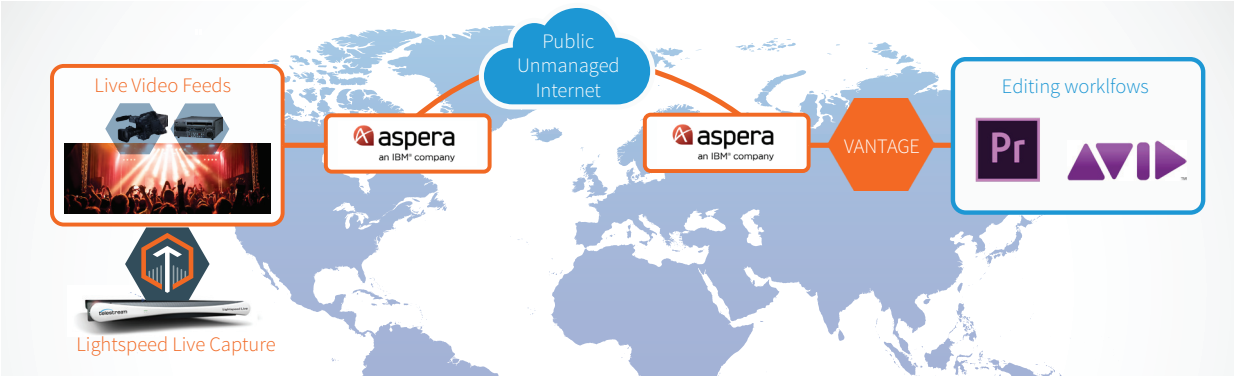
Vantage and IBM Aspera

Partner Solution



Real Time Editing Over Unmanaged Internet with Telestream & Aspera Integration

Telestream Vantage and Lightspeed Live Capture combined with Aspera's FASPStream technology enables long distance, low latency, high quality, real time editing of live captures over unmanaged Internet, which eliminates the high cost of co-locating a post-production crew and expensive satellite, IP and fiber connections.

Overview

Telestream and IBM Aspera have developed a game-changing, joint solution for high-speed capture and production of live, broadcast quality video from remote locations for faster production turnaround. Telestream Vantage and Lightspeed Live Capture combined with Aspera's FASPStream technology enables open-file workflows for production teams to work on live video feeds from remote locations in real time.

Real-time, Remote Production Has Been an Unattainable Goal

Capturing and producing content for live events such as sports, news, training or education programs poses unique challenges, and true real-time, remote production has long been an unattainable goal. Today, media companies have to rely on costly satellite or fiber-based infrastructure, and incur additional costs by co-locating production teams and equipment at the event itself. Alternative IP-based solutions either offer streaming with low quality and high latency, or provide slow data transfer capabilities that don't work with content still being created or captured, requiring completed files to be transferred over the network, and introducing unacceptable delays for time critical material.

Telestream – IBM Aspera Solution

Telestream Vantage and Lightspeed Live Capture in conjunction with Aspera FASPStream technology offers an innovative approach to delivering broadcast-quality video streams from the venue to the remote production facility live, enabling workflows never before possible. Creative teams can now begin working on a live capture feed delivered from a remote location (across the country or around the world) while the event is taking place, without waiting for the entire file to be first written to disk and then transferred.

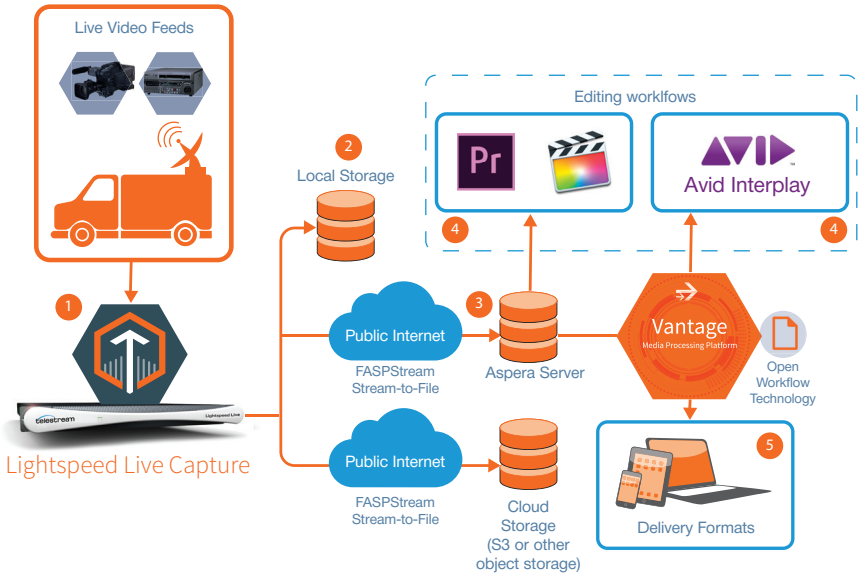
telestream

Transcoding, packaging, editing and other downstream workflows can start immediately, significantly shortening the production cycle and increasing the value of the produced content. The end-point can have a range of hosting environments, including centralized on-premises, private or public cloud and the streams can be written to multiple locations concurrently to aid in redundancy and business continuity.

Built upon the latest version of the IBM Aspera FASP™ protocol, FASPStream technology can transport any live video source available on local multicast, unicast as it is being created or captured, and can allow access to portions of a file in memory during the transfer process rather than waiting for the entire file to be written to disk.

The stream is transported as a uniform lossless, in-order byte stream that equally supports constant bit rate and adaptive bit rate formats. FASPStream performs exceptionally well over long-haul WANs, with negligible start up delay, i.e. less than 2 seconds of delay from live for 50 Mbps video sources over global Internet networks. FASPStream technology is tightly integrated into Vantage using the available APIs providing a completely seamless user experience.

How the Solution Works



1. At the event site, an HD-SDI live feed is captured in real time. In this case, Telestream Lightspeed Live Capture is being used, but this technology will work with any growing file workflows that Vantage can support.
2. The live feed is captured and written to local storage by Lightspeed Live Capture.
3. Simultaneously, a copy of the growing captured file is sent over unmanaged Internet to a remote Aspera file server using FASPStream™ Technology.
4. At the remote post production facility, the incoming growing file is immediately available for editing or processing from within the Aspera Server storage.

   Applications such as Adobe Premiere Pro or Final Cut X can open the growing files for editing directly, or Vantage can automatically begin processing the content for use from within an Avid system by checking the asset into Interplay. Once checked into Interplay an editor can edit the growing file in Media Composer using Frame Chase Edit While Capture (EWC).
5. In addition to enabling the editing of growing files Vantage also can create a wide variety of media file types and deliver them to an assortment of delivery locations, all while the source files are growing in Aspera Server storage.

Once the event is complete and all the content has been captured, the capture process is stopped at the event site, and that triggers the automated completion of the transfer and the shutdown of the remaining workflow tasks. The complete file including all capture content is typically available within seconds of when the event site recording is halted. Further editing and other media processing workflows can continue from this point.

Benefits of the Solution

- Enable long distance, low latency, high quality, real time editing of live captures over unmanaged Internet, which eliminates the high cost of co-locating a post-production crew and expensive satellite, IP and fiber connections.
- Deliver a variety of content types to the desired destinations:
  - Highlights and teasers can be sent to social media sites.
  - VOD content can be processed for immediate viewing just seconds after the event is over.
  - Versions can be produced for dynamic ad insertion and for condensed content viewing purposes (e.g. ads and promotions removed).
- The solution takes advantage of FASPStream stream-to-file capability and Vantage Open Workflows allowing files to be written remotely; thus, eliminating the drawbacks of a typical watch folder scenario while providing a much tighter integration and feedback mechanism between Telestream and Aspera components.
- Native Aspera support within Vantage ensures complete compatibility with all Aspera capabilities, including adaptive bandwidth control, management and notification, encryption over the wire and at rest, and support for all clients, servers and applications.
- Support for leading NLEs such as Avid Media Composer with Interplay and Adobe Premiere Pro.
- Concurrent files can be written to multiple locations to aid in redundancy and business continuity.

In Conclusion

Remote, real time post production editing and media processing workflows are now possible without co-locating a post-production team and without expensive, private satellite, IP and fiber connections. With Aspera FASPStream technology, including end-to-end growing file support, seamlessly integrated into Vantage with Open Workflows, operators can now edit files in real time in one location while they are being captured in a different location. All of this is done over unmanaged Internet with low latency and high quality, which saves set up time and money for remote event post production. Production crews do not need to be dispatched to the event location and the high cost of satellite and fiber connections is eliminated.

About Telestream

Telestream provides world-class live and on-demand digital video tools and workflow solutions that allow consumers and businesses to transform video on the desktop and across the enterprise. Many of the world's most demanding media and entertainment companies as well as a growing number of users in a broad range of business environments, rely on Telestream products to streamline operations, reach broader audiences and generate more revenue from their media.

Visit or contact **Telestream** at: www.telestream.net, email: info@telestream.net, phone: +1 530-470-1300.

About IBM Aspera

Aspera, an IBM company, is the creator of next-generation transport technologies that move the world's data at maximum speed regardless of file size, transfer distance and network conditions.

For more information about **IBM Aspera** visit http://www.asperasoft.com and follow us on Twitter @asperasoft.

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