



TRAINING

OPERATORS PRONEWS
EVS PRODUCTION SERVERS
PACKAGE 16.3

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TABLE OF CONTENTS

1. INTRODUCTION	2
2. LIVEIP IMPROVEMENTS	3
2.1 ST-2022-7	3
2.2 PTP	3
3. NEW SUPERMOTION CONFIGS IN HD AND UHD-4	3
4. CONVERSION HDR TO SDR FOR MULTIVIEWER	4
5. NEW CODEC FOR PROXY CHANNEL	4
6. DUAL-LSM WITH 1 PGM PER OPERATOR	4
7. FASTER AND BIGGER EXTERNAL STORAGE	4
8. SOFTWARE DOWNLOADS AND MANUALS	4

1. INTRODUCTION

This newsletter details the latest features and functionality of Multicam version 16.3.

In this version, the XT servers have increased their IP reliability, through the widest adoption of the standard ST-2022-7, and other LiveIP improvements. The external storage capacity is increased, and new supermotion configurations are available.

ST-2022-7

Standard SMPTE ST-2022-1-7 (hitless merge) is now available for all HD definitions, for audio and monitor outs.

More Super Motion Support in HD and UHD-4K

New Super Slow Motion 1080p configurations have been added on the XT servers.

Conversion HDR to SDR for multiviewer outs

Better monitoring quality on standard screens.

New codec for XT/XS-VIA proxy channels

New inter-frame H.264 codec for a better quality to bandwidth ratio. Bitrate is configurable.

Dual-LSM with 1 PGM per operator

Available in two Supermotion configurations

Increased recording capacity with external storage

Up to 54 TB of recording capacities is now possible, with higher transfer speeds.

LiveIP improvements

PTP is now received on all configurations, including “only inputs” ones. LTC is now generated from PTP. New SDP contents to configure UHD in Quad-HD streams.

2. LIVEIP IMPROVEMENTS

2.1 ST-2022-7

ST-2022-7 seamless switching is a redundancy solution for IP flows. All video and audio flows are duplicated, using different IP settings (and possibly, different network paths). If information is missing on the first stream, it is taken from the second one, to provide an uninterrupted flow. Already available in Multicam 16.2 for the XT/XS-VIA and XT/XS-4K servers with limited specifications, this feature is now extended to multiple essences:

- Video (clean out)
- Video (monitor out with characters)
- Audio



Multiple definitions are available too: 720p, 1080i, 1080p. Note that UHD-4K, ANC and ST-2022 flows are not yet covered.

Once activated, the LiveIP web interface allows you to configure both streams (Primary and Secondary) independently.

Label	Source Address	Source Port	Destination Address	Destination Port	SFP
IN1 Video	PRI	192.168.0.1	239.1.110.155	8100	4-C
IN1 Video	DUP	192.168.0.1	239.1.110.156	8100	4-D

2.2 PTP

PTP Master can now be connected to Master module #4 instead of #1, if it's not being used.

When receiving additional PTP metadata (*Organization Extension* from ST-2059-2 standards), the servers can generate LTC from the PTP. A specific status message (Orange) indicates when these metadata are missing - and therefore LTC cannot be generated - while PTP remains correct for other purposes.

3. NEW SUPERMOTION CONFIGS IN HD AND UHD-4

New Super Slow Motion configurations have been added on the XT servers:

HD 1080i/720p

- 3 SLSM 4x (3G) + 2 OUT
- 3 SLSM 4x (3G) + 1 IN + 2 OUT
- 3 SLSM 4x (3G) + 2 IN + 2 OUT
- 3 SLSM 4x (3G) + 1 IN + 4 OUT
- 3 SLSM 4x (3G) + 2 IN + 4 OUT

HD 1080p

- 2 SLSM 4x + 2 IN + 4 OUT

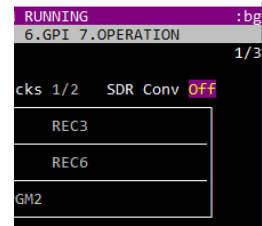
UHD-4K (PGM) / 1080p (REC)

- 1 SLSM 8x + 1 IN + 2 OUT
- 2 SLSM 6x + 0 IN + 2 OUT



4. CONVERSION HDR TO SDR FOR MULTIVIEWER

When working with HDR video essences on XT/XS-VIA, the multiviewer outputs sent to a non-HDR monitor display a poor-quality image, with reduced contrast. Now it's possible to have optimum quality by converting multiviewer outs to HDR.



5. NEW CODEC FOR PROXY CHANNEL

This new H.264 codec, only available for the XT/XS-VIA, offers a better quality to bandwidth ratio.

The specs are:

- Configurable bitrate: 1 – 1.5 – 2 – 3 – 4 Mbps
- Framerate 25 or 29.97 fps
- Definition: 640 x 360
- Colorspace: ITU BT R.709
- GOP size: 8
- Audio MPEG1 L2 @48 kHz
- Up to 16 audio channels per video channel



6. DUAL-LSM WITH 1 PGM PER OPERATOR

This feature is available for XT3, XT4K and XT-VIA in 1080i and for XT-VIA only in 1080p. It is currently limited to two configurations:

- 2 SLSM 3x + 4 IN + 2 OUT
- 3 SLSM 3x + 1 IN + 2 OUT



7. FASTER AND BIGGER EXTERNAL STORAGE

For the XT/XS-VIA, higher bandwidth requires faster external storage, using SAS-6G. A new array has been qualified (AIC J2024-02), that offers a 12G connection.

The new maximum number of disks (internal + external) is now 36 (24 external and 12 internal), that bring the recording capacity up to 54 TB.



8. SOFTWARE DOWNLOADS AND MANUALS

Please refer to the [Support Page of the EVS Website](#) and the Download area for manuals, release notes and software packages to download.

If you don't already have an EVS login, you'll be invited to create a personal EVS account, to help ensure that you're kept up to date with only the most relevant information and updates. This will also allow you to download all the information you need, completely free of charge.