

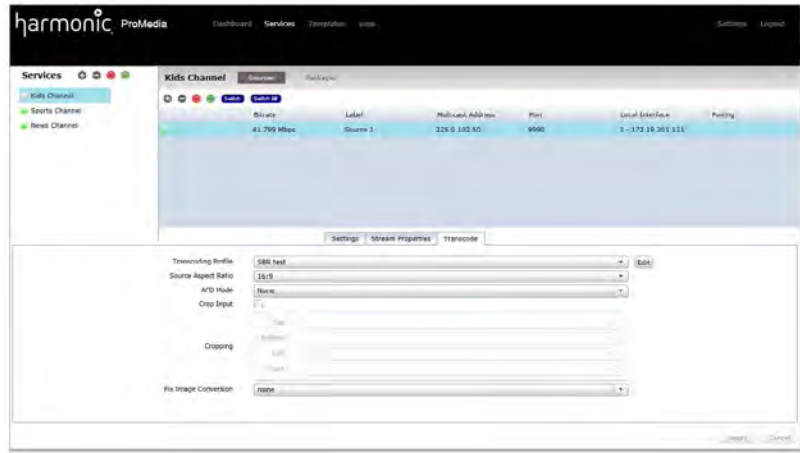
ProMedia Live

REAL-TIME MULTISCREEN TRANSCODER



HIGHLIGHTS

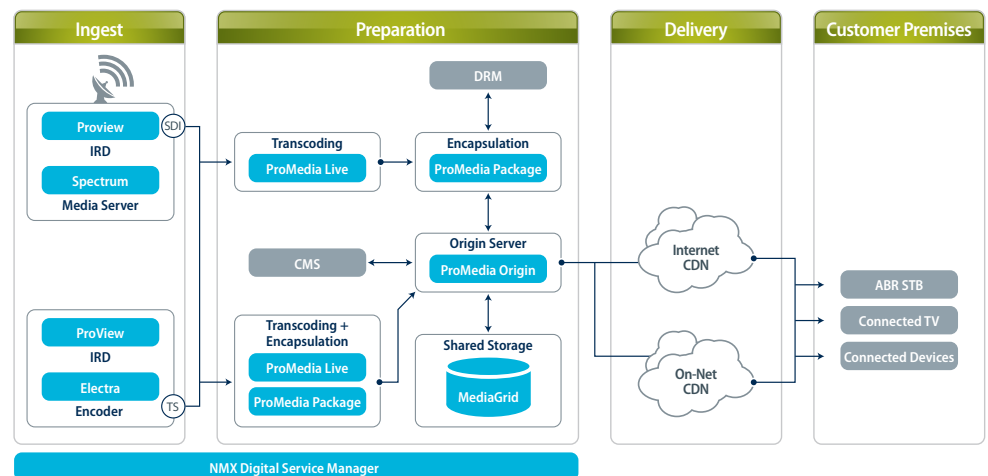
- Support for real-time SD/HD-SDI and MPEG-2/MPEG-4 AVC encoding
- Premium H.264 video quality based on Harmonic's Hierarchical LookAhead and VBR technologies
- Multi-machine synchronization for adaptive bitrate encoding
- Carrier-grade management system with NMX Digital Service Manager monitoring and control supporting N+M redundancy
- Wide range of client integration
- Ad insertion (SCTE-35) support
- Available as software only or as optimized hardware appliance
- Seamlessly integrates with the ProMedia Package adaptive stream preparation application
- HEVC-ready



Designed to address the increasing demand for video delivery to Internet and mobile devices, Harmonic's ProMedia™ Live is a real-time video processing and encoding system with enhanced H.264 video codec technology for creating high-quality Internet video streams. It can transcode baseband SD and HD or MPEG-2 or MPEG-4 AVC (H.264) content to multiple streams optimized for adaptive bitrate delivery.

ProMedia Live simplifies processing by efficiently handling metadata information (language, captions, ad signaling/insertion) on input and output. The application can be controlled with the Harmonic NMX™ Digital Service Manager, which enables users to monitor and manage compressed multiscreen video and audio services seamlessly.

Entirely software-based, ProMedia Live is part of the ProMedia family of video preparation and processing solutions for production and multiscreen applications, including real-time and file-based transcoding, packaging and origination.



ProMedia Live supports both baseband and IP architectures:

- Direct input of SD/HD video via four SDI ports
- Direct input of MPEG-2 and H.264 content from an integrated receiver-decoder (IRD) or an encoder via transport stream

BUSINESS AND TECHNICAL BENEFITS

Premium Video Quality

ProMedia Live leverages video codecs based on Harmonic's Hierarchical LookAhead™ and VBR technologies, both specifically engineered for adaptive streaming delivery. Operators can prepare and deliver video streams in the formats needed, with the best picture quality at the lowest bitrates.

Usability

ProMedia Live automatically stores metadata information on input, such as language, captions, ad signaling/insertion and teletext, so that it is automatically embedded on output.

Ecosystem Integration

The carrier-grade software platform can be integrated with ProMedia Package for encapsulation and delivery to a variety of target ecosystems and formats.

VIDEO INPUTS

SD-SDI (SMPTE-259M)/HD-SDI (SMPTE-292M)	Up to four channels
MPEG-2 SD/HD, CBR/VBR	Up to 10 channels delivered as transport stream/UDP
MPEG-4 AVC SD/HD, CBR/VBR	Up to 10 channels delivered as transport stream/UDP

AUDIO INPUTS

Formats	MPEG-1 Layer II, AAC-LC, HE-AAC v1/v2, Dolby® Digital (AC-3)
---------	--

REDUNDANCY

Redundancy	IP input source redundancy, mirrored IP output, N:M unit redundancy
------------	---

Centralized Management

ProMedia Live can be managed via a web-based GUI, an API or Harmonic's NMX network management system. NMX centrally provisions and controls multiple elements of the ProMedia suite, enhancing scalability while simplifying deployment and management of multiscreen services.

PROMEDIA APPLICATION SERVER

ProMedia Live is available as software or as an appliance. When purchased as software only, the customer can install the application onto their hardware server of choice (as long as it meets minimum hardware requirements). When purchased as an integrated appliance, the software is hosted on either the ProMedia 1104 (SD/HD-SDI, MPEG-2/MPEG-4 AVC inputs) or ProMedia 1200 (MPEG-2/MPEG-4 AVC inputs) application server.

PROCESSING FEATURES

Resolution	Up to 1920x1080i
Aspect Ratio	4:3 and 16:9 passthrough (AFD) or conversion
MPEG-4 AVC Video Processing	Hierarchical LookAhead, all intra prediction modes, advanced ME with quarter-pixel interpolation and multiple reference frames, mode decision and rate control optimized for adaptive streaming
Video Processing	Deinterlacing, scene-change detection, cropping
Audio Downmixing	5.1 to 2.0 to mono
Ad Insertion	SCTE-35 passthrough
Multi-Machine Synchronization	Split adaptive bitrate encoding across multiple machines
Subtitle and Closed Caption Support	SDI: CEA 608 and CEA 708 Transport stream: Teletext, VBI subtitling, CEA 608 and CEA 708
Untimed Data Passthrough	EBIF, DSM-CC, etc., data may be passed through

OUTPUTS

Video	H.264 (Baseline/Main/High) via passthrough
Audio	AAC-LC, HE-AAC v1/v2, AC-3, MPEG-1 Layer 2
Container	Transport stream over UDP, each video is delivered as a separate SPTS

All rights reserved. Harmonic, the Harmonic logo, ProMedia, Spectrum, Electra and ProView are trademarks, registered trademarks or service marks of Harmonic Inc. in the United States and other countries. Dolby and Dolby Digital are registered trademarks of Dolby Laboratories. Implementations of AAC/HE-AAC by Fraunhofer IIS. Other company, product and service names mentioned herein may be trademarks or service marks of their respective owners. All product and application features and specifications are subject to change at Harmonic's sole discretion at any time and without notice.
04.26.13