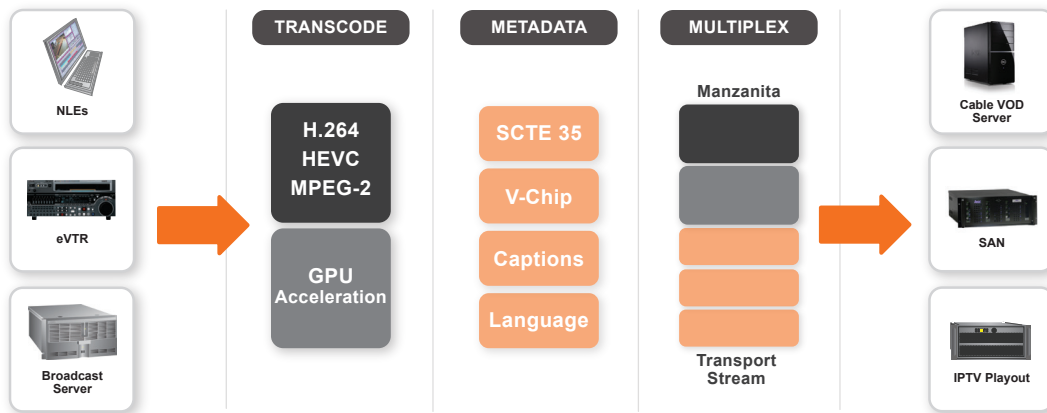


Vantage Transcode IPTV VOD

Product Sheet



Reduce bit rates and increase quality

Transcoding for IPTV and Cable VOD

Telestream Vantage® Transcode IPTV VOD allows you to achieve the highest possible quality at the lowest bit rates. With GPU accelerated transcoding, full integration of x264 H.264 and x265 HEVC encoding technology, and Manzanita Transport Stream multiplexing, Transcode IPTV VOD offers a complete solution to automate transcoding for IPTV and Cable VOD production.



Increase Quality, Lower Transmission Costs with x264

x264 is widely regarded as the industry leading H.264 encoding technology. Independent studies have shown x264 capable of reducing bit rate requirements by 50%, without sacrificing quality, when compared with other H.264 encoders. Transcode IPTV VOD offers GPU acceleration of x264 encoding for high quality with exceptional transcoding speed.

HEVC encoding

Transcode IPTV VOD includes x265 HEVC encoding, for high-quality H.265 encoding. HEVC allows you to reduce bit rates and increase video quality compared to H.264, allowing you to maximize the use of your bandwidth.



Accelerated HEVC Encoding

Transcode Multiscreen enables the creation of high-quality HEVC through x265 compression technology.

Extensive Transport Stream Control

Transcode IPTV VOD provides sophisticated metadata control, customizable stream mapping, and fully integrated Manzanita Transport Stream multiplexing. Audio tracks and metadata may be preserved from source and remapped or encoded according to your specifications. Captions, V-Chip ratings, and other metadata can be preserved and inserted during the transcode. With these features and more, Transcode IPTV VOD allows you to meet the needs of the most demanding distribution requirements.

Save time, effort and money

Transcode IPTV VOD eliminates tedious manual transcoding, cumbersome handling of tape, and the need for digital-to-analog conversions just to get your media into the right file format – saving you time, effort and money. Transcode IPTV VOD automates the full production of your VOD assets, from ingest to transcoding, packaging, delivery and notification.

Consistent, hands-free processing

Transcode IPTV VOD is your professional media processing system. Set up automated workflows once for consistent, high-quality results every time. Simply set rules for where to look for your source files, what to do with them and where to deliver them. Transcode IPTV VOD automatically monitors FTP, network or local folders for the arrival of new content, enhances media with pre-processing filters for high-quality output, transcodes and delivers your media – and then sends email notifications.

Options to enhance your workflow

Vantage also offers options and an upgrade path to enhance your workflow. Add Pipeline™ to ingest media from tape or live sources. Add Vantage Analysis to create “smart” transcoding workflows, which analyze media properties and then automatically choose and customize transcoding profiles to best suit the media. Automate VOD production further with Post Producer™, which replaces manual editing with automated stitching, graphics, effects, audio overlays, and ratings to create beautiful, finished VOD assets. Post Producer™ integrates tightly with IPTV VOD to create a complete VOD production solution. Add integration with third party software tools to access QC, digital delivery, and subtitling functions within a unified Vantage workflow.

Lightspeed GPU Acceleration

Add Lightspeed Server to improve Vantage performance and throughput. Leveraging Telestream’s exclusive Lightspeed technology, Lightspeed Server is a 1RU device that uses multiple GPUs and CPU cores to accelerate video processing and H.264 encoding. Enhanced deinterlacing, resizing, and accelerated H.264 encoding will significantly improve your image quality and reduce transcoding time.

Scalable, rock-solid server software

Vantage Transcode IPTV VOD runs on Windows Server 2008 R2 or Windows Server 2012. Optimized for server architectures, Vantage Transcode IPTV VOD ensures high performance. Automatic queuing and prioritization capability ensures that media is processed as quickly as possible.

Adding Vantage Array allows for full scalability, load-balancing and redundancy, giving you 24/7 reliability and auto-failover. Processing can take place on one or multiple load-balanced servers providing high-volume processing to meet your exact workflow needs.

Best in class customer support

You can rest assured that our worldwide team of highly-skilled technicians will be available to provide the quick and comprehensive support and guidance you need to fully leverage the power of your Telestream product.

Technical Specifications



Transcode IPTV VOD
Product Sheet

VIDEO INPUT

Container Type	DV ²	IMX	MPEG-2 ²	ProRes	Avid DNxHD ²	AVCI	J2K	H.264	VC-1
TIFO	■	■		■	■				
AVI	■								
Avid MediaStream ⁵			■						
GXF	■	■	■						
LXF ⁵			■						
MOV	■	■		■	■			■	
MP4								■	
MPEG-2 PS			■						
MPEG-2 TS			■					■	
MXF OP-1a	■	■	■		■	■	■		
MXF AS02 ³	■	■	■		■	■			
Omneon (MOV) ⁵	■	■	■		■	■			
Omneon (MXF) ⁵	■	■	■		■	■			
Seachange ⁵			■						
Windows Media ⁵									■

AUDIO INPUT

Container Type	PCM	MPEG	302M	AAC	AC3 ⁴	DolbyE ⁴	WMA
TIFO	■					■	
AC3	■						
AVI	■						
Avid MediaStream ⁵	■	■					
GXF	■						■
LXF ⁵	■						
MOV	■			■			■
MP4	■			■			■
MPEG-2 PS		■					
MPEG-2 TS	■	■	■	■	■	■	■
MXF OP-1a	■						■
MXF AS02 ³	■						■
Omneon (MOV) ⁵		■					■
Omneon (MXF) ⁵		■					
Seachange ⁵	■	■					
WAVE	■						■
Windows Media ⁵							■

VIDEO/AUDIO OUTPUT

Output Format	H.264	H.265	MPEG-2 ²	MPEG-1	AES	AC3 ⁴	MPEG-1 Layer 1	AAC
TIFO	■	■	■	■	■	■	■	■
Transport Stream	■	■	■	■	■	■	■	■
MP4	■	■						■

¹ Lightspeed Server sold separately; see Lightspeed server product sheet.
² DV includes DV25, DVCPRO25, DV50/DVCPRO50, and DVCPROHD. MPEG-2 includes long GOP and I-Frame only.
³ Files produced by Omneon media Subsystem (6.1) and Amberfin ICR (7.8) were tested
⁴ AC3 includes Dolby Digital and Dolby Digital Plus (E-AC3). Dolby E decoding requires an additional option.
⁵ Supported through the same decoding as Transcode/Transcode Pro. Please refer to the Vantage Format Sheet.
⁶ SQL enterprise installation may require Professional Services, contact Telestream for details.

Video, Audio and Graphics Processing INCLUDED

Video: Full 16-bit 4:4:4:4 YCbCrA multi-core video processing. Filtering includes aspect ratio preservation, blur, bumpers, color rescale, contrast, crop, deinterlacing, down conversion, field order conversion, gamma correction, image overlays, inverse telecine, mask/padding, movie overlays, noise reduction, telecine pulldown, saturation, sharpen, standards conversion, trailers, time code burn in, trimming, up conversion.

Audio: Channel mixing, fade up/down, language descriptor, normalization, phase invert, up/down sampling, mix external audio files, SMPTE 337M insertion

Graphics: QuickTime overlays, image overlays, bumpers, trailers; V-Chip image overlays at program start

Video: Multi-pass MPEG-2 and H.264 transcoding including GPU accelerated x264 encoding¹. VBR and CBR encoding with VBV buffer model control.

Audio: AES, Dolby AC3, MPEG-1 Layer 2, and AAC audio encoding. Optional Dolby E decoding available.

Transport Stream Multiplexing INCLUDED

Multiplexing: Fully integrated Manzanita multiplexing with support for configuration file, bit rate model control, NULL stream insertion, PID and PMT control.

Captions: ATSC/DTV 9600 708 SEI, ATSC DTV 9600 MPEG-2 (608 and 708), ATSC CEA 608, SCTE-21, SCTE-20.

Metadata: AFD preservation and insertion, Audio language descriptors, V-Chip rating, SCTE-35 insertion.

OPTIONAL

Dolby E decoding
CableLabs VOD Metadata entry and file creation

System Configuration Requirements

Vantage:

Operating System: Windows Server 2008 R2, and Server 2012 R1 and R2
Minimum Server: Dual, Six Core Processors - or better (a total of 12 cores or more is recommended), with 16 GB DDR Memory
Recommended Server: Telestream Lightspeed Server with GPU acceleration; High-Speed NAS or SAN storage recommended; GigE Ethernet adapter

SQL Database Dedicated Server:

Operating System: Windows Server 2008 R2, and Server 2012 R1 and R2
Minimum Server: Four Core Processor - or better with 16 GB DDR Memory or better
Database: SQL 2008, SQL 2012, SQL 2014 Standard or Enterprise, SQL Express 2014
Client OSs: Windows 10, Windows 7, 8, Server 2008 R1 and R2, Server 2012 R1 and R2

