[comprimato]
Live transcoder

GPU-powered software for professional video encoding and transcoding.

Comprimato Live Transcoder is high-performance encoder and transcoder software built explicitly for live streaming.

It is designated for broadcasters and content distributors to match the low latency and high-quality requirements.

Live transcoder enables end-to-end live video production from contribution encoding up to final distribution transcoding.

It is available as a flexible software license and high-density server appliance. Live transcoder has been developed to help

maximize revenue from content distribution by providing high-quality, cost-effective video processing.

CONTRIBUTION ENCODING

Encode live video using H.264 or JPEG2000 TR-01 codecs and transport the video to the studio or directly to the cloud. Avoid packet loss, reduce latency, and deliver high-quality video.
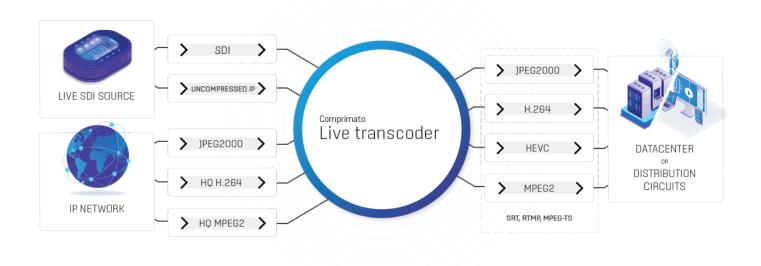
DISTRIBUTION TRANSCODING

Produce a high-quality video for live IPTV and OTT distribution. Create adaptive bitrate channels from IP inputs or directly from SDI sources.

SOFTWARE-BASED SOLUTION

Comprimato Live Transcoder is GPU accelerated high-density software. It is available as a software license or 1RU server appliance.

End-to-end live video encoding and transcoding software.

Additional features

High Value Transcoding

ABR transcoding

Instantly adapt live video content to the resolution, quality and codec needs of current and future devices.

High bitrate formats

Native support for high bitrate broadcasting contribution formats including JPEG2000, H.264 or HEVC.

Image processing

Resizing, Change of sampling factor, Bit depth conversion, Interlacing/Deinterlacing, Framerate reduction, Color adjustments and others.

Low latency

End-to-end live video delivery with guaranteed latency cap of 700 ms.

Lowest CapEx and OpEx

Easy deployment

Software only solution simplifies deployment; no need for specialized support; maximum flexibility and portability.

Simple scalability

Extend the number of streams, resolution or frame rate simply by adding additional CPUs or GPUs.

Investment protection

Fully leverages existing IT and IP infrastructure.

Easy integration and management

3rd party integration

Easy insertion into existing workflows via REST API.

Centralized control

Set up, manage and control hundreds of streams from a single console via SNMP or web interface.

For more information contact sales@comprimato.com

Specifications

| Feature on product roadmap

Video input

Supported codecs:
JPEG 2000
H.264 (MPEG-4, AVC)
H.265 (HEVC)
MPEG-2

SDI interface:
SD, HD, 3G-SDI
| Quad split 4K, 2SI 4K SDI
| 12G-SDI

Resolutions:
FullHD 1080p
4K UHD

Color component sampling:
4:2:2 10bit/8bit
4:2:0 10bit/8bit

Audio input

Codec:
Uncompressed PCM - multichannel
(SMPTE 302M-2007)
AAC
MPEG2 Audio
AC-3
SDI audio (AES 3, Embeded AC3 - SMPTE 337)
| E-AC-3

Metadata

SCTE-35, SCTE-104 + conversion
Metadata pass through
Subtitles embeding into H.264 SEI messages
Closed Captions (EIA-608/708)
Line 21 captions

Video processing

- Resizing
- Automatic color component subsampling
  (both configured automatically based on input and
  output settings)
- De-Interlacing
- Cropping / Padding
- Color adjustments
- Frame-rate adjustment (to 1/2)
| - Logo insertion

Containers & Protocols

UDP, RTP
MPEG-2 TS, MPTS
VSF TR-01
RTMP
SRT
| Transport stream File

Synchronization

Input PCR:
Configurable: global
(in separate transport stream) or local
(contained in each input transport stream)

Output PTS:
Configurable: pass-through or adding offset
to input PTS

Audio processing

- Shufling
- Volume gain
- Sampling rate conversion

Video output

Multiple output streams per each input
stream, different configuration per each
output stream.

Video codec:
H.264 (MPEG4, AVC)
JPEG2000
H.265 (HEVC)
MPEG2

SDI interface:
| SD, HD, 3G-SDI
| Quad split 4K, 2SI 4K SDI
| 12G-SDI

Color component sampling:
4:2:2 10bit/8bit
4:2:0 10bit/8bit

Audio output

Audio codec:
AAC - multichannel
AC-3
Uncompressed PCM (SMPTE 302M-2007)
MPEG2 Audio
| E-AC-3

System

Input stream count:
Depends on HW configuration

Output stream count:
Depends on HW configuration

Latency (input to output):
Configurable, 700 down to 400 ms

System type:
CentOS/RHEL OS custom image.

Stream startup time:
Max. 5 seconds after configuration is applied

Configuration options:
Web UI, SNMP, REST API

System Monitoring options:
System webconsole, SNMP + custom OIDs