

Telestream

What's New at IBC 2022



Your Video Challenges | Our Solutions | Great Outcomes

High-level View of Telestream at IBC 2022

- Telestream solutions address challenges in live and studio production, post production, video-on-demand, content management, production and live streaming, and video quality monitoring and analytics.
- Telestream can meet customers wherever they are on their journey to the cloud because our solutions can be delivered on-prem, in the cloud, or in some combination of both.
- Great outcomes result from working with Telestream – these include improved customer satisfaction, lower subscriber churn, standardized and repeatable workflows for producing, prepping, validating, and distributing content, lower cost, and quicker time to revenue.

Media Processing & Workflow Automation

Enterprise software and systems for transcoding, captioning, QC, and live streaming



- **NEW PRODUCT!** Lightspeed Live C2+ is a new server with 4 channels of 3G HD-SDI inputs, which makes it 30% less expensive per channel than previous generation configurations. The system also supports UHD ingest for many formats
- Vantage 8.1 Update Pack 2 is the latest release that includes support for the new Telestream Cloud Qualify QC Service, a new Vantage Listen Action, and support for Backblaze scalable cloud backup and storage.
- Vantage has added support for Signiant Media Shuttle with a new connector and a new FrameFormer framerate conversion that does not need a GPU. Also new, additional integrations and connectors include support for Frame.io, Alchemist, and DIVA.
- IPTV and Multiscreen have been enhanced with new, Intelligent audio handling that significantly reduces workflow complexity and a consolidated approach for DAI insertion utilizing .mpd files.
- Vantage Media Processing Platform supports Dolby Vision® and Dolby Atmos®, including new support for a Dolby Vision to standard dynamic range (SDR) filter, and support for Dolby Vision Profile 8.1 HDR10 compatible format. Vantage also now supports HDR10+.
- Vantage now has additional transcoding capabilities including support for FFV1, Grass Valley HQ/HQX (Canopus), DVCPPro and DVCPPro HD, and AS-11. Vantage can also now produce Omneon-compatible outputs.
- **NEW PRODUCT!** CardAgent for Vantage – job submission tool which allows non-technical staff to prepare media files for processing by a Vantage workflow.
- Optional color processing filter from Colorfront is now available for Vantage Flip64.
- Switch has added improved performance, Reduced Frame Decoding, ProRes RAW playback (Pro), and IMF/DCP Package playback (Pro). Switch also now has a tech preview of built-in luminance, vector, and component parade scopes.
- GLIM, the Telestream solution for viewing professional grade media files in a browser, now runs on Linux for deployment in the cloud (soon to be available on AWS Market Place), and it has a brand new UI. There is also a zoomable timeline with selectable overlays such as GOP, SCTE 35/104, and Nielsen watermarking. GLIM also includes live edit sub-clipping, and a tech preview of luma, vector, and RGB parade scopes.
- Lightspeed Live Capture has been updated with a 2-channel 12G SDI option, and a 25G 2-port ST 2110 option with NMOS. Sub-clipping based on GLIM, Live Schedule with router control, and SRT and NDI source support are also new.
- Lightspeed Live Stream now has support for CMAF packaging and SRT output.
- ContentAgent now supports IMF packaging, GPU accelerated BMD RAW decoding and Codex HDE ARRI RAW processing, and several other enhancements.
- **NEW PRODUCT!** ContentAgent Server is now available. Housed in a 1 RU chassis, ContentAgent Server reduces rack space, power, and cooling requirements while meeting processing demands with ease.
- Stanza is a next generation software application for creating and editing captions and subtitles using a multi-platform, browser-based user interface. Stanza is sold as a subscription, which makes it economical for operations of all sizes. Stanza, when used with Telestream Cloud Timed Text Speech, enables automated transcription workflows with high accuracy. Stanza also integrates with Timed Text Flip for advanced captioning workflow automation.



Cloud-native Services

Professional-grade transcoding, QC, and speech-to-text transcription



- Encoding.com, as the leading cloud-based video processing service, is trusted by many of the world's largest media and entertainment brands for their high value workflows. The Telestream Media Framework is a powerful and robust suite of proprietary media processing tools utilized by the vast majority of broadcasters, cable companies, and video content providers throughout the world. These tools comprise the DNA for complex video pipelines used in post-production, broadcast, and OTT content processing preparation and distribution workflows. Together as one platform, Encoding.com and Telestream deliver the most complete and unparalleled cloud media processing service in the market.
- Telestream Cloud Qualify is a new, cloud-native QC service that combines the best of Vidchecker and Aurora, which means this new service is a combination of the technology obtained from three Telestream acquisitions. Qualify is also built upon the Telestream Media Framework.

As software-defined instruments, it's possible to start economically and to enlarge the feature set as the user's needs change. It's also easy to access the UI remotely over a wide-area network, and to seamlessly integrate with Telestream's Inspect 2110 monitoring solution.

Accurate, resilient timing and synchronization from a company that knows video

As important as easily diagnosing problems is the possibility of avoiding them in the first place. Many common challenges that PRISM helps to analyze surround timing and the specific issues that result from multiple streams and multiple protocols. For that reason, along with PRISM's diagnostic capabilities, a facility design and implementation that begins with the most accurate, resilient timing solution possible, is crucial. Therefore, along with PRISM, the SPG8000A hybrid SDI/PTP synchronization generator and its companion ECO8000 changeover round out our future-proof solutions for SDI, IP, and hybrid facilities. Together, these instruments ensure technical success throughout the IP transition.

Expanded Monitoring Coverage into Production Networks

Video Test and Synchronization

Software-defined hybrid SDI/IP waveform monitor platform for engineering and production



- PRISM MPS and MPD, small form-factor Waveform Monitors expand the family with multiple inputs and fast IP switching.
- Flexibility to maximize the return on investment for users from production to distribution.
 - Supports both HD and UHD.
 - SDI and IP in the same instrument.
 - Engineering and production applications.
- Innovative mechanical design.
 - Minimal rack space required.
 - Shallow enough to fit into the tightly constrained space available in live production environments like trucks.
 - Cooling fans quiet enough to sit in edit suites and post production rooms.
- Version 3.3 expands flexibility in post production.
 - IBC marks the first showing of software V3.3 with features like DCI 2048x1080 and 4096x2160 4K sources.
 - New format support includes 10 or 12bit RGB via SDI at frame rates of 23, 24, 25, 29, and 30p; and 10bit YCbCr via ST 2110-20 at 23, 24, 25, 29, 30, 50, 59, and 60p.
 - A colored RGB Parade display, new audio functionality, safe area graticules and more.

- In transitioning from SDI to IP, engineers and operators lose visibility of the high volume of activity on their network and the continual changes to their content.

- Inspect 2110 provides:

- Enhanced visibility by monitoring content and key parameters on ST 2110 and ST 2022-6 networks.
 - Oversight of system synchronization, properly functioning redundancy, and optimal network performance.
 - Checking of formats, resolutions, bitrates, and frame rates to ensure streams contain valid content, and are error-free.
- Monitoring by exception to alert users with warnings and alarms.
- 24/7 proactive background monitoring.
- With its customizable dashboard and video/audio payout, Inspect 2110 lets users focus on their jobs without being interrupted unless there is an issue.
- Users can focus on resolving issues by proactively detecting them and directing engineers right to the area requiring investigation.
- With one-click integration, PRISM is a perfect companion diagnostic tool.
 - Quickly jump into in-depth analysis by automatically launching and configuring PRISM to view the stream in question.
 - Troubleshoot your media network with speed, agility, and precision.



Video Quality Monitoring and Analytics

Visibility and business intelligence with real-time video monitoring from content origination to consumption



Telestream iQ solutions overcome three primary business challenges for any type of linear TV or OTT streaming service: enhanced visibility, faster diagnostics, compliance and SLA enforcement. The key value is the automated surveillance of video delivery chain using a centralized video monitoring management system which aggregates data from monitoring probes in different points of the video delivery chain, so that users can correlate the information to quickly identify the source of the problems and then dive directly into the root cause.

- Inspecting video and audio quality (QoE) across 100s or 1000s of monitoring points to enhance visibility and reduce subscriber churn.
- Aggregation and correlation of that information to pinpoint where problems arise in real-time so outages can be minimized.
- In-depth measurements of captions and loudness to remain in legal compliance and avoid fines.
- Ensuring the correct ad-markers are present to generate downstream revenue for ad insertions.

What's new at IBC 2022 for Telestream iQ?

Telestream iQ's continued innovation, investment, and significant expansion to the capabilities of the centralized video monitoring management system as well as the wide range of video analysis probes, enables video quality monitoring for OTT head-ends where live content is acquired, transcoded, packaged as ABR and delivered to the origin servers and CDNs. Data from all Telestream iQ video analysis probes are collected from any point of transition in the video delivery chain and analyzed and presented to operations and engineering teams to provide high-level of visibility and correlation for the complex video distribution networks.

Telestream iQ solutions are used in a variety of applications that range from cable head-ends, ground-to-cloud distribution to OTT streaming services, and in broadcast applications as they transition to IP infrastructure. These use cases include:

- **Contribution Links:** Monitor QoE source contribution feed, encoding, and packaging for OTT streaming and Linear TV services.
- **Content Distribution:** Monitoring QoS for network delivery, origin servers and CDN with end-to-end service view.
- **Dynamic Ad Insertion:** Monitor SCTE-35 ad markers and correlate this to the ABR manifest to track ad availability from end to end across 100s of Linear channels.
- **VOD Monitoring:** Real-time QoS and QoE Video On-Demand monitoring with centralized dashboard and reporting.

New: ARGUS – The Next Gen Centralized Video Monitoring Management

ARGUS is the next step in Telestream iQ's powerful centralized video monitoring solution that enables automated surveillance of each transition in the video delivery chain. Like the market leading iVMS-ASM centralized video monitoring management system, ARGUS provides deep dive analytics data that enables service providers to identify video quality issues and their root causes. But in addition, Argus introduces a new distributed system architecture that helps scaling the number of monitoring points from small to large based on a usage-based model and takes advantage of a new microservices architecture which is optimized for virtual and cloud deployment. All with a hassle-free migration path for the existing iVMS ASM customers to upgrade to ARGUS while protecting the prior investment. Additional solution advantages include:

- **Pay-as you-grow pricing model** that makes the power of centralized probe management affordable for smaller scale systems including the Base Subscription tier free of charge.
- **Comprehensive performance analysis** by integrating all the probes including Sentry, Inspector, Surveyor ABR, and Surveyor TS, and enabling correlation of data from any point of video transition in the delivery chain.
- **Next generation centralized configuration enhancement** for asset lineups, alarm template configuration and management for Inspector, Surveyor ABR Active, and Surveyor TS.
- **Dynamic Ad Insertion (DAI) Monitoring** for end-to-end advertising workflows from TS source to ABR delivery.
- **Additional compliance monitoring enhancements** including closed captions and audio loudness monitoring.

Widest Range of Video Analysis Probes with Advanced Features

Telestream iQ offers the largest and most complete portfolio of video analysis probes that enhance visibility into the quality of content distribution, ABR transcoding, packaging, and encryption in any type of OTT streaming service. Highlighted new features of Telestream iQ probing technologies are:

- Automated and orchestrated licensing with centralized cloud license server for Inspector, Surveyor-TS, Surveyor ABR Active, and Inspect 2110.
- Kubernetes container packaging for the video analysis probes so that they can be deployed directly into customer Virtual Private Cloud.
- Encoding monitoring enhancements with AVS2 support in addition to MPEG2, MPEG4/H.264, and HEVC/H.265 for Inspector and HEVC support for Surveyor ABR Active.
- Expanded support for DRM including PlayReady, Fairplay, Widevine, Synamedia, EZDRM, Irdeto and Verimatrix, so that encrypted content can be inspected at the content level.



Content Management

Asset lifecycle management for media content



- Telestream now offers Content Management options in an easy to deploy 1 RU server. Option the server with DIVA or Kumulate to manage your media storage on-premise and/or in the Cloud.
- Telestream DIVA has a new interface, simplifying the management and migration of large media libraries across Cloud and on premise storage systems while also providing users with the ability to browse and search their managed content.
- Telestream Content Management systems now offer expanded integration with Telestream GLIM, to enable viewing of professional-grade media files in a browser, including tech preview of luma, vector, and RGB parade scopes and live edit sub-clipping.
- Telestream Kumulate now offer integration with Telestream Stanza for automated caption and subtitle creation.
- Telestream DIVA now supports the accelerated acquisition of content from Cloud or disk by registering the files in place without requiring a copy or move.

Production and Live Streaming

Wirecast's industry-leading live-streaming and video production software for Mac and Windows enables individuals of all experience levels to host professional, high-quality broadcasts easily. For those looking to build a live streaming studio from the ground up, Wirecast Gear is a turnkey live streaming hardware appliance with everything necessary to go live: simply connect your cameras, plug in your microphones, and start streaming.



Live streaming production software

- Wirecast is now updated to version 15, bringing with it new functionality, as well as platform stability and resource efficiency enhancements, all geared toward empowering content creators to more easily create professional broadcasts.
- The highlights include improved support for 4K video sources/playback/streaming, new Social Media Comment moderation with built-in graphics overlays, a refreshed user interface, performance and stability improvements, improved audio meters, additional animated titles, and much more.
- Wirecast Rendezvous has also benefitted from some improvements, including Rendezvous Music Mode: a preset specifically designed to capture high-quality audio from musical instruments. Additionally, Rendezvous hosts have more flexibility to configure layout options, view network diagnostics, mirrored video, guest audio muting, and more.

Live streaming production appliance

Wirecast Gear is a family of live streaming production appliances for HDMI, SDI, and network video sources. Plug in sources and start using Wirecast immediately with a no-hassle setup used by major broadcasters and small event producers alike! Combined with an optional Gear Care package with live support and overnight replacement, Wirecast Gear is the true worry-free solution for live streaming at an affordable price. Wirecast Gear comes in both 1080P and 4K-ready models, with configurations for HDMI or SDI depending on your needs, any of which provide a powerful turnkey streaming hardware solution for under \$10,000.

Sherpa's flexible, high-quality live-streaming and video hosting platform.



Sherpa Stream is a secure, customizable platform designed for organizations to easily create, manage, and share large libraries of high-quality, custom-branded live and on-demand video to any size audience.

Fortune 500 companies have leveraged Sherpa Stream for all types of corporate use cases: from virtual tradeshows to internal company town halls, from product announcements to lead generation webinars, from branded video advertisements to company training videos, and more. Supporting an infinite amount of visual design options, along with enterprise-grade security features and streamlined content management workflows, Sherpa Stream is a suitable solution for any marketing or corporate video use case.

Sherpa Stream boasts a vast array of live/on-demand production and audience engagement features out of the box, such as bi-directional breakout sessions and viewing parties; remote webcam capture and multi-presenter capabilities; viewer engagement tools like checkpoints, live chat, Q&A, and polling; as well as powerful marketing analytics. With professional services and support options to help consult, produce, monitor, and optimize your events, Sherpa Stream is perfect for any event producer from beginner to expert.

- Connect Wirecast with Sherpa's Multi-Presenter feature to add advanced graphics overlays, stock media insertion, moderated social media comments, and more, or to automatically switch between multiple remote presenters using Wirecast Rendezvous Virtual Camera Output. Incorporate all of Wirecast's professional capabilities to stream content from every host or presenter at broadcast-level quality!