

# Transcoding, Workflow Automation, and System Management

Telestream® Vantage® provides a complete range of world-class video transcoding and workflow solutions – from single-server installations for automating transcoding, to very large, multi-server systems that produce and assemble millions of finished media packages.

Vantage transcoding workflows make content production, multi-screen delivery, and device interoperability a hands-off process. Add automated decision making and enterprise-class system management to take your workflow to the next level.

Vantage brings transcoding, media capture, metadata processing, and analysis – into a unified system. Groundbreaking process design allows you to build a flexible, scalable system while delivering predictable, visible, reliable results.

### **Vantage Uniquely Offers**

- Best-in-class transcoding
- Intelligent workflow automation
- Powerful system management

Vantage is flexible and modular, allowing you to choose the perfect solution to meet your needs, today and into the future.



### **Product Brochure**

# **Best-in-class Transcoding**



Vantage® transcoding products utilize the latest technologies to deliver pristine quality, exceptional processing speeds, plus the industry's most extensive workflow management and system support.

Dynamic, decision-based workflows can be designed for most any application. Vantage Transcode products can be used standalone, clustered using Vantage Array, or integrated using any of the Vantage Enterprise System Management products.

#### **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 VOD 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-2VOD 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, streaming server, cable VOD server, web, and mobile file formats.

Vantage Transcode Pro offers the industry's deepest and broades 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, VOD, IPTV, MXF and al 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. It also adds integration with Avid Interplay, allowing ingest of media from Avid and delivery into Interplay.

#### **Transcode Multiscreen**

Vantage Transcode Multiscreen is high-efficiency video transcoding software designed specifically for adaptive bitrate (ABR) content production workflows. Content is converted directly from a wide variety of source formats. Files are automatically packaged for Apple HLS, Adobe Dynamic Streaming, Microsoft Smooth Streaming, MPEG DASH and MP4 progressive download for hands-free publishing. Transcode Multiscreen is the only transcoding solution that provides a complete workflow for GPU-accelerated adaptive bitrate applications, including ingest, transcoding, packaging, encryption, delivery and notification.

#### **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.



**Lightspeed Server** 

## Vantage

# World-Class Workflow Design and Automation

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

#### **Visual Workflow Design**

With visual workflow design and job status views, Vantage provides a powerful yet simple way to build and automate video workflows. Metadata flow, analysis data flow, media file flow, and process flows can be designed independently of one another and of the underlying media file.

#### **Full Automation in Multi-Vendor Environments**

Vantage automates content ingest, file format conversion, video device interoperability, multi-channel distribution, and other video production workflows. With support for all major broadcast servers, edit systems, streaming servers, cable VOD servers, SANs and virtually any networked digital device in your facility, Vantage unifies your video operations into a managed, fasterthan-real-time workflow ecosystem.

#### **Automated Decision-Making**

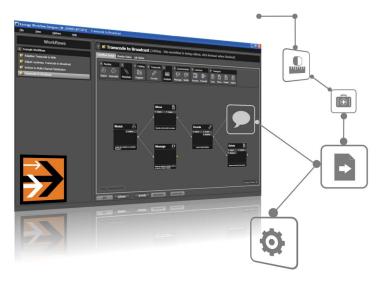
Using unique workflow design capabilities, Vantage allows you create adaptive workflows that automatically make decisions and manage your content based upon incoming metadata and content properties. Further, Vantage allows the creation of self-healing workflows that can detect – and recover from – errors 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
- Vantage Array binds Vantage Workflow products together, offering easy, cost-effective capacity expansion, failover, redundancy and load-balancing. CPU-aware load balancing offers 15%-25% throughput improvement over traditional "round robin" techniques
- Vantage Team Management allows administrators to customize and deploy web-based job status views, allowing users to see only the information and workflows relevant to them.



Create powerful workflows with the Vantage workflow designer

### **Powerful System Management**

### Powerful System Management

For large-scale or mission-critical workflows, Vantage® Enterprise System Management products provide a high level of visibility and a deep level of management and control for Telestream or third-party systems. Vantage offers the only truly scalable solution for file-based transcoding, device interchange, automated content production, broadcast operations and multi-channel distribution.

#### **More Throughput, Fewer Servers**

Vantage includes 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.

#### **Predictability and Visibility**

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With web-based dashboard, customizable load balancing and retry rules, plus reporting capabilities for capacity planning, Vantage Enterprise System Management products provide 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 ensure that there is no single point of failure, and no barrier between you and your workflow needs.

#### **Enterprise System Management products include**

- Vantage Enterprise Control maximizes workflow capacity, resiliency, throughput and predictability
- Vantage Master Control provides visibility & management of large, high-volume workflows and systems

	Feature	Transcode	Transcode Pro	Transcode Multiscreen Bundle <sup>1</sup>	Transcode Multiscreen Pro Bundle <sup>2</sup>
/antage Franscode Product Comparison	Monitor local folder, FTP, SFTP, Windows network folder watch/deliver	$\checkmark$	$\checkmark$		$\sim$
	Decode web, VOD, MPEG-2/4/H.264, Broadcast server, MXF, IPTV formats	$\checkmark$	$\sim$	-	$\sim$
	Encode New Media, VOD, MPEG-2/4/H.264 (X264)	$\checkmark$	$\sim$	$\checkmark$	$\checkmark$
	Email notification	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
	Automated decision making	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
	Encode Broadcast Server, MXF, IPTV		$\checkmark$		$\sim$
	Avid Send to Playback & Interplay deliver via Transfer Engine		Connect		$\checkmark$
	XML & data ingest, creation, transformation, web service notification	Connect	Connect		$\sim$
	Broadcast server watch and delivery	Connect	Connect		$\sim$
	Creation of TAR/ZIP files	Connect	Connect	$\checkmark$	$\checkmark$
	Encode high quality X.264 (H.264) for HLS, HDS, HSS, HAS, MP4			$\sim$	$\checkmark$
	High efficiency, high fan-out encoder			$\checkmark$	$\sim$
	Packing for Adobe (HDS), Apple (HLS), Microsoft (HSS), MPEG-DASH (HAS) Adaptive Bit Rate files, MP4 Progressive download			$\checkmark$	$\sim$
	AES 128 encryption, integration with Microsoft PlayReady and Adobe Access DRM servers			$\sim$	$\checkmark$
	FTP delivery of ABR packages to CDN origin servers			$\sim$	$\sim$
	Lightspeed server for acceleration	Optional	Optional	$\checkmark$	$\checkmark$

tes: <sup>1</sup>Transcode Multiscreen bundle includes the Lightspeed Server and Transcode Multiscreen software <sup>2</sup>Transcode Multiscreen Pro bundle includes the Lightspeed Server, Transcode Multiscreen, and Transcode Pro Connect software

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