Off CC XDS Remember Last State Default budness meter state: Off Cn Cn Remember Last State Dashboard channel order: Channel Name Manual Order	Play live on last used channels Play live on last used channels Play live on last used channels Play layer speed in FF and FW mode Log-in with no active channels

Figure: User preferences

10.1.1.1 Time zone

Volicon Media Intelligence service defaults to the same time zone as your computer. If you want to override that setting and select a different time zone, use the **<Time zone>** dropdown.

10.1.1.2 States

The default metadata state and default loudness meter state set the default viewer behavior. For example, if CC is selected and the channel is closed captioned, it will be displayed whenever the channel is opened in the viewer. You are still able to change the viewer behavior directly; however, the next time the viewer is opened, it reverts to its default behavior.

Dashboard channel order allows you to customize how channels are displayed (not yet implemented).



10.1.1.3 Far right-hand column

Play live on last used channels automatically opens the channel in real time.

Send email notification when export is finished (CEM export only) sends an email to the address associated with your login.

Display player speed in FF and RW mode adds graphic overlay to the video showing speed.

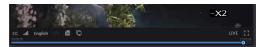


Figure: Player speed overlay

Login with no active channels resets any selected channels at each login.

10.1.2 Password

Use this feature to change your password. The system requires the new password to be entered twice. If they do not match, Volicon Media Intelligence service displays an error message, and your old password continues to be in force.

10.2 Help and tutorials

Pressing **<Help & tutorials>** displays an overlay with multiple help videos. You can watch a video, then **<Close>** the window without affecting the page you are currently on. There is a link at the bottom of the page to log in to Volicon Media Intelligence service Customer Support.



Figure: Tutorial page



10.3 About

Press **<About>** to view the Volicon Media Intelligence service software version and the ActiveX controls used with Internet Explorer.

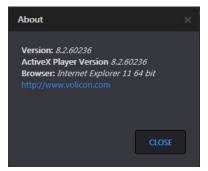


Figure: Volicon Media Intelligence service software version

10.4 Contact us

The **<Contact us>** option opens a link to the Volicon Media Intelligence service website to submit a question. Contact your local administrator before contacting Volicon Media Intelligence service directly with questions.

10.5 Reset page settings

<Reset> clears the user page settings, such as selected channels.

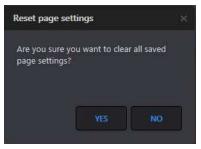


Figure: Reset cache

10.6 Log out

When you attempt to log out, you will be prompted to confirm the request (as shown in the login section).



11 Appendix

11.1 Revision history

11.1.1 Volicon Media Intelligence service releases

Version	Build number	Date	Description
7.0 QB1	7.0.35351	02/11/13	New features: PLR, Mobile, bug fixes
7.0 QB2	7.0.36068	04/01/13	City time zone
7.0 QB3	7.0.36871	05/02/13	FE Architecture, new PHP version, bug fixes, enhancements, IE10 in compatibility view (see the release notes for more details)
7.1	7.1.39589		Ability to search for content by program
7.2	7.2.39589		Wall of monitors mode

11.1.2 Revision change history

Date	Description				
5/14/13	7.0 QB3 initial release, revision history				
6/14/13	Updated enhancements				
06/25/13	Remove internal references… related section; add lineup display sync issues				
12/16/13	Update User Guide to Release 7.1; revamp User Guide to target end users				
2/3/2014	Update User Guide to Release 7.2				



About Volicon Media Intelligence service

Volicon Media Intelligence service is the leading provider of enterprise-grade media intelligence for broadcasters, networks, cable and IPTV operators and governments worldwide.

The Volicon Media Intelligence service records all types of broadcast content across multiple interfaces (SDI, TS, analog and OTT) and stores content for up to seven years in either high-resolution or low-resolution proxies. With this Volicon Media Intelligence service, you're able to view your content with a variety of players and formats, search and find content quickly with closed captioning and export and share content easily with collaborators.

The platform is an enterprise-grade, highly-reliable solution that is scalable to hundreds of channels and thousands of users.

Providing a window on content delivered via satellite, cable or over-the-air signal, as well as internet-based over-the-top (OTT) services, the Volicon Media Intelligence service offers portals tailored to the many different departments at broadcasting facilities. Volicon Media Intelligence service provides functionality appropriate for engineering and operations, production and promotions, new media, news, sales and traffic, media relations and executive and legal departments.

The Volicon Media Intelligence service supports applications, including compliance logging, content archiving, content repurposing for new media outlets, competitive analysis, producer and talent evaluation, ad verification and media sales and executive review of content. Streams may be viewed singly or side by side on desktop and laptop computers, tablets and smartphones and television monitors (via Multicast).

Volicon Media Intelligence service's patented Virtual Media Network (VMN), which supports Volicon Media Intelligence service systems, comprises a multichannel video streaming engine, interactive search, content analytics and service monitoring and alarm capabilities.

