



Vantage Media Processing Platform

Telestream® Vantage® is a media processing and workflow orchestration platform that manages all media services from the camera to the point of distribution.

Vantage allows content owners, producers, and distributors to quickly, easily, and cost-effectively ingest, edit, package, monetize, quality-check, and distribute their media. It sits above your content and media workflows, orchestrating best-in-class media processing services, on-premises and in the Cloud – to quickly address changing production demands or to test new business concepts.

Based on a flexible service-oriented architecture, Vantage is made up of discrete Services, Media Management Tools, and Connectors that combine to create powerful automated workflows – all under unified robust system control. Vantage Services provide media capture, transcoding, metadata processing, and media analysis. Vantage Management Tools provide advanced compositing, assembly and powerful workflow automation. Vantage Connectors enable seamless, API-level integration with third-party systems and our own Vidchecker QC.

Vantage offers scalability from simple standalone systems to complex, multi-server systems to meet growing business needs today and well into the future. Running on standard, off-the-shelf server hardware, or best-in-class Telestream Lightspeed® GPU acceleration servers, Vantage provides disaster recovery, and utilizes all of the capabilities of today's enterprise-level IT infrastructures and best practices. Where cloud deployment is preferable, Vantage can flexibly run in private or public clouds solely, or in addition to your on-premises systems.

Vantage utilizes the latest technologies to deliver pristine quality, exceptional processing speeds, plus the industry's most intelligent and scalable workflow automation system. We offer a broad range of enterprise-class transcoding and workflow solutions based on the Vantage media processing platform to ensure flexibility and scalability to meet your business needs well into the future.

Vantage supports 4K/UltraHD and HEVC encoding

Vantage supports full UltraHD and 4K video processing, including upconversion from HD content and full GPU acceleration.



Accelerated HEVC Encoding

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

Transcode Products

Vantage Transcode products simplify media distribution and editing in today's multiformat, multi-vendor video environments. Video and audio are automatically converted to all major edit, web, mobile and MPEG-2 file formats. Vantage Transcode products save you time, effort and money by eliminating 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.

Vantage Transcode converts from virtually any source format to a full range of web, mobile, edit, and MPEG-2 formats. Exclusive Telestream technology up converts SD interlaced content to superior quality 1080i and 720p HD output; high-quality deinterlacing also allows the creation of exceptional web and mobile content.

Vantage Transcode Connect adds the ability to automate XML sidecar metadata transformation, the creation of TAR packages, and web services notification.

Transcode Pro Products

Vantage Transcode Pro products simplify media conversion in today's multi-format, multi-vendor video environments. Video and audio are automatically converted with metadata between all the major broadcast servers, edit system, MXF, web, and mobile file formats.

Vantage Transcode Pro offers the industry's deepest and broadest support for all the major professional video and audio file formats, systems, and wrapper variants. It converts from virtually any source format to a full range of web, mobile, edit, MXF and all leading broadcast server formats. For broadcast content, HD VANC is preserved or can be inserted, and optional Dolby E decode or pass through is also supported.

Vantage Transcode Pro Connect adds the ability to automate XML sidecar metadata transformation, monitoring and delivery to broadcast servers using proprietary protocols, creation of TAR packages, and web services notification. Transcode Pro Connect also enables you to integrated with Avid Interplay, including ingest of media through Send to Playback and options to deliver media using Transfer Engine or Interplay Web Services.

Transcode Multiscreen

Vantage Transcode Multiscreen offers GPU-accelerated multiscreen transcoding with extraordinary speed and quality. Built specifically for adaptive bit rate (ABR) encoding, Transcode Multiscreen can encode dozens of bit rates simultaneously up to 20 to 30 times faster than other solutions. With accelerated x264 encoding technology, Transcode Multiscreen also offers the industry's highest H.264 quality at the lowest possible bit rates.

Transcode Multiscreen is also the only transcoding solution that provides full workflow automation for GPU-accelerated ABR preparation. Content is transcoded directly from a wide variety of source formats. Files are packaged and encrypted for Apple HLS, Adobe Dynamic Streaming, Microsoft Smooth Streaming, MPEG DASH and MP4 progressive download. Only Transcode Multiscreen allows full automation for compete hands-free publishing.

Transcode IPTV VOD

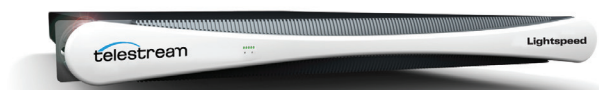
Vantage Transcode IPTV VOD allows you to achieve the highest possible video quality at the lowest possible bit rate. With GPU-accelerated transcoding, Transcode IPTV VOD offers unparalleled video processing speed for creating MPEG-1, MPEG-2 and H.264 Transport Streams. Industry-leading x264 encoding can reduce H.264 bit rate requirements by as much as 50% without sacrificing visual quality when compared with other encoding technologies. Direct integration with Manzanita multiplexing ensures Transport Stream compliance for the most demanding environments. Finally, Transcode IPTV VOD allows fully integrated QC, delivery and notification allowing the entire transcoding workflow to be completely automated.

Lightspeed Server

Lightspeed Server can be added to any Vantage Transcode product to accelerate video processing and H.264 transcoding. Lightspeed Server accelerates Vantage video and H.264 processing with GPUs and multicore CPUs to provide the best image quality in the least amount of time. Housed in an efficient 1 RU server, Lightspeed Server reduces rack space, power and cooling requirements while meeting increased output capacity needs.

Lightspeed Server accelerates image processing within Vantage workflows, including scaling, deinterlacing, frame rate conversion, motion vector calculation, and other tasks that require computation and analysis to modify or create new video frames. Faster video preprocessing acceleration benefits the output quality of all video output formats.

Vantage® workflow products enable the design and automation of video workflows and can integrate with virtually any network device in your facility.



Lightspeed Server

Visual Workflow Design

With visual workflow design and job status views, Vantage provides a powerful yet simple way to build and automate video workflows. The Vantage workflow engine offers comprehensive tools for managing process, metadata and video files independently, regardless of the underlying file format.



Create powerful workflows with the Vantage workflow designer

Full Automation in Multi-Vendor Environments

Vantage unifies your video operations into a managed, faster-than-real-time workflow ecosystem by offering a comprehensive set of built-in tools and third-party integrations. Vantage includes native support for content ingest, analysis, file format conversion, and transcoding for broadcast, cable, IPTV and multiscreen delivery. Vantage further integrates with virtually every type of video device, including broadcast servers, edit systems, streaming servers, cable VOD servers, QC systems—including our own Vidchecker QC products, digital delivery protocols, and video processing tools. This broad range of capabilities ensures that you can completely orchestrate and unify your workflow and achieve complete automation and visibility.

Automated Decision-Making

Using unique workflow design capabilities, Vantage allows you to create adaptive workflows that automatically make decisions and manage your content based upon incoming metadata and content properties. Further, Vantage allows the creation of self-healing workflows that can detect – and recover from – errors in video files. By integrating Vantage analysis, transcoding, file movement and workflow design, you can build automated intelligence into your video workflows.

Support for Manual Steps

The Vantage Workflow Portal puts the manual steps in your video workflow under process control. Operators can review assets, enter metadata, and forward jobs as part of the entire workflow environment.

Vantage Workflow Products include:

- **Vantage Analysis** – media analysis, decision making & quality control workflows.
- **Vantage Workflow Portal** – creation of operator user interfaces for browsing video, entering metadata, and moving media through workflows.
- **3rd Party Integrations** – direct integrations with Adobe, Aspera, Signiant, Dolby, Digimetrics Aurora, Interra Baton, Venera Pulsar, Nielsen, Civolution, Screen Subtitling, Avid, VOD, all major commercial delivery services, and all major broadcast servers, provide a fully managed and tightly coupled multi-vendor workflow.

- **Post Producer** – automates the editing of assets for distribution and promotional purposes. Stitch media, overlay graphics and text, convert multiple segments and apply ratings and ad insertion metadata, all automatically. Post Producer removes the need for tedious manual editing, increasing the value of your media through faster turnaround times and lower production costs. Post Producer Titler Engine, powered by NewBlueFX[®] extends automation to include animated titles and overlays.
- **TrafficManager** – allows full automation of the content processing for commercials. Direct integrations with national catch servers, inventory searching and preview, and automated transcoding and delivery create a unified and flexible commercial management system. TrafficManager will help you reduce errors, lower costs, and offer improved services to your advertising clients.
- **Tempo** – A complete solution for re-timing file-based content for intelligently decreasing the running time of shows and segments, without noticeably impacting video and audio quality. Tempo runs on the Vantage media processing platform enabling efficient re-timing operations on multiple files simultaneously.
- **VOD Producer DAI** – Automates the assembly of CableLabs VOD content and provisions it for Dynamic Ad Insertion. With VOD Producer DAI, content production networks of any size can generate ongoing, profitable revenue with fresh, relevant advertising from Video On Demand assets in cable networks.
- **Vantage Camera Ingest** – automated ingest of camera footage into edit and transcoding. Native camera file format support and automated stitching streamlines your workflow and saves editing time.
- **Capture and Live Streaming** – integrated support is built in for Telestream's Lightspeed Live Stream, and Lightspeed Live Capture, two new applications that deliver real-time, enterprise-class streaming and capture for media and entertainment companies, corporations, government and education.

Powerful System Management

For large-scale or mission-critical workflows, Vantage[®] offers several options to achieve a high level of visibility and a deep level of management and control. Vantage offers the only truly scalable solution for file-based transcoding, device interchange, automated content production, broadcast operations and multi-channel distribution.

Vantage Array

Vantage Array binds Vantage servers together, offering easy, cost-effective capacity expansion, failover, redundancy and load-balancing. CPU-aware load balancing offers throughput improvement over traditional "round robin" techniques.

More Throughput, Fewer Servers

Vantage offers the industry's leading task scheduling, which is both cost-based and CPU-aware. It automatically responds to fluctuations in processing or media loads, ensuring optimal hardware utilization and offering as much as 30%-50% throughput improvement over competing transcoding products. This results in hardware cost savings, less power and cooling, and fewer servers to manage.

Vantage support for Open Workflows allows select downstream processes to begin before upstream processes are complete. In addition to improving turnaround time, Open Workflows improve the speed and overall efficiency of file-based workflow processing.

Predictability and Visibility

With web-based dashboard, customizable load balancing and retry rules, plus reporting capabilities for capacity planning, Vantage offers several options for true visibility into the workflow and the sound knowledge that work will be done as designed.

Integrate Multi-Vendor Environments

Vantage includes support for all the major broadcast servers, edit systems, streaming servers, cable VOD servers, SANs and virtually any network digital device in your facility. Vantage removes tape and signal-based steps in your video operations, enabling faster than real-time automation across the entire workflow.

Scalable, rock-solid server software

Processing can take place on one or multiple load-balanced servers providing high-volume processing to meet your exact media workflow needs. For critical workflows, priority-driven scheduling, distributed control and auto-failover all ensure that there is no single point of failure, and no barrier between you and your workflow needs.

Vantage Transcode Product Comparison

Feature	Transcode	Transcode Pro	Transcode Multiscreen	Transcode IPTV/VOD
Watch hot folders and deliver files: Windows, FTP, SFTP	■	■	■	■
Decode broadcast, MPEG-2/4/H.264, MXF, IPTV, web, mobile formats	■	■	■	■
Email Notification	■	■	■	■
Encode mobile, edit and web formats	■	■		
Encode for broadcast servers, MXF		■		
Create TAR files	Connect	Connect	■	■
XML data ingest, transformation and creation, SOAP and REST web service notification	Connect	Connect	Optional	Optional
Broadcast server watch and delivery	Connect	Connect		
Encode high-quality x264 (H.264) for adaptive bit rates: Apple HLS, Adobe Dynamic Streaming, Microsoft Smooth Streaming, MPEG-DASH			■	
High-efficiency multi-rate H.264 encoding			■	
Packaging for adaptive bitrate formats			■	
AES 128 encryption for DRM			■	
Encode high-quality x264 (H.264) for IPTV				■
Manzanita Transport Stream Multiplexing for IPTV and cable				■
Transport Stream metadata and language mapping control				■
Integrations for QC, digital delivery, subtitling, and watermarking	Optional	Optional	Optional	Optional
Lightspeed Server for acceleration	Optional	Optional	Optional	Optional
Analysis	Optional	Optional	Optional	Optional

