



## FOX Sports

### Revolutionizes Delivery of the 2018 FIFA World Cup with IBM Aspera

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#### Overview

##### Challenge

FOX Sports required a means to provide coverage and highlights for 64 World Cup matches in Russia while utilizing their state-of-the-art production facilities in Los Angeles.

##### Solution

FOX Sports deployed an integrated best-of-breed solution consisting of IBM® Aspera FASPStream technology and Telestream Lightspeed Live and Vantage solutions. The deployment enabled high-quality streaming to remote production teams in near real-time - over unmanaged IP networks.

##### Results

Delivered live action from Russia to editing in Los Angeles within 10 seconds

Drastically reduced production costs with production workflows run out of FOX Sports' central broadcast facility in Los Angeles

Creation of the most captivating viewer experiences possible

FOX Sports is the US English language home of the 2018 FIFA World Cup, hosted in Russia. The 2018 event is the largest production in FOX's 20-year history in terms of personnel, hours, and scale. Its coverage will include 320 hours of original broadcast content and over 1,100 hours of original content. In total, all 64 matches spread over 12 venues across Russia will be broadcast in both HD and UHD – more than were broadcast in the four previous World Cups combined.

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*“With IBM Aspera and Telestream, our coverage will be enhanced by our ability to get more content back to our LA facility at a lower cost,” according to Kevin Callahan, VP Field Operations Engineering, FOX Sports.*

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##### Challenge

The FOX Sports Operations & Engineering team set out to create a dramatic new audience experience while maximizing efficiencies for the production of the 2018 FIFA World Cup hosted by Russia. The team sought to leverage FOX Sports' existing, state-of-the-art production facilities in Los Angeles and avoid the creation of entirely new facilities and the movement of staff to Russia. By moving data – instead of people and equipment – FOX could enhance their tournament coverage and



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### Features & Capabilities

- Fast, efficient, and secure data pipeline over unmanaged IP networks
- Support for growing open mezzanine grade edit-ready workflows
- Real-time transport of HLS streams directly in to cloud object storage to support live highlight clipping
- Native integration of deployed solutions

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### Solution components

#### Software

- IBM® Aspera® FASPStream API
  - Telestream Lightspeed Live
  - Telestream Vantage
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create more content by leveraging new IBM Aspera improvements in IP-based transfer technology and the existing investments in the Los Angeles facility.

In its coverage of the 64 tournament matches, FOX will ingest 20 HD-SDI feeds and two UHD-HDR feeds per match, which will create over 1 petabyte of content for the entire tournament. The production team in Los Angeles must be able to edit and deliver content within seconds of live action to meet audience expectations for playback of match highlights during the halftime show and other bridge programs.

### Solution

To deliver high-quality coverage of the World Cup, FOX Sports uses IBM Aspera FASPStream technology integrated into Telestream's Vantage and Lightspeed Live products. The integrated solution allows creative teams to begin working on a live capture feed delivered from a Russian site while the event is taking place. Transcoding, packaging, editing and other downstream workflows can start immediately, significantly shortening the production cycle and increasing the value of the produced content.

For FOX Sports' World Cup operations, 22 Telestream Lightspeed Live systems will support camera ISOs and other feeds not dedicated to the match, allowing the team to fully capture all event-related content made accessible within their content management system. Four concurrent high resolution feeds will be routed directly to the Los Angeles production facility via Aspera FASPStream for editing in near-real-time. The editorial and production systems there receive a full-resolution captured video with very low latency, requiring fewer on-site edit and production systems. The team in Los Angeles can begin working on a live capture feed delivered from Russia while the matches are taking place, without waiting for the entire event to complete before the locally captured file(s) are transferred.

By recording direct to the AVC-Intra codec, the team has reduced the number of encode/decode steps experienced in traditional workflows. Additionally, by delivering an edit-ready format over IP directly into the remote storage infrastructure in Los Angeles, the solution enables editors to consume the live video almost instantaneously without any remote SDI infrastructure.

All of this is accomplished without requiring expensive dedicated transmission lines. By utilizing only public internet data connections (as opposed to dedicated point-to-point fiber leased lines and/or satellite), the FOX Sports team is assured that data lines are always available, ubiquitous, and require no proprietary equipment or scheduling windows.

## Results

FOX Sports' goal was to create a cutting-edge workflow that leveraged their "home base" infrastructure to support live event production anywhere in the world, a truly revolutionary achievement for a major event of this scale. The solution has proven to be highly cost-effective for the robust media handling capabilities it offers and its adaptability to the needs of both remote locations and the production staff at home. At this event alone, the resulting workflow enabled producers at FOX Sports' Los Angeles facility to support live coverage on two channels and create over 150 World Cup feature pieces.

The 2018 FIFA World Cup operation represents an investment in FOX Sports' future. The organization plans to utilize the joint Telestream-Aspera solution for the FIFA Women's World Cup next year and at events such as NFL games. These events will be enhanced by the ability to get a high volume of quality content to the Los Angeles production facility for immediate action and quick turnaround. In the long term, FOX Sports' digital content offerings will be strengthened by the ability to create and deliver more and better content to their audiences. In the end, it is the viewers who end up with a better experience.

## About FOX Sports

FOX Sports is the umbrella entity representing 21st Century Fox's wide array of multi-platform US-based sports assets. Built with brands capable of reaching more than 100 million viewers in a single weekend, FOX Sports includes ownership and interests in linear television networks, digital and mobile programming, broadband platforms, multiple web sites, joint-venture businesses and several licensing partnerships. FOX Sports includes the sports television arm of the FOX Broadcasting Company; FS1, FS2; FOX Sports Regional Networks, their affiliated regional web sites and national programming; FOX Soccer Plus; FOX Deportes and FOX College Sports. FOX Sports also encompasses FOX Sports Digital, which includes FOXSports.com, FOX Sports App and FOX Sports GO. Also included in the Group are FOX's interests in joint-venture businesses Big Ten Network and BTN 2Go, as well as a licensing agreement that establish the FOX Sports Radio Network.

## About Telestream

Telestream, Inc. is a privately-held provider of software and hardware products for video capture, encoding, transcoding, and network-based delivery. Products include desktop components, screencasting, video streaming, cross-platform encoding software and transcoding applications to automate enterprise-class digital video workflows.

## About Aspera, an IBM Company

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. Based on its patented, Emmy® award-winning FASP® protocol, Aspera software fully utilizes existing infrastructures to deliver the fastest, most predictable file-transfer experience. Aspera's core technology delivers unprecedented control over bandwidth, complete security and uncompromising reliability. Organizations across a variety of industries on six continents rely on Aspera software for the business-critical transport of their digital assets.

## For more information

For more information on IBM Aspera solutions, please visit <https://www.ibm.com/cloud/high-speed-data-transfer> and follow us on Twitter @asperasoft.



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Route 100  
Somers, NY 10589

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