



Observer

Release Notes 7.1 QB4

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Contents

1	Introduction	3
1.1	Purpose	3
1.2	Definitions and acronyms	3
1.3	General.....	4
1.4	Hardware considerations.....	4
1.5	Version interoperability	4
1.6	Operating Systems	4
1.6.1	CS installations.....	4
1.6.2	Probe installations.....	4
1.6.3	PC Client installations	4
2	New features	5
2.1	Clientless user interface	5
2.2	Multi-view mode	6
2.2.1	Multi-view limitations.....	7
2.3	Multicast	7
2.4	SCTE-35 DPI monitoring	8
2.4.1	DPI graph	9
3	Enhancements and Limitations	10
3.1	Enhancements and bug fixes	10
3.2	Limitations.....	11
4	Appendix	12
4.1	Keyboard shortcuts player control	12
4.2	Revision history	13
4.2.1	Document revision change history	13

1 INTRODUCTION

1.1 Purpose

This document covers new features for release 7.1 in general, and bug fixes for release 7.1 Qualified Build one, two and three (QB1, QB2, QB3) in particular.

1.2 Definitions and acronyms

The following table defines the terms and acronyms used in this document:

Services	A/V program content with the associated metadata
ARL	As Run Logs use customer extracted program schedules
CC	Closed Captioning
CS	Central Server
TS	Transport Stream, a standard broadcast systems protocol for transmission and storage of audio, video, and PSIP data.
PSIP	Program System Information Protocol - TS program schedule for ATSC DTV
MH	Media-hub module also referred to as the Observer TS module
PLR	Program Loudness Report - loudness values recorded over time
STB	Set Top Box
DPI	Digital Program Insertion SCTE 35
Encoder	Observer module that receives and processes media signals
GUI	Graphical user interface
FE	Front End – Web client based user interface
AFD	Active Format Description - Standard set of codes that carries information about the active picture aspect ratio and related characteristics

1.3 General

This is a major release with new features including

- Clientless user interface
- Multi-view mode
- Multicast mode
- DPI features

These features are described in more detail further in this document.

1.4 Hardware considerations

A system running Observer version 6.2 or higher can be upgraded to version 7.1. However for upgrade of a system running versions earlier than 6.2 and in general, please consult the Volicon Support department.

1.5 Version interoperability

Due to a new protocol in 7.1 QB3, the central server, probes and players need to use the compatible release version and build numbers.

1.6 Operating Systems

1.6.1 CS installations

- Windows 2003
- Windows 2008 x32 and x64
- Windows 7 x32 and x64

1.6.2 Probe installations

- Windows 2003
- Windows 2008 x32 and x64
- Windows 7 x32 and x64

1.6.3 PC Client installations

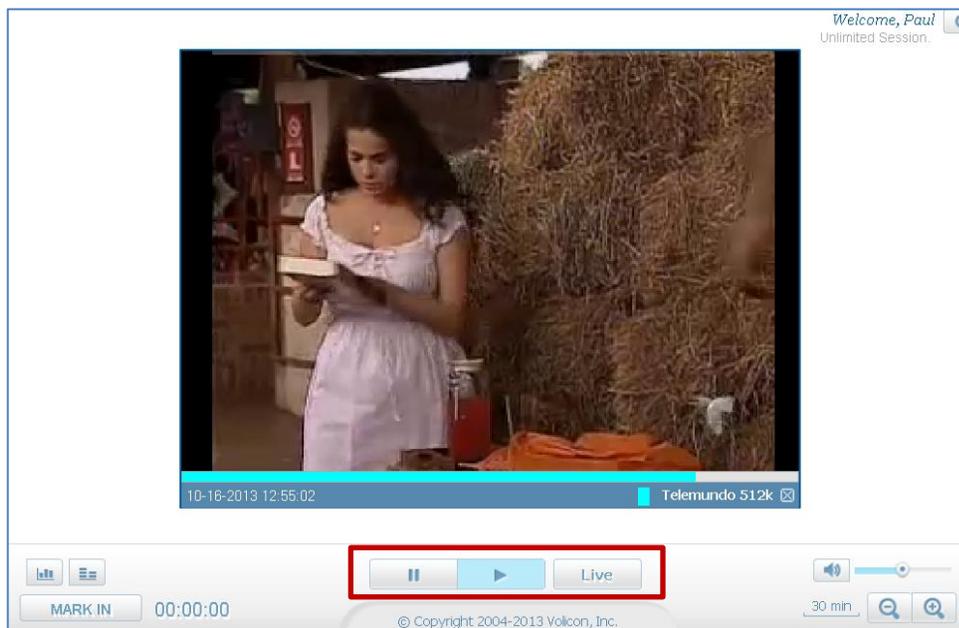
- Windows 7
- Windows XP (for sanity check)

2 NEW FEATURES

2.1 Clientless user interface

This capability facilitates Observer monitoring on Chrome, Firefox and Safari (MAC) Internet browsers without requiring a prior installation of a local player and its active-x component. In addition it facilitates large Observer system deployments.

The clientless interface has a slightly reduced feature set from the active-x based Observer player. Keyboard shortcuts (see Appendix for details) complement the simplified player control-bar functionality (highlighted below).



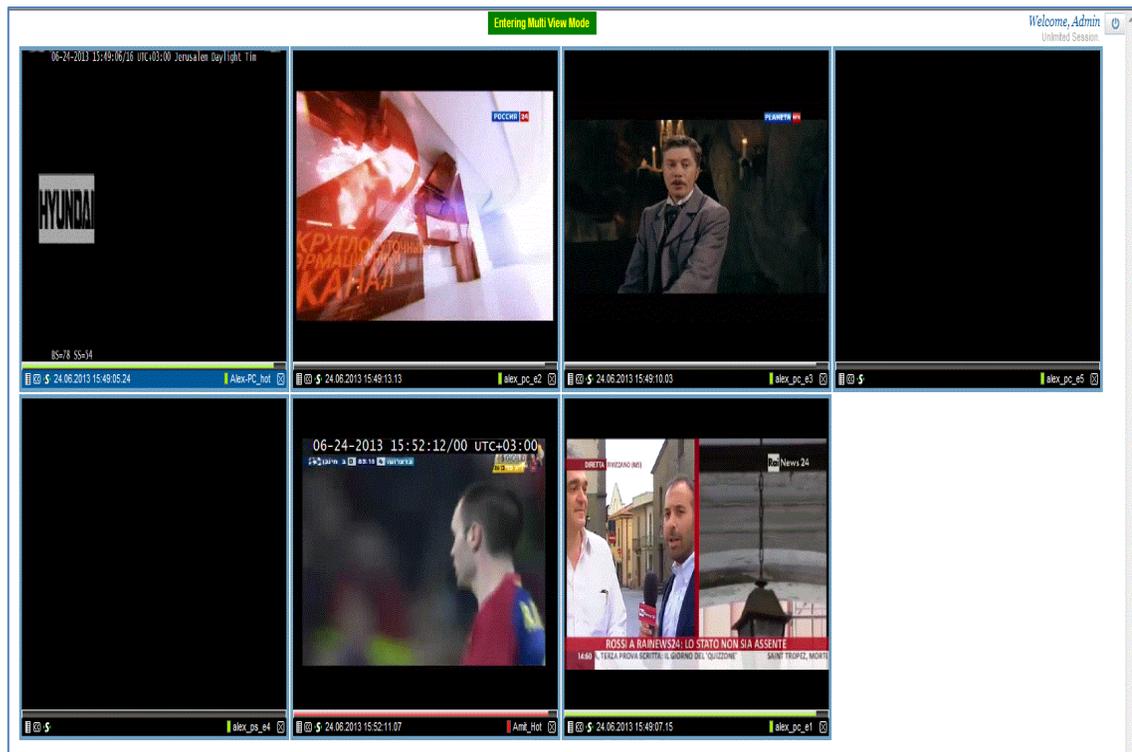
Prior to using the clientless interface (based on the HLS protocol) on the Observer system, older encoder media need to be converted to H264 video and AAC audio formats.

2.2 Multi-view mode

The Multi-view mode supports multiple simultaneous players while using system resources efficiently.

It can be used to watch multiple programs on a wall of monitors for example while in parallel using the desktop interface to target and troubleshoot a suspect stream.

The Multi-view mode is enabled automatically on the Observer system after a user opens more than six players simultaneously. It supports up to twelve players at the same time. These defaults can be readjusted by Volicon Support if required.



2.2.1 Multi-view limitations

This mode has the following limitation:

- Player control-bar is not displayed

However the keyboard shortcuts can be used instead to control these player functions as well, see the appendix for details.

2.3 Multicast

IP multicast is a technique for one-to-many communication over an IP network infrastructure. It scales to a large receiver population through an efficient use of the network and is convenient to use by not requiring prior knowledge of the receiver addresses. The source only needs to send a single packet even if it needs to be delivered to a large number of receivers. The nodes in the network replicate the packets automatically and deliver these to multiple receivers as needed.

IP multicast facilitates the Observer system to stream TS media over customer multicast networks.



2.4 SCTE-35 DPI monitoring

DPI allows cable head ends and broadcast affiliates to insert locally-generated commercials and short programs into remotely distributed regional programs, before delivering these to home viewers.

DPI insertion enables the monitoring, logging, and frame-accurate display of content, metadata and in/out point markers to insure proper DPI message delivery and display.

In general the TS (SCTE-35 protocol) and SDI (SCTE-104 protocol) originated streams are used. Currently we support only the SCTE-35 protocol.

The image displays four screenshots of a DPI monitoring interface, each showing a video stream with overlaid SCTE-35 metadata. The metadata includes stream identifiers, program names, and in/out point markers.

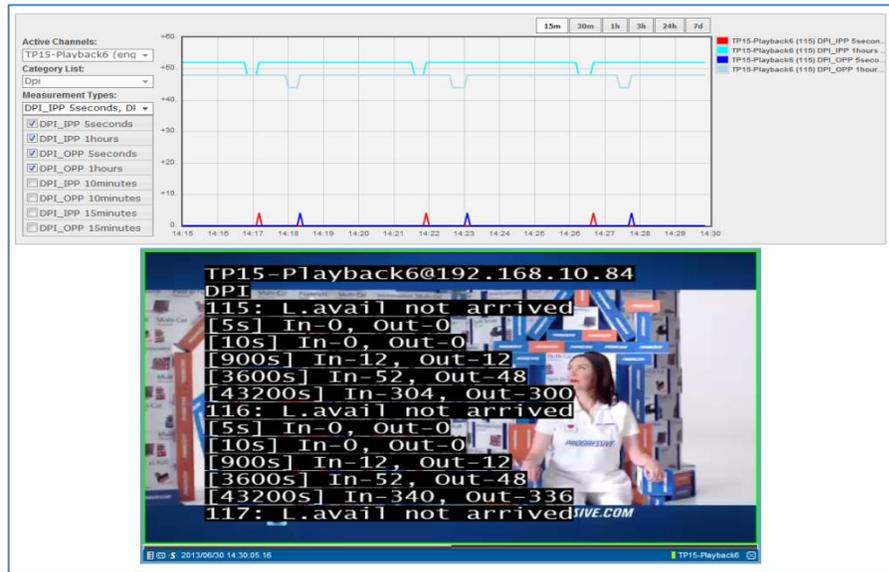
TP15-Playback2@192.168.10.84
 DPI
 35: L.avail not arrived
 [5s] In-0, Out-0
 [600s] In-0, Out-0
 [3600s] In-0, Out-0
 36: L.avail not arrived
 [5s] In-0, Out-0
 [600s] In-0, Out-0
 [3600s] In-4, Out-4

TP15-Playback4@192.168.10.84
 DPI
 67: In program
 [5s] In-0, Out-0
 68: In program
 [5s] In-0, Out-0
 69: L.avail not arrived
 [5s] In-0, Out-0

TP15-Playback5@192.168.10.84
 DPI
 99: In L.avail [53/60] sec
 [5s] In-0, Out-0
 [900s] In-12, Out-12
 [3600s] In-20, Out-16
 100: In L.avail [53/60] sec
 [5s] In-0, Out-0
 [900s] In-12, Out-12 (7837)
 [3600s] In-20, Out-20
 www.LaserSpineInstitute.com
 Medicaid currently not accepted

TP15-Playback6@192.168.10.84
 DPI/
 115: In program
 [5s] In-0, Out-0
 [3600s] In-16, Out-16
 116: In program
 [5s] In-0, Out-0
 [3600s] In-16, Out-16
 117: L.avail not arrived
 [5s] In-0, Out-0
 [3600s] In-0, Out-0

2.4.1 DPI graph



3 ENHANCEMENTS AND LIMITATIONS

3.1 Enhancements and bug fixes

Enhancements and bug fixes for release 7.1 QB4 from the previous version are listed below:

Description
Media-Hub connectivity related alerting issues resolved
TS export of teletext and ASF fixed
Multi-view display issues resolved
Starting the Silverlight interface fixed
While activating AFD and Loudness monitoring, video stability was fixed
CC rendering and fast forwarding on exported clips resolved
CC character accuracy restored for 608, 708 and 608 in 708 profiles
Spanish CC rendering from HD source fixed
Adding 5th audio channel resolved

3.2 Limitations

This release has the following limitations:

Description
Encoder names should not contain spaces
Mobile IOS 7 on iPhone - not supported yet
Internet explorer 11 is not fully supported (IE "Compatibility view" should be enabled for Observer web addresses used)
"Delete all results" for "Programs" fails when performed on a very large number of programs ("Delete selected" used as a workaround)

4 APPENDIX

4.1 Keyboard shortcuts player control

Key	Function
L	Live
P	Picture in picture
S	Split screen
F	Full screen
M	Mute
D	Switch between main and expanded display
Z	Fast reverse
X	Normal reverse
C	Slow reverse
<Spacebar>	Pause/play
V	Slow forward
B	Normal forward
N	Fast forward
M	Mute/unmute
<Cursor up/down>	Volume up/down
Mouse scroll <up/down>	Single frame forward/backward
<'>	Cut clip <Mark in/Mark out>

4.2 Revision history

4.2.1 Document revision change history

Date	Description
10/16/13	7.1 QB3 release notes
1/7/14	Initial 7.1 QB4 release notes